Racing Manual

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NEOGEN®

Drug Detection ELISA Kits

Racing Product List

Qualitative Test Kits

Product Name	Single Kit (96 Well) Product #	Bulk Kit (480 Well) Product #
16ß-Hydroxystanozolol*	103510	103515
Alfentanil*	103610	103615
Amphetamine	105210-1	105215-1
Amphetamine Ultra	130819	130815
Anileridine	105510	105515
Apomorphine/Apocodeine*	109110	109115
Azaperone*	100910	100915
Barbiturate Group	100110	100115
Benzodiazepine Group	180610	180615
Benzylpiperazine*	108310	108315
Boldenone*	101010	101015
Bronchodilator Group	100310	100315
Bumetanide	103710-1	103715-1
Buprenorphine	103810	103815
Buspirone*	108710	108715
Butorphanol	101110	101115
Caffeine/Pentoxifylline	106410	106415
Carfentanil	103910	103915
Carisoprodol	132519	132515
Carprofen*	181110	181115
Celecoxib	180710	180715
Clenbuterol	101210	101215
Clonidine/Romifidine	180110	180115
Cocaine/Benzoylecgonine	101310	101315
Corticosteroid Group	100410	100415
Cromoglycate*	105810	N/A
Dantrolene	106310	106315
Dermorphin	181910	181915
Detomidine	181310	181315
Dexamethasone	101510	101515
Dextromethorphan*	131419	131415
Diprenorphine*	106110	106115
Doxapram	106210	106215
Droperidol*	101610	101615
Ethacrynic Acid*	101710-1	101715-1
Etorphine	101810	101815
Fentanil Group	100510	100515
Fentanyl	104010	104016
Fexofenadine/Terfenadine*	181410	181415
Flunitrazepam	109510	109515
Flunixin	101910	101915
Fluoxetine	107610	107615
Fluphenazine*	104110	104115
Furosemide	104210-1	104215-1
Glycopyrrolate	102010	N/A
Guanabenz*	109210	109215
Haloperidol Metabolite*	102110	102115
Hydrochlorothiazide*	180310	180315
Hydromorphone	106610-1	106615-1
Hydroxyzine	105710	105715

Product Name	Single Kit (96 Well) Product #	Bulk Kit (480 Well) Product #
Ibuprofen	180210	180215
Ipratropium/Atropine	107110	107115
Isoxsuprine	102210	102215
Ketamine	109410	109415
Ketoprofen	108210	108215
Ketorolac*	105610	105615
Levallorphan	102310	102315
Lidocaine	106710-1	106715-1
Mazindol/Mazindol Metabolite	102510	102515
Meperidine	102610	102615
Mephentermine*	107210	107215
Mepivacaine	102710	102715
Meprobamate	133419	133415
Metaraminol*	107910	107915
Methadone	131619	131615
Methadone/LAAM	132919	132915
Methamphetamine/MDMA	130919	130915
Methocarbamol	108010	108015
Methotrexate	107510	107515
Methylprednisolone	104560	104565
Methylphenidate/Ritalinic Acid	134219	134215
Modafinil	181210	181215
Nalbuphine	102810	102815
Nandrolone	104610	104615
Nikethamide*	109910	109915
Opiate Group	103010	103016
Oxymorphone/Oxycodone	102919	102916
Pentazocine	103110	103115
Phenylbutazone	104710-1	104715-1
Procaine*	103210	103215
Promazine Group	100710	100715
Propranolol	107310	107315
Propoxyphene	131119	131115
Pyrilamine	105910	105915
Reserpine*	104810	104815
Sufentanil	104910	104915
Sulfamethazine*	103410	103415
Synthetic Cannabinoids (JWH-018)	133519	133515
THC	131019	131015
Theophylline*	106010	106015
Tramadol	131819	131815
Trazadone	132819	132815
Trenbolone*	109710	109715
Triamcinolone Acetonide	105110	105115
Tricyclics Group	100810	100815
Zomepirac*	109610	109615
Zopiclone/Eszopiclone	133819	133815

*Minimum quantities and lead times required, contact for more details.

Other Drug Kits Available (Forensic Assay Format)

Product Name	Single Kit (96 Well) Product #	Bulk Kit (480 Well) Product #
6-AM	134019	134015
Acetaminophen	132419	132415
Amphetamine Specific-2	132319-2	132315-2
Barbiturate Group	130619	130615
Benzodiazepine Group	130119	130115
Benzodiazepine Group Ultra	134319	134315
Buprenorphine	131919	131915
Citalopram*	132719	132715
Cocaine/BZE-2	130319-2	130315-2
Cotinine	182219	182215
Creatinine	133319	N/A
Fentanyl	131519	131515
Hydromorphone	132219	132215
Ketamine	131719	131715
LSD*	130219	130215
Meperidine	131219	131215
Naltrexone/Nalbuphine	133019	133015
Opiate Group	130419	130415
Oxycodone/Oxymorphone	130719	130715
Phencyclidine (PCP)	130519	130515
Phenytoin*	132119	132115
Salicylates*	133619	133615
Sertraline	131319	131315
Synthetic Cannabinoids (JWH-250)	133719	133715
Synthetic Cannabinoids (UR-144)*	133919	133915
Synthetic Cathinones (Methcathinone)	181819	181815
THC Ultra	182319	182315
Tricyclics Group	132019	132015
Zolpidem	132619	132615

*Minimum quantities and lead times required, contact for more details.

General Information

NEOGEN®

Drug Detection Test Kits (Racing)

Assay Protocol Summary

Test Kit Name	Product Number		Conjugate			Sample Volume/Well	Incubation Conjugate/Sample	TMB per Well	Incubation TMB
	(96 Well)	(480 Well)	Type	Dilution	Amt per Well				
16b-Hydroxystanozolol	103510	103515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Alfentanil	103610	103615	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Amphetamine	105210-1	105215-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Anileridine	105510	105515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Apomorphine/Apocodeine	109110	109115	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Azaperone	100910	100915	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Barbiturate Group	100110	100115	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Benzodiazepine Group	180610	180615	Concentrate	1:50	50 µL	20 µL	45 min	150 µL	30 min
Benzylpiperazine	108310	108315	Concentrate	1:50	50 µL	20 µL	45 min	100 µL	30 min
Boldenone	101010	101015	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Bronchodilator Group	100310	100315	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Bumetanide	103710-1	103715-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Buprenorphine	103810	103815	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Buspirone	108710	108715	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Butorphanol	101110	101115	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Caffeine/Pentoxyfylline	106410	106415	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Carfentanil	103910	103915	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Carisoprodol	132519	132515	Concentrate	1:100	100 µL	20 µL	30 min	150 µL	30 min
Carprofen	181110	181115	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Celecoxib	180710	180715	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min

Test Kit Name	Product Number		Conjugate			Sample Volume/Well	Incubation Conjugate/Sample	TMB per Well	Incubation TMB
	(96 Well)	(480 Well)	Type	Dilution	Amt per Well				
Clenbuterol	101210	101215	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Clonidine/Romifidine	180110	180115	Lyophilized	1:180	180 µL	20 µL	45 min	150 µL	30 min
Cocaine/Benzoylecgonine	101310	101315	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Corticosteroid Group	100410	100415	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Cromoglycate	105810	105815	RTU	RTU	100 µL	20 µL	60 min	100 µL	15 min
Dantrolene	106310	106315	Concentrate	1:180	180 µL	100 µL	45 min	150 µL	30 min
Dermorphin	181910	181915	Concentrate	1:180	180 µL	20 µL	30 min/30 min	150 µL	30 min
Detomidine	181310	181315	Lyophilized	1:180	180 µL	20 µL	60 min	150 µL	30 min
Dexamethasone	101510	101515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Diprenorphine	106110	106115	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Doxapram	106210	106215	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Droperidol	101610	101615	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Ethacrynic Acid	101710-1	101715-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Etorphine	101810	101815	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Fentanil Group	100510	100515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Fentanyl	104010	104015	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Fexofenadine/Terfenadine	181410	181415	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Flunitrazepam	109510	109515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Flunixin	101910	101915	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Fluoxetine	107610	107615	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Fluphenazine	104110	104115	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Furosemide	104210-1	104215-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min

Test Kit Name	Product Number		Conjugate			Sample Volume/Well	Incubation Conjugate/Sample	TMB per Well	Incubation TMB
	(96 Well)	(480 Well)	Type	Dilution	Amt per Well				
Glycopyrrolate	102010	102015	RTU	RTU	100 µL	20 µL	60 min	100 µL	30 min
Guanabenz	109210	109215	Lyophilized	1:180	180 µL	20 µL	45 min	150 µL	30 min
Haloperidol Metabolites	102110	102115	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Hydrochlorothiazide	180310	180315	Concentrate	1:100	100 µL	100 µL	45 min	150 µL	30 min
Hydromorphone	106610-1	106615-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Hydroxyzine	105710	105715	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Ibuprofen	180210	180215	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Ipratropium/Atropine	107710	107715	Concentrate	1:50	50 µL	20 µL	45 min	150 µL	30 min
Isoxsuprine	102210	102215	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Ketamine	109410	109415	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Ketoprofen	108210	108215	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Ketorolac	105610	105615	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Levallorphan	102310	102315	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Lidocaine	106710-1	106715-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Mazindol/Mazindol Metab.	102510	102515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Meperidine	102610	102615	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Mephentermine	107210	107215	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Mepivacaine	102710	102715	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Metaraminol	107910	107915	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Methocarbamol	108010	108015	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Methotrexate	107510	107515	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Methylprednisolone	104560	104565	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min

Test Kit Name	Product Number		Conjugate			Sample Volume/Well	Incubation Conjugate/Sample	TMB per Well	Incubation TMB
	(96 Well)	(480 Well)	Type	Dilution	Amt per Well				
Modafinil	181210	181215	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Nalbuphine	102810	102815	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Nandrolone	104610	104615	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Nikethamide	109910	109915	Lyophilized	1:180	180 µL	20 µL	45 min	150 µL	30 min
Opiate Group	103010	103015	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Oxymorphone/Oxycodone	102919	102916	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Pentazocine	103110	103115	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Phenylbutazone	104710-1	104715-1	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Procaine	103210	103215	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Promazine Group	100710	100715	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Propranolol	107310	107315	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Pyrilamine	105910	105915	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Reserpine	104810	104815	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Sufentanil	104910	104915	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Sulfamethazine	103410	103415	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Theophylline	106010	106015	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Trenbolone	109710	109715	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Triamcinolone Acetonide	105110	105115	Concentrate	1:180	180 µL	20 µL	60 min	150 µL	30 min
Tricyclics Group	100810	100815	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min
Zomepirac	109610	109615	Concentrate	1:180	180 µL	20 µL	45 min	150 µL	30 min

Recommended Sample Dilutions

Categorized by Matrix

Kit Name	Equine Urine	Canine Urine	Equine Serum	Equine Plasma
Alfentanil	Neat	—	—	—
Amphetamine	1:3	1:1	Neat	Neat
Anileridine	Neat/1:1	—	—	—
Apomorphine/Apocodeine	Neat	Neat	Neat	Neat
Azaperone	1:1	1:3	Neat	Neat
Barbiturate Group	1:4–1:7	—	—	—
Benzodiazepine Group	1:19	1:9	1:9	1:9
Benzylpiperazine	1:19	1:19	1:1	1:1
Boldenone	1:9	—	—	—
Bronchodilator Group[1]	Neat	Neat	Neat	Neat
Bumetanide	1:1	Neat	Neat	Neat
Buprenorphine	Neat	Neat	1:1	1:1
Buspirone	1:1	1:9	1:1	1:1
Butorphanol	Neat	Neat	Neat	Neat
Caffeine/Pentoxifylline	1:5	1:5	Neat	Neat
Carfentanil	1:2	—	—	—
Carprofen	1:4	1:4	1:4	1:4
Celecoxib	1:1	1:1	Neat	1:1
Clenbuterol	1:1	1:2	Neat	—
Clonidine/Romifidine	1:4	1:4	1:4	1:4
Cocaine/Benzoylecgonine	1:7	1:7	Neat	Neat
Corticosteroid Group	1:3	1:9	Neat	Neat
Cromoglycate	Neat	—	—	—
Dantrolene	1:9	1:9	1:1	1:1
Dermorphin	1:4	1:4	1:4	1:4
Detomidine	1:4	1:4	1:4	1:4
Dexamethasone	Neat	Neat	Neat	Neat
Dextromethorphan	Neat	1:2	Neat	Neat
Diprenorphine	Neat	—	—	—
Doxapram	1:2	—	—	—
Droperidol	1:3	—	—	—
Ethacrynic Acid	1:9	1:1	Neat	1:1
Etorphine	Neat	Neat	Neat/1:1	Neat/1:1

Kit Name	Equine Urine	Canine Urine	Equine Serum	Equine Plasma
Fentanil Group	1:1	Neat	Neat	Neat
Fentanyl	1:2	1:2	Neat	Neat
Fexofenadine/Terfenadine	1:4	1:4	1:4	1:4
Flunitrazepam	1:9	1:9	Neat	Neat
Flunixin	1:9	1:9	Neat	Neat
Fluoxetine	1:4	1:4	Neat	Neat
Fluphenazine	1:1	—	Extract	Neat
Furosemide	1:9	1:9	Neat	Neat
Glycopyrrolate	Neat	—	—	—
Guanabenz	Neat	Neat	Neat	Neat
Haloperidol Metabolites	1:3	1:1	Neat	1:1
Hydrochlorothiazide	1:19	1:9	1:4	1:4
Hydromorphone	Neat	Neat	Neat	Neat
Hydroxyzine	1:3	1:5	Neat	Neat
Ibuprofen	1:9	1:9	1:1	1:1
Ipratropium/Atropine	1:4	1:2	Neat	Neat
Isoxsuprine	1:1	Neat	Neat	Neat
Ketamine	1:4	1:3	1:1	1:1
Ketoprofen	1:9	1:9	Neat	Extract
Ketorolac	1:9	1:4	Neat	Neat
Levallorphan	1:1	1:1	Neat	Neat
Lidocaine	1:1	1:1	Extract	Neat
Mazindol/Mazindol Metabolites	1:2	1:2	Neat	Neat
Meperidine	1:1	Neat	Neat	Neat
Mephentermine	1:3	Neat	Neat	Neat
Mepivacaine	1:9	—	—	—
Meprobamate	1:19	1:19	1:19	1:19
Metaraminol	1:4	1:4	1:4	1:4
Methocarbamol	1:9	1:9	Neat	Neat
Methotrexate	1:9	1:7	Neat	Neat
Methylprednisolone	1:3	Neat	Neat	Neat
Modafinil	1:4	1:4	1:4	1:4
Nalbuphine/Naltrexone	Neat	—	—	—
Nandrolone	1:9	—	—	—
Nikethamide	1:29	1:19	1:1	1:1

Kit Name	Equine Urine	Canine Urine	Equine Serum	Equine Plasma
Opiate Group	1:1	1:1	Neat	Neat
Oxymorphone/Oxycodone	Neat	Neat	Neat	Neat
Pentazocine	1:1	Neat	Neat	Neat
Phenylbutazone	1:4	1:9	Neat	1:4
Procaine	1:1	—	—	—
Promazine Group	Neat	Neat	Neat	Neat
Propranolol	1:3	Neat	Neat	Neat
Pyrilamine	Neat	—	—	—
Reserpine	Neat	—	—	—
16β-Hydroxystanozolol	1:19	1:5	1:5	1:5
Sufentanil	Neat	—	—	—
Sulfamethazine	Neat	—	—	—
Theophylline	1:19	1:19	—	—
Tramadol	1:2	1:2	1:2	1:2
Trazodone	1:4	1:4	1:4	1:4
Trenbolone	1:9	1:49	Neat	Neat
Triamcinolone Acetonide	1:6	—	—	—
Tricyclics Group	1:4	1:2	—	—
Zomepirac	1:19	1:19	Neat	1:1
Zopiclone/Eszopiclone	1:19	1:19	1:9	1:9

[1]The Bronchodilator Group Kit suggests no sample dilution for porcine urine.

Troubleshooting

There are many variables involved in ELISA assays that could produce inadequate results. The following are some common examples of inadequate results with possible reasons as to why they may occur.

1. Very deep blue color development with samples and controls.
   a. Plate was not washed three times with diluted wash buffer.
   b. Drug-enzyme conjugate concentrate was incorrectly diluted, the conjugate is too concentrated, and needs further dilution.
2. Very low color development with samples and controls.
   a. Wash buffer was not diluted ten times before use.
   b. Drug-enzyme conjugate concentrate was incorrectly diluted, the conjugate is too diluted, and needs to be diluted less.
   c. Contamination.

d. Kit deteriorated. Possibly from adverse conditions during shipping.
   e. Kit has expired.

3. No color development with samples and controls.
   a. Improper dilution of drug-enzyme conjugate.
   b. Kit has expired.
4. Little or no differentiation between negative and positive controls with the negative giving normal reading.
   a. Positive control has deteriorated.
5. Little or no differentiation between negative and positive controls with low color development.
   a. Kit has deteriorated.
6. Large number of false positives.
   a. An unknown compound is cross-reacting with kit.
   b. Possibly calling positives that are close to the normal urine background of test (sample exhibiting only slight positive result).
   c. Drug in sample at too low a concentration to be confirmed.
   d. Test has a background problem and samples were not diluted with EIA buffer to reduce interference.
7. Large variability with duplicates.
   a. Inconsistent pipetting technique.

Template

Test: _____ Date of test: _____

Kit lot #: _____ Dilution of conjugate: _____

Exp. date: _____ Blank value (if subtracted): _____

Filter wavelength: _____ Technician: _____

	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												
D												
E												
F												
G												
H												

Standard Formulations

Suggested Amounts

Stocks	Concentration	Dilution	
Stock	1 mg/mL	1 mg in 1 mL of MeOH or H_2O	
A	1 µg/mL	5 µL stock	→ 5 mL Testing Medium
B	1 ng/mL	5 µL A	→ 5 mL Testing Medium
Standard	**Ratio**	**Dilution**	
0.001	B/1000	2 µL B	→ 2 mL Testing Medium
0.002	B/500	4 µL B	→ 2 mL Testing Medium
0.004	B/250	8 µL B	→ 2 mL Testing Medium
0.005	B/200	10 µL B	→ 2 mL Testing Medium
0.008	B/125	16 µL B	→ 2 mL Testing Medium
0.01	B/100	20 µL B	→ 2 mL Testing Medium
0.02	B/50	40 µL B	→ 2 mL Testing Medium
0.04	B/25	80 µL B	→ 2 mL Testing Medium
0.05	B/20	100 µL B	→ 2 mL Testing Medium
0.08	B/12.5	160 µL B	→ 2 mL Testing Medium
0.1	B/10	200 µL B	→ 2 mL Testing Medium
0.2	B/5	400 µL B	→ 2 mL Testing Medium
0.4	B/2.5	800 µL B	→ 2 mL Testing Medium
0.5	B/2	1000 µL B	→ 2 mL Testing Medium
0.8	B/1.25	1600 µL B	→ 2 mL Testing Medium
1	B	B	
2	A/500	4 µL A	→ 2 mL Testing Medium
4	A/250	8 µL A	→ 2 mL Testing Medium
5	A/200	10 µL A	→ 2 mL Testing Medium
8	A/125	16 µL A	→ 2 mL Testing Medium
10	A/100	20 µL A	→ 2 mL Testing Medium
20	A/50	40 µL A	→ 2 mL Testing Medium
40	A/25	80 µL A	→ 2 mL Testing Medium
50	A/20	100 µL A	→ 2 mL Testing Medium
80	A/12.5	160 µL A	→ 2 mL Testing Medium
100	A/10	200 µL A	→ 2 mL Testing Medium
200	A/5	400 µL A	→ 2 mL Testing Medium
400	A/2.5	800 µL A	→ 2 mL Testing Medium
500	A/2	1000 µL A	→ 2 mL Testing Medium
800	A/1.25	1600 µL A	→ 2 mL Testing Medium
1000	A	A	

Definitions of Terms

Absorbance (optical density): A measure of light absorbed by a solution that is equal to the logarithm of the ratio of incident light to transmitted light.

Accuracy: The conformity of a result to an accepted standard value.

Analyte: The substance, set of substances, or factor to be assayed.

Antibody: The functional component of antiserum, often referred to collectively as a population of molecules, each member of which is capable of reacting with a specific antigenic determinant.

Antigen: Classically, a substance that will elicit the formation of antibodies in a suitable host. A more recent connotation defines an antigen as a substance that will combine with antibody through its antibody binding sites.

Background: This refers to the natural background or interference that is seen on our tests with raw urine, blood, or other biological substances. There are naturally occurring components in these substances that can slightly cross-react with the antibody. The background graph on kit inserts is generated by comparing 40 known negative track samples against a standard curve in buffer.

An apparent drug concentration can be calculated for each track sample against this standard curve. This is considered the background for there is no drug actually present. If the concentration is higher than the I-50 for the test, a dilution is recommended with buffer which will reduce the background below the I-50.

Chromogen: Any substance that can become a pigment or coloring matter, as a substance in organic fluids that forms colored compounds when oxidized.

Competitive binding assay: An assay based on the competition of labeled and unlabeled analytes for receptor.

Conjugate: A material produced by attaching two or more substances together. Conjugates of antibody with fluorochromes, radioactive isotopes, or enzymes are systems used in immunoassays. Within the assay, the conjugate is the hapten (drug) linked to an enzyme (horseradish peroxidase).

Cross-reactivity: This term refers to the antibody binding to a compound other than the original compound for which the antibody was developed. We graph standard curves of drugs that cross-react strongly with the test. Drugs that exhibit low cross-reactivity are only presented in a percent format.

Percent cross-reactivity is calculated by dividing the I-50 of the original analyte by the I-50 of the cross-reacting compound, then multiplied by 100 to achieve percentage.

Duration of detection: Our tests are validated for detecting the drug and/or it's metabolite(s) by dosing a horse with the drug and testing the pre and post-dose urine samples with our kit. This test is performed on a single horse for each test. The clearance time can differ from animal to animal.

Enzyme-linked immunosorbent assay (ELISA): A heterogeneous enzyme immunoassay method where an antigen or antibody is firmly attached to a solid support.

Hapten: A specific substance that interacts with specific antibody-combining sites of an antibody molecule, but is not immunogenic by itself.

I-50: This is a term used to indicate the sensitivity of the tests. This number is derived from a standard curve of the drug (commonly in buffer). The drug concentration that shows 50% less color activity than the zero standard is considered to be the I-50.

Immunoassay: A ligand-binding assay that uses a specific antigen or antibody capable of binding to the analyte.

Immunogen: A substance that elicits a cellular immune response and/or antibody.

Limit of detection: The smallest quantity or concentration of the drug compound that can be reliably distinguished from background in the test.

The limit of detection is determined by performing ten separate standard curves. The standard curves include a zero standard and standard points that give binding levels (B) from 80–20% B/Bo. From these standard curves, a composite standard curve is generated by determining the mean absorbance for each standard. The following equation is used to determine the absorbance value for the limit detection:

$$\text{Limit of detection} = Bo - 2S$$

Where Bo = Mean of O.D.'s at 0 ng/mL
2S = 2 standard deviations

The limit of detection concentration is generated by converting the absorbance to a value based on the data from the standard curve. The equation for the linear regression of the standard points, excluding the zero, is calculated for this purpose. This is done by transforming the X axis to the log (x) and the Y axis to the logit (y) to linearize the data. The equation for the line will then fit the general formula:

$$Y = ax + b$$

The concentration represented by the absorbance calculated above will be obtained by solving the equation for X.

Also, calculate the correlation coefficient (r) of the curve data points with the line points and review as an evaluation of linearity. Acceptable results are:

$$r = > \text{ or } = 0.98$$

Matrix effects: Refers to interfering agents in the solution being assayed.

Metabolite: A metabolite is a compound formed when a drug is metabolized after administration to the animal. Some drugs are metabolized extensively while others are changed very little. The detection and confirmation of a drug metabolite is considered adequate evidence that the parent drug has been administered.

Monoclonal: Arising from a single clone of cells, in the case of immunoglobulin, refers to its origin; the monoclonal antibody is of a single immunoglobulin class only one light chain type of either the K and λ variety, all molecules with identical physical-chemical characteristics and antibody specificity.

Polyclonal: Arising from different clones. A typical antiserum obtained from a conventional immunization is polyclonal.

Precision: The extent to which replicate analyses of a sample agree with each other; usually expressed as imprecision (cf. the coefficient of variation (CV) of a population of values or the standard deviation divided by the mean).

Qualitative assay: Concerned with determining the presence or absence of a particular chemical in a mixture.

Quantitative assay: Deals with accurate measurement of compound of interest in a mixture.

Reference correlation (accuracy): The degree of closeness of the linear relationships between the results from the product and a reference assay over the range of the test. Expressed as the correlation coefficient, slope, and Y-intercept of the regressed data.

Reproducibility (precision): The ability of the assay to duplicate results in repeat determinations. The opposite of variability in the assay.

Intra-assay variation: Variability between replicate determinations in the same assay.

Inter-assay variation: Variability between replicate determinations from different assays.

Shelf life: Number of days assigned to a product based on stability studies from accelerated and real time assays. This number reflects usable life of product.

Signal: The measured response of the assay system to the analyte.

Spectrophotometer: An instrument used for measuring the transmission or reflection of light by comparing various wavelengths of the light. A microplate reader is a spectrophotometer designed specifically for 96 well microplates.

Stability: The usable shelf life of the kit under specified storage conditions.

Substrate: A substance that is activated by an enzyme and converted to a chemically different product.

Your ELISA Drug Detection Source

Neogen's extensive line of drug detection ELISA kits can be used to screen for over 300 drugs and/or their metabolites in urine and blood. These easy-to-use, one-step kits are highly sensitive assays that can detect low levels of drugs in less than two hours with quality reproducible results.

The chart below is an alphabetical listing of the drugs that can be detected with our line of ELISA test kits. Some drugs are listed for more than one kit so the end user can choose the kit that is most appropriate for their screening methods. Drugs and metabolites can be searched on our website at neogen.com to determine appropriate kits for the screening need.

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
1	A-796260	Synthetic Cannabinoids (UR-144/XLR-11)
1	A-834735	Synthetic Cannabinoids (UR-144/XLR-11)
3	Acepromazine	Promazine Group, Carprofen
4	Acetaminophen	Acetaminophen
2	Acetophenazine	Fluphenazine, Tricyclics Group
N/A	Acetyl Fentanyl	Fentanyl, LSD, Sufentanil
2	Adinazolam	Benzodiazepine Group
N/A	Adrafinil	Modafinil
3	Albuterol	Bronchodilator Group
1	Alfentanil	Alfentanil, Fentanil Group
2	Alprazolam	Benzodiazepine Group
N/A	α-Hydroxy-Alprazolam	Benzodiazepine Group
2	Alprenolol	Propranolol
1	AM 694	Synthetic Cannabinoids (JWH-018)
1	AM 1220	Synthetic Cannabinoids (JWH-018/250)
1	AM 2201	Synthetic Cannabinoids (JWH-018)
1	AM 2201 6-hydroxyindole Metabolite	Synthetic Cannabinoids (JWH-018)
1	AM-2201 N-(4-hydroxypentyl) Metabolite	Synthetic Cannabinoids (JWH-018)
1	AM 2232	Synthetic Cannabinoids (JWH-018/250)
4	Amcinonide	Triamcinolone Acetonide
3	Aminophylline	Theophylline
N/A	Aminopterin	Methotrexate
2	Amitriptyline	Promazine Group, Tricyclics Group
2	Amobarbital	Barbiturate Group
1	Amphetamine	Amphetamine, Amphetamine Specific-2, Amphetamine Ultra
N/A	p-Hydroxyamphetamine	Amphetamine Specific-2
N/A	Androstenedione	Boldenone
1	Anileridine	Anileridine
N/A	Apocodeine	Apomorphine/Apocodeine
1	Apomorphine	Apomorphine/Apocodeine
2	Aprobarbital	Barbiturate Group
3	Atenolol	Propranolol

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
3	Atropine	Ipratropium/Atropine
N/A	5'-Hydroxy-Azaperol	Azaperone
2	Azaperone	Azaperone, Buspirone
N/A	5'-Hydroxy-Azaperone	Azaperone
2	Barbital	Barbiturate Group
4	Beclomethasone	Corticosteroid Group, Dexamethasone, Triamcinolone Acetonide
4	Benoxinate	Procaine
2	Benperidol	Azaperone, Droperidol
N/A	Benzoylecgonine	Cocaine/BZE
1	Benzylpiperazine	Benzylpiperazine
4	Betamethasone	Corticosteroid Group, Dexamethasone, Triamcinolone Acetonide
N/A	Bolandiol	Nandrolone
2	Bentazepam	Benzodiazepine Group
3	Boldenone	Boldenone, Nandrolone, Trenbolone
N/A	Boldenone Sodium Sulfate	Boldenone
2	Bromazepam	Benzodiazepine Group
2	Bromperidol	Azaperone, Haloperidol, Haloperidol Metabolite
4	Budesonide	Triamcinolone Acetonide
3	Bumetanide	Bumetanide
N/A	Buphedrone	Synthetic Cathinones (Methcathinone)
2	Bupivacaine	Mepivacaine
2	Buprenorphine	Buprenorphine, Diprenorphine
N/A	Hydroxybupropion	Amphetamine Ultra
2	Buspirone	Buspirone
2	Butabarbital	Barbiturate Group
2	Butalbital	Barbiturate Group
3	Butorphanol	Butorphanol, Nalbuphine, Levallorphan
2	Caffeine	Caffeine
1	Carfentanil	Carfentanil, Fentanil Group, Fenspiride, Sufentanil
N/A	Carboxydetomidine	Detomidine
2	Carisoprodol	Carisoprodol, Meprobamate
4	Carprofen	Carprofen
3	Celecoxib	Celecoxib
N/A	Celecoxib Carboxylic Acid	Celecoxib
4	Cetirizine	Fexofenadine/Terfenadine, Hydroxyzine
2	Chlordiazepoxide	Benzodiazepine Group
2	Chloroprocaine	Procaine
4	Chlorpheniramine	Hydroxyzine, Pyrilamine
4	Chlorothiazide	Hydrochlorothiazide

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
1	Chlorpromazine	Fluphenazine, Hydroxyzine, Promazine Group, Tricylics Group
N/A	7-Hydroxy-Chlorpromazine Metabolite	Promazine Group
2	Chlorprothixene	Promazine Group
N/A	Cimaterol	Bronchodilator Group
N/A	Cinnarizine	Hydroxyzine
2	Citalopram	Citalopram
N/A	N-Desmethyl-Citalopram	Citalopram
N/A	(S)-Citalopram	Citalopram
3	Clenbuterol	Bronchodilator Group, Clenbuterol
N/A	Hydroxyclenbuterol	Bronchodilator Group, Clenbuterol
N/A	Hydroxymethylclenbuterol	Bronchodilator Group, Clenbuterol
2	Clobazam	Benzodiazepine Group
N/A	Clobetasol Propionate	Triamcinolone Acetonide
2	Clomipramine	Promazine Group, Tricyclics Group
2	Clonazepam	Benzodiazepine Group
N/A	7-Amino-Clonazepam	Benzodiazepine Group
N/A	8-Amino-Clonazolam	Benzodiazepine Group
3	Clonidine	Clonidine/Romifidine
2	Clozapine	Tricyclics Group
N/A	Cocaethylene	Cocaine/BZE
1	Cocaine	Cocaine/BZE
N/A	m-Hydroxy-Cocaine	Cocaine/BZE (Forensic)
N/A	p-Hydroxy-Cocaine	Cocaine/BZE
1	Codeine	Hydromorphone, Opiate Group, Oxymorphone
N/A	(-) Cotinine	Cotinine
N/A	(+/-) Trans-Hydroxy-Cotinine	Cotinine
3	Cyclizine	Hydroxyzine
4	Cyclobenzaprine	Promazine Group, Tricyclics Group
N/A	Cyprenorphine	Buprenorphine, Diprenorphine
4	Dantrolene	Dantrolene
N/A	Delorazepam	Benzodiazepine Group
3	Deracoxib	Celecoxib
1	Dermorphin	Dermorphin
N/A	Deschloroetizolam	Benzodiazepine Group
2	Desipramine	Promazine Group, Tricyclics Group
4	Desoximethasone	Triamcinolone Acetonide
N/A	Despropionyl-3-Methyl-Fentanyl	Fentanyl
3	Detomidine	Detomidine
4	Dexamethasone	Corticosteroid Group, Dexamethasone, Triamcinolone Acetonide
4	Dextromethorphan	Dextromethorphan RTU

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
3	Diazepam	Benzodiazepine Group, Flunitrazepam
N/A	Diclazepam	Benzodiazepine Group
N/A	Diflorasone Diacetate	Triamcinolone Acetonide
2	Dihydrocodeine	Hydromorphone
3	Diphenhydramine	Hydroxyzine
2	Diprenorphine	Buprenorphine, Diprenorphine
N/A	Dizocilpine	Tricyclics Group
N/A	Dothiepin	Tricyclics Group
2	Doxapram	Doxapram
2	Doxepin	Promazine Group, Tricyclics Group
2	Droperidol	Azaperone, Droperidol
2	Ephedrine	Amphetamine, Amphetamine Ultra, Methamphetamine
N/A	Equilin	Trenbolone
N/A	Estradiol	Trenbolone
2	Estazolam	Benzodiazepine Group
2	Eszopiclone	Zopiclone/Eszopiclone RTU
N/A	N-Desmethyl-Eszopiclone	Zopiclone/Eszopiclone RTU
3	Ethacrynic Acid	Ethacrynic Acid
N/A	Ethcathinone	Synthetic Cathinones (Methcathinone)
1	Ethylmorphine	Hydromorphone, Opiate Group, Oxymorphone
N/A	Ethylone (bk-MDEA)	Synthetic Cathinones (Methcathinone)
N/A	Ethyltryptamine	Amphetamine Specific-2
2	Etizolam	Benzodiazepine Group
n/A	α-Hydroxy-Etizolam	Benzodiazepine Group
1	Etorphine	Etorphine
2	Fenfluramine	Amphetamine, Amphetamine Ultra, Methamphetamine
N/A	Fenproporex	Amphetamine Ultra
1	Fentanyl	Fentanyl, Fenspiride, LSD
N/A	α-Methyl-Fentanyl	Fentanyl, Fenspiride
N/A	p-Fluoro-Fentanyl	Fentanyl
N/A	3-Methyl-Fentanyl	Fentanyl, Fenspiride
4	Fexofenadine	Fexofenadine/Terfenadine, Hydroxyzine
2	Fluanisone	Azaperone
N/A	Flubromazepam	Benzodiazepine Group
4	Flumethasone	Corticosteroid Group, Dexamethasone
4	Flunarizine	Hydroxyzine
4	Flunisolide	Triamcinolone Acetonide
2	Flunitrazepam	Benzodiazepine Group, Flunitrazepam
N/A	N-Desmethyl-Flunitrazepam	Benzodiazepine Group

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
N/A	7-Amino-Flunitrazepam	Flunitrazepam, Benzodiazepine Group
4	Flunixin	Flunixin
4	Fluocinolone	Triamcinolone Acetonide
N/A	Fluocinolone Acetonide	Triamcinolone Acetonide
4	Fluocinonide	Triamcinolone Acetonide
N/A	3-Fluoromethcathinone	Synthetic Cathinones (Methcathinone)
N/A	4-Fluoromethcathinone (Flephedrone)	Synthetic Cathinones (Methcathinone)
2	Fluoxetine	Fluoxetine
2	Fluphenazine	Fluphenazine, Tricyclics Group
4	Flurandrenolide	Triamcinolone Acetonide
2	Flurazepam	Benzodiazepine Group
N/A	Furosemide	Furosemide
4	Glycopyrrolate	Glycopyrrolate
4	Guaifenesin	Methocarbamol
3	Guanabenz	Guanabenz
	Guanfacine	Guanabenz
N/A N/A	2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)	Promazine Group
2	Halazepam	Benzodiazepine Group
4	Halcinonide	Triamcinolone Acetonide
2	Haloperidol	Azaperone, Haloperidol Metabolites
N/A	Haloperidol Metabolite I & II	Haloperidol Metabolites
1	Heroin	Hydromorphone
4	Hydrochlorothiazide	Hydrochlorothiazide
1	Hydrocodone	Hydromorphone, Opiate Group, Oxymorphone
4	Hydrocortisone	Corticosteroid Group, Dexamethasone,
1	Hydromorphone	Hydromorphone, Opiate Group, Oxymorphone
2	Hydroxyzine	Fexofenadine/Terfenadine, Hydroxyzine
4	Ibuprofen	Ibuprofen
2	Imipramine	Promazine Group, Tricyclics Group
3	Ipratropium	Ipratropium/Atropine
4	Isoflupredone	Corticosteroid Group
4	Isoxsuprine	Isoxsuprine
1	JWH-007	Synthetic Cannabinoids (JWH-018)
1	JWH-015	Synthetic Cannabinoids (JWH-018/250)
1	JWH-018	Synthetic Cannabinoids (JWH-018/250)
1	JWH-018 4-hydroxyindole	Synthetic Cannabinoids (JWH-018)
1	JWH-018 5-hydroxyindole	Synthetic Cannabinoids (JWH-018)
1	JWH-018 6-hydroxyindole	Synthetic Cannabinoids (JWH-018/250)
1	(+/-) JWH-018 N-(4-hydroxypentyl) Metabolite	Synthetic Cannabinoids (JWH-018)

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
1	(+)-JWH-018 N-(4-hydroxypentyl) Metabolite	Synthetic Cannabinoids (JWH-250)
1	JWH-018 N-5-hydroxypentyl	Synthetic Cannabinoids (JWH-018)
1	JWH-018 N-(5-hydroxypentyl) β-D-glucuronide	Synthetic Cannabinoids (JWH-018/250)
1	JWH-018-N-Pentanoic Acid	Synthetic Cannabinoids (JWH-018/250)
1	JWH-019	Synthetic Cannabinoids (JWH-018)
1	JWH-022	Synthetic Cannabinoids (JWH-018/250)
1	JWH-073	Synthetic Cannabinoids (JWH-018/250)
1	JWH-073 N-Butanoic Acid	Synthetic Cannabinoids (JWH-018/250)
1	JWH-073-N-(4-hydroxybutyl) Metabolite	Synthetic Cannabinoids (JWH-250)
1	JWH-122	Synthetic Cannabinoids (JWH-018)
1	JWH-200	Synthetic Cannabinoids (JWH-018/250)
1	JWH-203	Synthetic Cannabinoids (JWH-250)
1	JWH-250	Synthetic Cannabinoids (JWH-250)
1	JWH-250 5-hydroxyindole Metabolite	Synthetic Cannabinoids (JWH-250)
1	JWH-250 N-(5-carboxypentyl) Metabolite	Synthetic Cannabinoids (JWH-250)
1	JWH-250 N-(4-hydroxypentyl) Metabolite	Synthetic Cannabinoids (JWH-250)
1	JWH-250 N-(5-hydroxypentyl) Metabolite	Synthetic Cannabinoids (JWH-250)
2	Lorazepam	Benzodiazepine Group
2	Ketamine	Ketamine
4	Ketoprofen	Ketoprofen, Zomepirac
3	Ketorolac	Ketorolac, Zomepirac
N/A	LAAM	Methadone RTU, Methadone/LAAM
N/A	LAMPA	LSD
N/A	LSD	LSD
N/A	Iso-LSD	LSD
N/A	Nor-/Nor-iso-LSD	LSD
N/A	2-oxo-3-OH LSD	LSD
N/A	2-oxo-3-OH LAMPA	LSD
N/A	Levallorphan	Hydromorphone, Levallorphan
1	Levorphanol	Hydromorphone, Levallorphan, Opiate Group
2	Lidocaine	Lidocaine, Mepivacaine
N/A	3-Hydroxy-Lidocaine Metabolite	Lidocaine
N/A	4-Hydroxy-Lidocaine Metabolite	Lidocaine
2	Lormetazepam	Benzodiazepine Group
1	MAM 2201	Synthetic Cannabinoids (JWH-018/250)
N/A	(+/-)-MDA	Amphetamine Specific-2
N/A	MDMA	Methamphetamine
2	Maprotiline	Tricyclics Group
1	Mazindol	Mazindol/Mazindol Metabolite

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
N/A	Mazindol Metabolite	Mazindol/Mazindol Metabolite
3	Meclizine	Hydroxyzine
N/A	Meclonazepam	Benzodiazepine Group
3	Medetomidine	Detomidine
1	Meperidine	Anileridine, Meperidine
N/A	Mephedrone	Synthetic Cathinones (Methcathinone), Methamphetamine
1	Mephentermine	Amphetamine, Amphetamine Ultra, Mephentermine, Methamphetamine
2	Mepivacaine	Mepivacaine
N/A	3-Hydroxy-Mepivacaine	Metabolite Mepivacaine
N/A	4-Hydroxy-Mepivacaine	Metabolite Mepivacaine
N/A	Meprobamate-N-β-Glucuronide	Meprobamate RTU
2	Mesoridazine	Promazine Group
N/A	Mesterlone	Trenbolone
3	Metaproterenol	Bronchodilator Group
1	Metaraminol	Metaraminol
1	Methadone	Methadone RTU, Methadone/LAAM
1	Methamphetamine	Amphetamine, Amphetamine Ultra, Methamphetamine
N/A	p-Hydroxy-Methamphetamine	Methamphetamine
N/A	d-Methamphetamine	Methamphetamine
N/A	l-Methamphetamine	Methamphetamine
3	Methandrostenelone	Boldenone
1	(±) Methcathinone	Synthetic Cathinones (Methcathinone)
N/A	Methedrone	Synthetic Cathinones (Methcathinone)
4	Methocarbamol	Methocarbamol
4	Methotrexate	Methotrexate
N/A	Methylene Blue	Carprofen
N/A	4-Methylethcathinone	Synthetic Cathinones (Methcathinone)
N/A	Methylone	Synthetic Cathinones (Methcathinone)
1	Methylphenidate	Methyphenidate
4	Methylprednisolone	Corticosteroid Group, Methylphenidate/Ritalinic Acid RTU
N/A	Methylprednisolone-21-hemisuccinate	Methylprednisolone
N/A	Methylreserpate	Reserpine
N/A	1-Methylxanthine	Theophylline
3	Midazolam	Benzodiazepine Group
2	Modafinil	Modafinil
N/A	Modafinil	Acid Modafinil
N/A	R-Modafinil	Modafinil
1	Morphine	Hydromorphone, Opiate Group
N/A	3-Methoxy-Morphinan	Dextromethorphan RTU

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
2	Nalbuphine	Butorphanol, Nalbuphine, Naltrexone (Forensic)
2	Nalorphine	Levallorphan
N/A	Nalmefene	Naltrexone (Forensic)
3	Naltrexone	Naltrexone (Forensic)
N/A	Naltriben	Naltrexone (Forensic)
3	Nandrolone	Boldenone, Nandrolone
1	3-(1-naphthoyl)-1H-Indole	Synthetic Cannabinoids (JWH-018)
2	Nefazodone	Trazodone RTU
N/A	Nifoxipam	Benzodiazepine Group
1	Nikethamide	Nikethamide
N/A	Nikethamide 1-Oxide	Nikethamide
2	Nimetazepam	Benzodiazepine Group
2	Nitrazepam	Benzodiazepine Group
N/A	Norbuprenorphine	Buprenorphine
2	Nordiazepam	Benzodiazepine Group
N/A	Nordoxepin	Tricyclic Group
N/A	Norfentanyl	LSD
N/A	Norfluoxetine	Fluoxetine
N/A	Norketamine	Ketamine
N/A	Normeperidine	Meperidine
N/A	Norproxyphene	Propoxyphene RTU
N/A	Norsufentanil	Fentanil Group
2	Nortriptyline	Promazine Group, Tricyclics Group
3	Nylidrin	Amphetamine Ultra, Isoxsuprine
N/A	(+/-) Octopamine	Amphetamine
2	Olanzapine	Tricyclics Group
4	Orphenadrine	Flunitrazepam, Hydroxyzine
2	Oxazepam	Benzodiazepine Group
1	Oxycodone	Oxymorphone
1	Oxymorphone	Oxymorphone
1	PB 22 N-(5-hydroxypentyl) Metabolite	Synthetic Cannabinoids (JWH-250)
N/A	Penicillin-G Procaine	Procaine
3	Pentazocine	Pentazocine
2	Pentobarbital	Barbiturate Group
4	Pentoxifylline	Caffeine
2	Perphenazine	Fluphenazine, Tricyclics Group
N/A	3-hydroxy-phenazepam	Benzodiazepine Group
N/A	Phenazepam	Benzodiazepine Group
1	Phencyclidine	Phencyclidine (PCP) (Forensic)

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
N/A	Pheniramine	Pyrilamine
2	Phenobarbital	Barbituate Group
N/A	Phenothiazine	Carprofen
2	Phentermine	Amphetamine, Amphetamine Specific-2, Amphetamine Ultra
4	Phenylbutazone	Phenylbutazone
3	Phenylpropanolamine	Amphetamine, Metaraminol
4	Phenytoin	Phenytoin
N/A	Hydroxyphenytoin	Phenytoin
2	Pimozide	Droperidol
3	Pindolol	Propranolol
3	Pirbuterol	Bronchodilator Group
N/A	Piribedil	Buspirone
2	Prazepam	Benzodiazepine Group
4	Prednisolone	Corticosteroid Group, Dexamethasone, Methylprednisolone, Triamcinolone Acetonide
3	Procaine	Procaine
2	Prochlorperazine	Fluphenazine, Tricyclics Group
3	Promazine	Carprofen, Promazine Group, Tricyclics Group
N/A	2-(1-hydroxyethyl)-Promazine Sulfoxide Metabolite	Promazine Group
N/A	3-Hydroxy-Promazine Metabolite	Promazine Group
3	Propentofylline	Caffeine/Pentoxifylline
2	Propiomazine	Promazine Group
2	Propionylpromazine	Promazine Group
2	Propoxycaine	Procaine
N/A	Propoxyphene	Propoxyphene RTU
3	Propranolol	Bronchodilator Group, Propranolol
N/A	4-Hydroxypropranolol Metabolite	Propranolol
2	Protriptyline	Promazine Group, Tricyclics Group
3	Pseudoephedrine	Methamphetamine
N/A	Pyrazolam	Benzodiazepine Group
3	Pyrilamine	Pyrilamine
N/A	O-desmethyl-Pyrilamine Metabolite	Pyrilamine
1	RCS-8	Synthetic Cannabinoids (JWH-250)
1	Remifentanil	Fentanil Group
N/A	Rescinnamine	Reserpine
2	Reserpine	Reserpine
3	Romifidine	Clonidine/Romifidine
2	Ropivacaine	Mepivacaine

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
N/A	Salbutamol	Bronchodilator Group
4	Scopolamine	Ipratropium/Atropine
N/A	N-desmethyl-Selegiline	Amphetamine, Amphetamine Ultra
2	Sertraline	Sertraline
N/A	N-desmethyl-Sertraline	Sertraline
N/A	Sodium Cromoglycate	Cromoglycate
2	Spiperone	Azaperone
3	Stanozolol	16-β-Hydroxystanozolol
N/A	3'-Hydroxy-Stanozolol	Stanozolol
4	16-β-Hydroxy-Stanozolol	16-β-Hydroxystanozolol
1	Sufentanil	Fentanil Group, Fenspiride, Sufentanil
N/A	Sulfamethazine	Sulfamethazine
N/A	(+/-) Synephrine	Amphetamine, Amphetamine Ultra, Methamphetamine/MDMA
2	Temazepam	Benzodiazepine Group
3	Terbutaline	Bronchodilator Group
4	Terfenadine	Fexofenadine/Terfenadine, Hydroxyzine
3	Testosterone	Boldenone, Nandrolone, Trenbolone
2	Tetrazepam	Benzodiazepine Group
2	Thebaine	Hydromorphone, Opiate Group
4	Theobromine	Caffeine, Theophylline
3	Theophylline	Theophylline
N/A	Thienylfentanyl	Fentanyl
2	Thioridazine	Promazine Group, Tricyclics Group
3	Tolmetin	Ketorolac, Zomepirac
2	Tramadol	Tramadol RTU
2	Trazodone	Trazodone RTU
3	Trenbolone	Trenbolone
4	Triamcinolone	Triamcinolone Acetonide
N/A	Triamcinolone Acetonide	Triamcinolone Acetonide
N/A	Triamcinolone Diacetate	Triamcinolone Acetonide
4	Triamterene	Methotrexate
2	Triazolam	Benzodiazepine Group
4	Trichlormethiazide	Hydrochlorothiazide
2	Trifluoperazine	Fluphenazine, Tricyclics Group
2	Trifluperidol	Azaperone
2	Triflupromazine	Fluphenazine, Promazine Group, Tricyclics Group
2	Trimipramine	Promazine Group, Tricyclics Group
3	Triplelennamine	Pyrilamine
1	(+/-)UR-144 N-(4-hydroxypentyl) Metabolite	Synthetic Cannabinoids (UR-144/XLR-11)

RCI Class	Drug/Metabolite Name	Drug Detection ELISA Kit
1	UR-144 N-(5-hydroxypentyl) Metabolite	Synthetic Cannabinoids (UR-144/XLR-11)
1	UR-144 N-pentanoic acid	Synthetic Cannabinoids (UR-144/XLR-11)
1	XLR-11	Synthetic Cannabinoids (UR-144/XLR-11)
1	XLR-11 N-(4-pentenyl) analog	Synthetic Cannabinoids (UR-144/XLR-11)
2	Zolazepam	Benzodiazepine Group
2	Zomepirac	Ketorolac, Zomepirac
2	Zopiclone	Zopiclone/Eszopiclone RTU
N/A	Zopiclone-N-Oxide	Zopiclone/Eszopiclone RTU

*Drug classification information was obtained from the Association of Racing Commissioners International, Inc. Uniform Classification Guidelines for Foreign Substances, 2019.

Techincal Manual

NEOGEN®

ENHANCED KIT

16β-HYDROXYSTANOZOLOL

Product #103510

& 103515 (Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Stanozolol	1.4 ng/ml
16β-Hydroxystanozolol	1.7 ng/ml

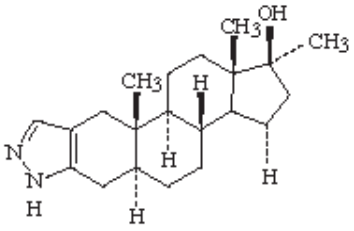
I-50 in Equine Urine (Diluted 1:19)		**I-50 in Canine Urine (Diluted 1:5)**	
Stanozolol	15.9 ng/ml	Stanozolol	10.5 ng/ml
16β-Hydroxystanozolol	13.0 ng/ml	16β-Hydroxystanozolol	15.2 ng/ml
I-50 in Equine Plasma (Diluted 1:5)		**I-50 in Equine Serum (Diluted 1:5)**	
Stanozolol	20.6 ng/ml	Stanozolol	21.1 ng/ml
16β-Hydroxystanozolol	20.5 ng/ml	16β-Hydroxystanozolol	15.5 ng/ml

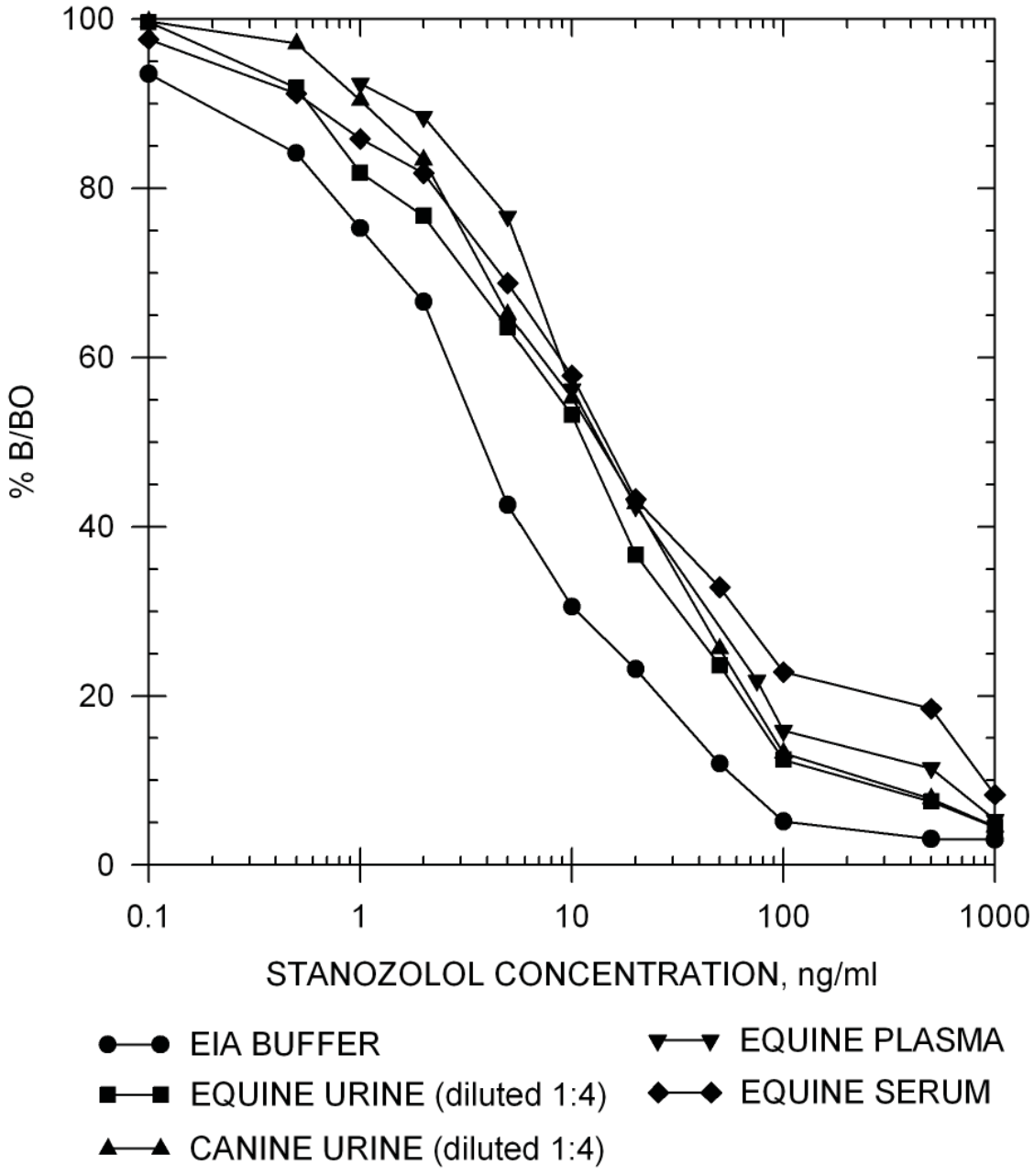
Precision: Intra-Assay 2.40%
Inter-Assay 1.64%

Note: Measuring wavelength was 650 nm.

16β-HYDROXYSTANOZOLOL STANDARD CURVES

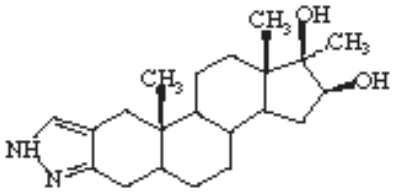
Stanozolol

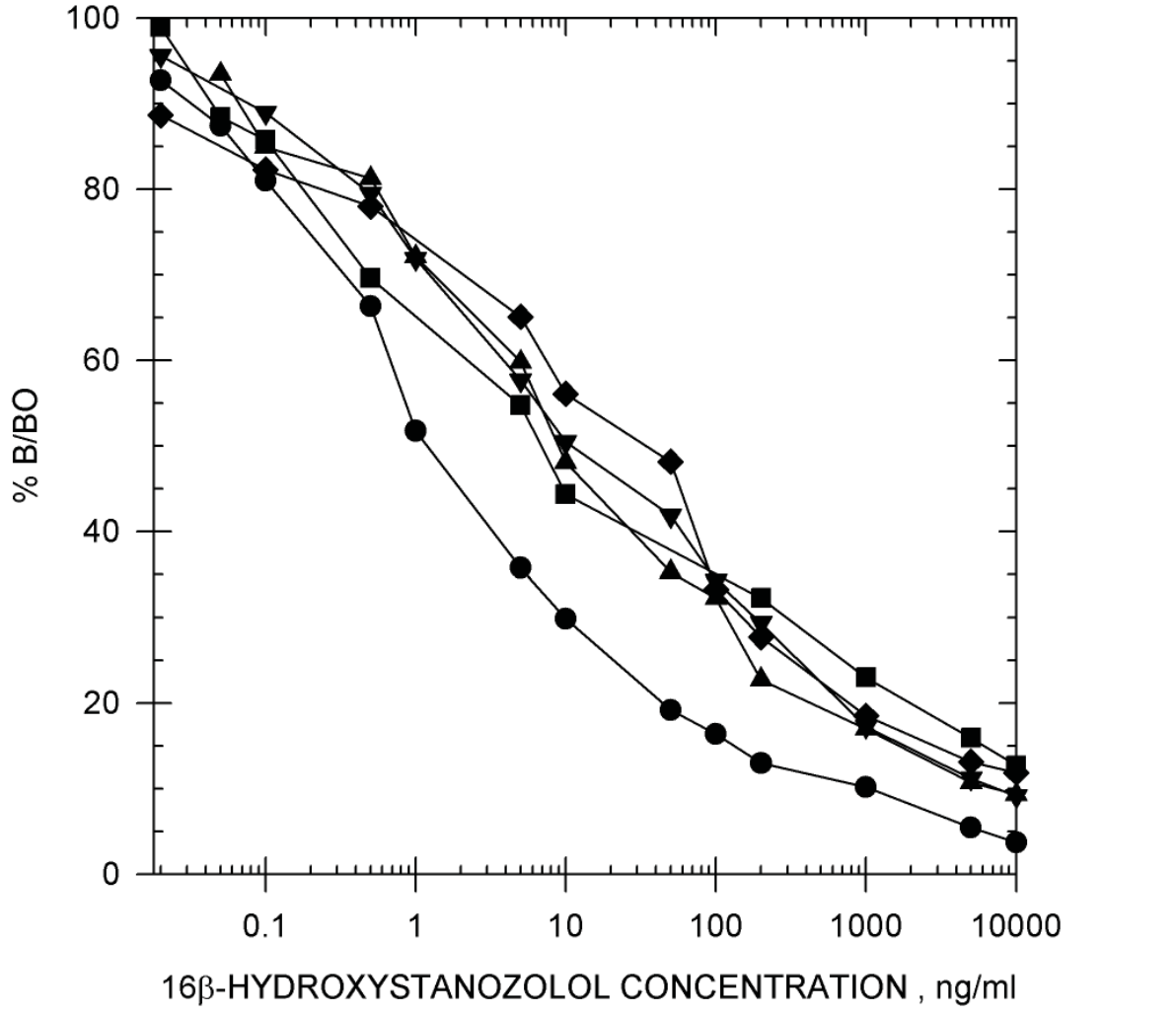




16β-HYDROXYSTANOZOLOL STANDARD CURVES

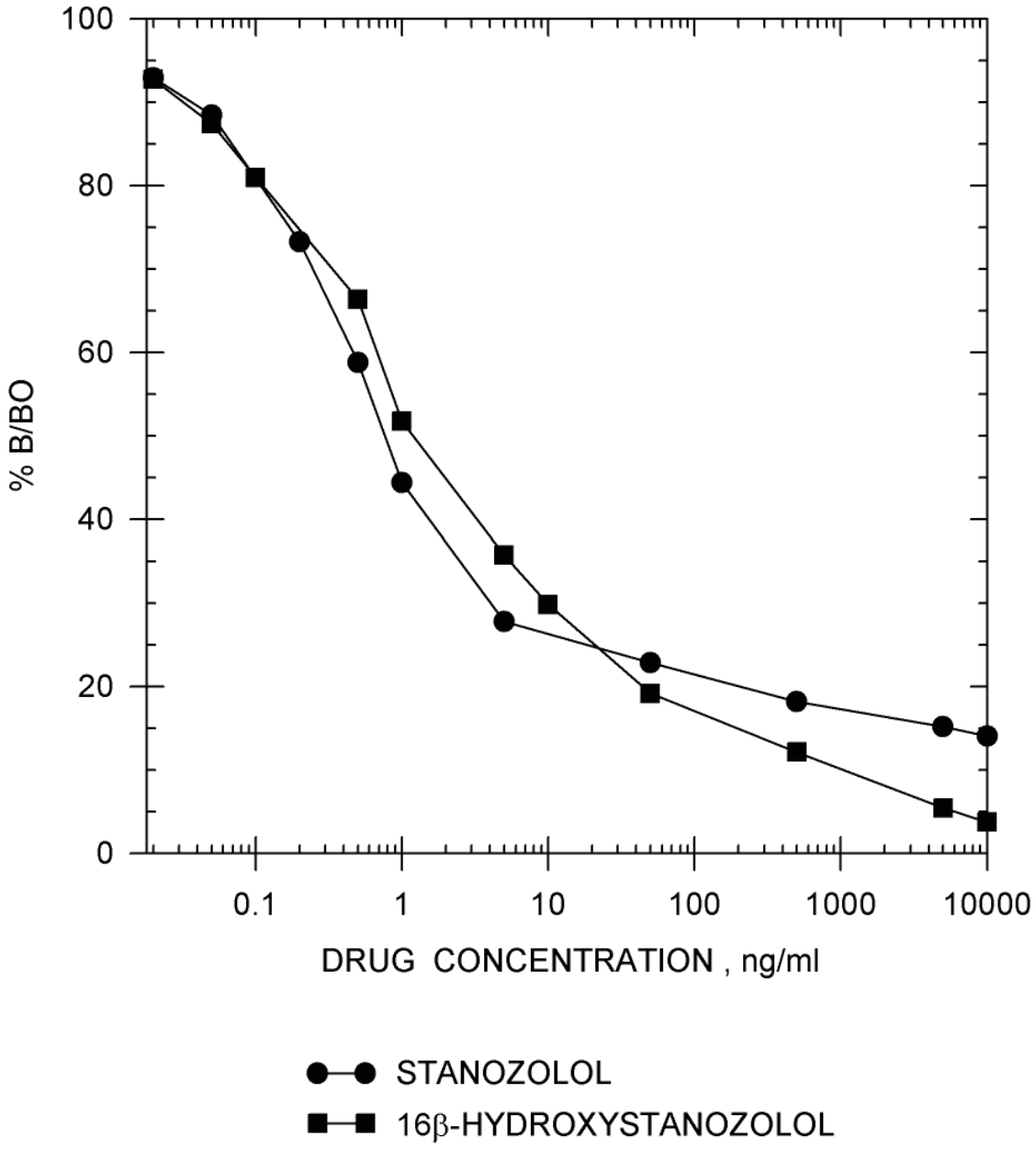
16β-Hydroxystanozolol





16β-HYDROXYSTANOZOLOL STANDARD CURVES

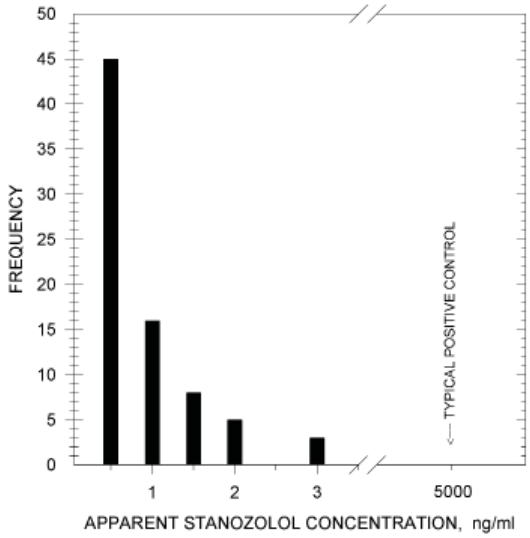
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 76 post-race equine urine samples, diluted 1:19, has shown no background levels above 3.96 ng/ml.

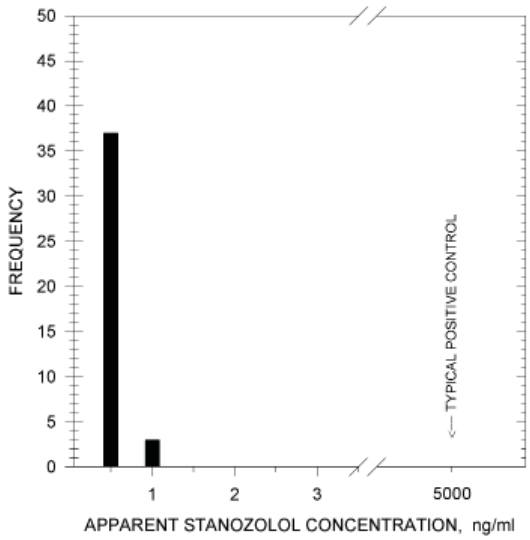
Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

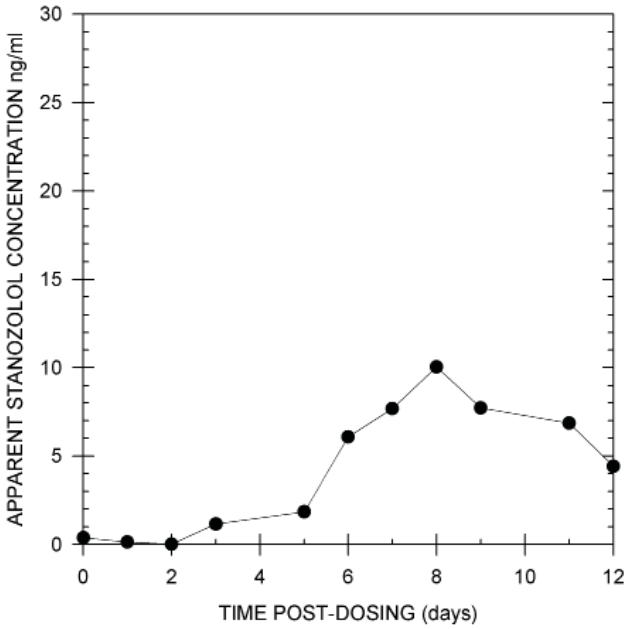
Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 1.60 ng/ml.

Sample Treatment: A dilution of 1:5 (i.e. 1 part urine to 19 parts EIA buffer) will reduce natural backgrounds.

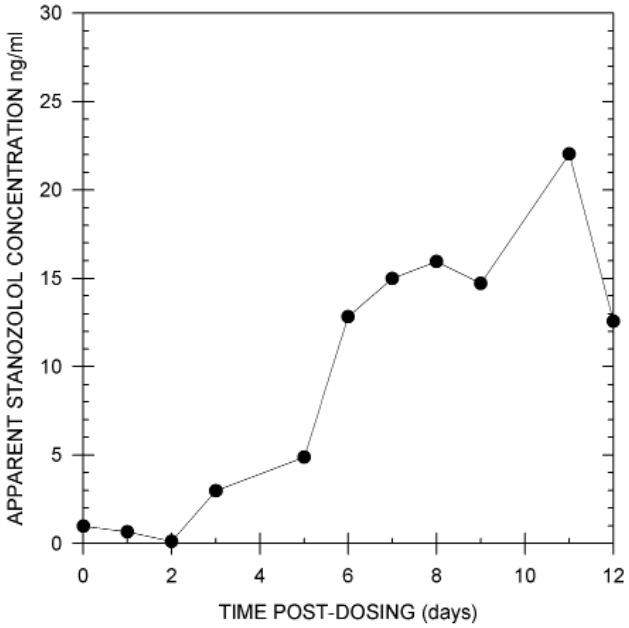


TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 1000 mg of stanozolol orally to one horse, the presence of this drug was detected at 6 days and for at least 12 days in equine urine. Samples were diluted 1:19 with EIA buffer before testing according to the recommended sample treatment.



Duration of Detection: The same set of administration samples was treated with β-glucuronidase from bovine liver. One milliliter was adusted to pH 4.0 to 5.0 (if necessary) and then spiked to a concentration of 100 units per mL of β-glucuronidase. The samples were incubated at 37°C for four hours. The deconjugated samples were then assayed as described



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Stanozolol	121%	Testosterone	0.4%	Oxymetholone	0.1%
16β-Hydroxystanozolol	100%	Boldenone	0.2%	Oxandrolone	0.06%
Androstenedione	0.5%	Trenbolone	0.2%	Estradiol	0.06%
Nandrolone	0.4%	Methandriol	0.1%	Methandrostenolone	0.02%
Progesterone	0.4%	17'Methyltestosterone	0.1%		

Acepromazine	<0.01%	Gemfibrozil	<0.01%	Orphenadrine	<0.01%
Acetaminophen	<0.01%	Gentisic Acid	<0.01%	Oxyphenbutazone	<0.01%
Acetylsalicylic Acid	<0.01%	Glipizide	<0.01%	Penicillin G-Potassium	<0.01%
ε-amino-n-caproic Acid	<0.01%	L-Glutamic Acid	<0.01%	Penicillin G-Procaine	<0.01%
Amitriptyline	<0.01%	Gluthethimide	<0.01%	Pentoxifylline	<0.01%
Ascorbic Acid	<0.01%	Glycopyrrolate	<0.01%	Phencyclidine (PCP)	<0.01%
Benzoic Acid	<0.01%	Heparin	<0.01%	Phenothiazine	<0.01%
Caffeine	<0.01%	Hippuric Acid	<0.01%	Phenylbutazone	<0.01%
Chlordiazepoxide	<0.01%	Hordenine	<0.01%	Polyethylene Glycol	<0.01%
Chlorpromazine	<0.01%	Hydrocortisone	<0.01%	Prednisolone	<0.01%
Clenbuterol	<0.01%	3'Hydroxystanozolol	<0.01%	Primadone	<0.01%
Codeine	<0.01%	Ibuprofen	<0.01%	Procainamide	<0.01%
Cotinine	<0.01%	Imipramine	<0.01%	Procaine	<0.01%
Dexamethasone	<0.01%	Isoxsuprine	<0.01%	Promazine	<0.01%
Dextromethorphan	<0.01%	Lidocaine	<0.01%	Pseudoephedrine	<0.01%
Diclofenac	<0.01%	Meperidine	<0.01%	Pyrantel	<0.01%
Dimethyl Sulfoxide	<0.01%	Metaproterenol	<0.01%	Pyrilamine	<0.01%
Dipyrone	<0.01%	Methadone	<0.01%	Pyrimethamine	<0.01%
Doxepin	<0.01%	Methaqualone	<0.01%	Quinidine	<0.01%
Ephedrine	<0.01%	Methocarbamol	<0.01%	Quinine	<0.01%
Erythromycin	<0.01%	Methylene Blue	<0.01%	Salbutamol	<0.01%
Ethyl p-amino-benzoate	<0.01%	Methylprednisolone	<0.01%	Salicylamide	<0.01%
Fenoprofen	<0.01%	Nalorphine	<0.01%	Theophylline	<0.01%
Flunixin	<0.01%	Naproxen	<0.01%	Thiamine	<0.01%
Folic Acid	<0.01%	Niacinamide	<0.01%	Trimethoprim	<0.01%
Folinic Acid	<0.01%	Nicotine	<0.01%	Trimpramine	<0.01%
Furosemide	<0.01%	Nortriptyline	<0.01%	Uric Acid	<0.01%

ENHANCED ALFENTANIL

Product #103610 & 103615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

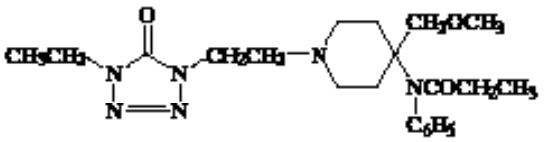
Alfentanil 0.11 ng/ml

Precision:	Intra-assay	1.86 %
	Inter-assay	6.10 %

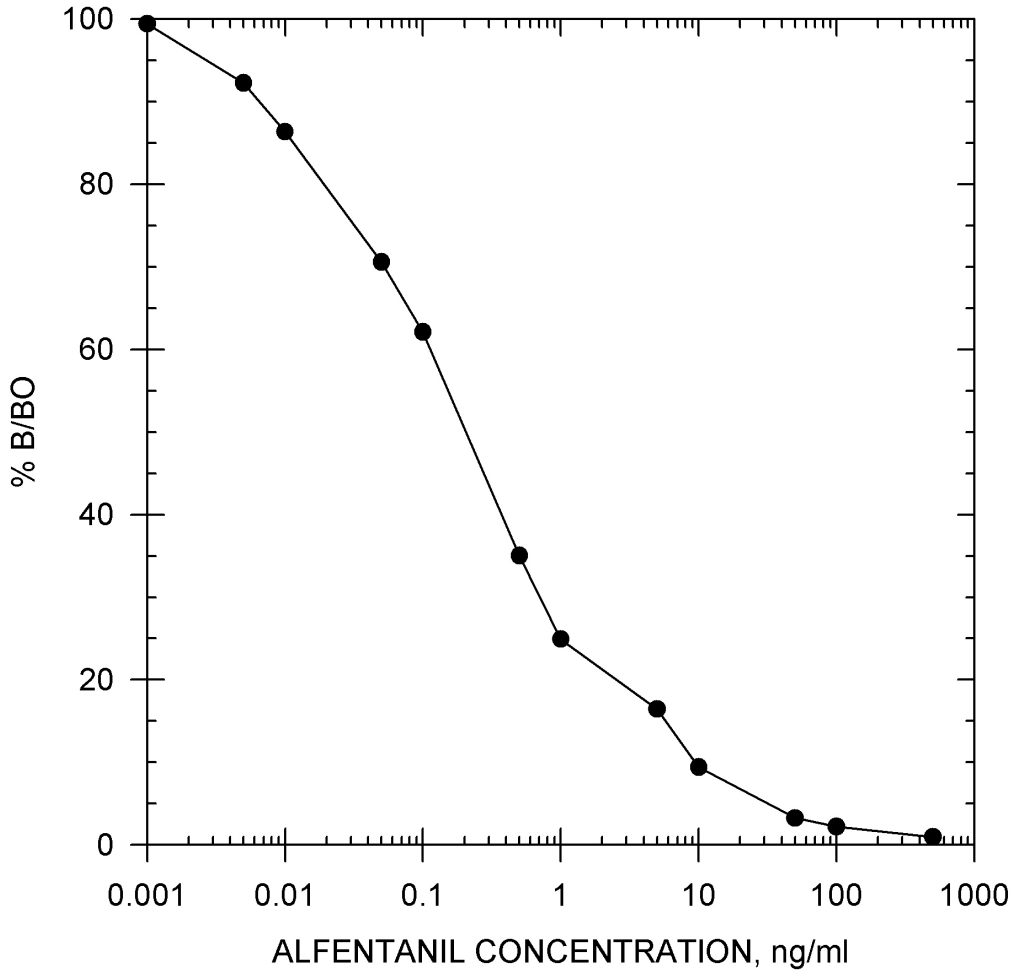
Note: Measuring wavelength was 650 nm**.**

ALFENTANIL STANDARD CURVE

Alfentanil



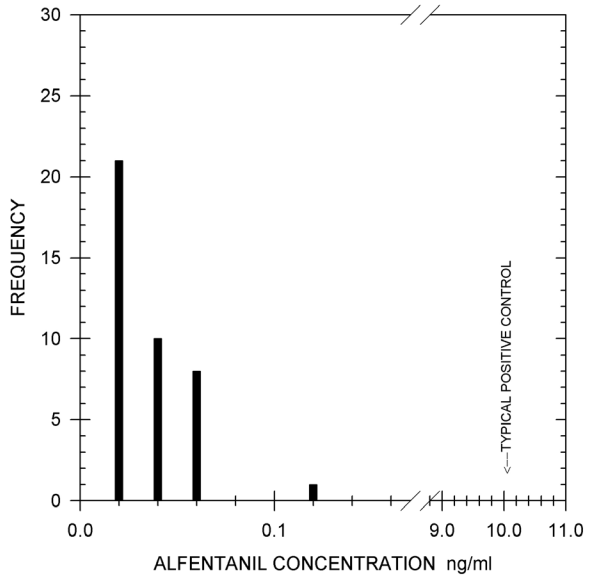
Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

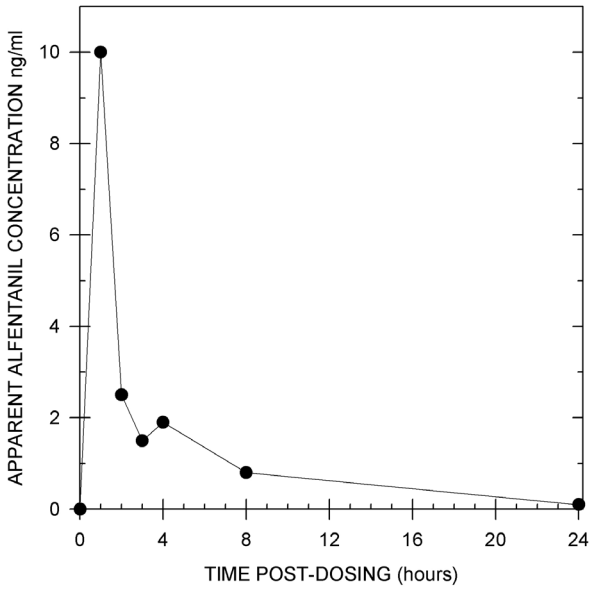
Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.12 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 0.5 mg of alfentanil by intravenous injection to one horse, the presence of this drug was detected for 4 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Alfentanil	100%

Acetaminophen	<0.01%	B-Hydroxythiofentanyl	<0.01%
Acetylfentanyl	<0.01%	Ibuprofen	<0.01%
Acrylfentanyl	<0.01%	Imipramine	<0.01%
Amitriptyline	<0.01%	Isobutyrfentanyl	<0.01%
Aspirin	<0.01%	Lidocaine	<0.01%
Benzylfentanyl	<0.01%	Lofentanil	<0.01%
Butyrfentanyl	<0.01%	Meperidine	<0.01%
Carfentanil	<0.01%	Methadone	<0.01%
Chlordiazepoxide	<0.01%	Methaqualone	<0.01%
p-Chlorisobutyrylfentanyl	<0.01%	Methoxyacetylfentanyl	<0.01%
Chlorpromazine	<0.01%	3-Methylfentanyl	<0.01%
Cotinine	<0.01%	α–Methylfentanyl	<0.01%
Cyclopentylfentanyl	<0.01%	B-Methylfentanyl	<0.01%
Cyclopropylfentanyl	<0.01%	α–Methylthiofentanyl	<0.01%
Dextromethorphan	<0.01%	Nalorphine	<0.01%
Doxepin	<0.01%	Naproxen	<0.01%
Erythromycin	<0.01%	Nortriptyline	<0.01%
Fenoprofen	<0.01%	Ocfentanyl	<0.01%
Fentanyl	<0.01%	Penicillin G-Potassium	<0.01%
p-Fluorofentanyl	<0.01%	Penicillin G-Procaine	<0.01%
p-Flurobutyrylfentanyl	<0.01%	Phencyclidine	<0.01%
Fluoroisobutyrfentanyl	<0.01%	Primadone	<0.01%
Furanylethylfentanyl	<0.01%	Procainamide	<0.01%
Gemfibrozil	<0.01%	Procaine	<0.01%
Gentisic Acid	<0.01%	Quinidine	<0.01%
Glipizide	<0.01%	Quinine	<0.01%
Glutethimide	<0.01%	Theophylline	<0.01%
B-Hydroxyfentanyl	<0.01%	Thienylfentanyl	<0.01%
		Trimipramine	<0.01%

ENHANCED KIT
AMPHETAMINE

Product # 105210-1 &
105215-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

d-Methamphetamine	2.5 ng/ml
N-desmethylselegiline	9.6 ng/ml
Fenfluramine	13 ng/ml
d-Amphetamine	25 ng/ml
Ephedrine	45 ng/ml
Nylidrin	120 ng/ml
l-Amphetamine	150 ng/ml
Mephentermine	180 ng/ml
Phentermine	220 ng/ml
Benzphetamine	300 ng/ml
Phenylpropanolamine	400 ng/ml
Isoxsuprine	450 ng/ml

I-50 in Equine Urine (Diluted 1:3)

d-Methamphetamine	20 ng/ml
Fenfluramine	213 ng/ml
d-Amphetamine	90 ng/ml
Ephedrine	1200 ng/ml
l-Amphetamine	600 ng/ml
Mephentermine	850 ng/ml
Phentermine	1200 ng/ml
Phenylpropanolamine	2000 ng/ml

I-50 in Canine Urine (Diluted 1:1)

d-Methamphetamine	25 ng/ml
Fenfluramine	51 ng/ml
d-Amphetamine	25 ng/ml
Ephedrine	1500 ng/ml
l-Amphetamine	600 ng/ml
Mephentermine	850 ng/ml
Phentermine	1000 ng/ml
Phenylpropanolamine	2000 ng/ml

I-50 in Equine Plasma

d-Methamphetamine	3 ng/ml
Fenfluramine	17 ng/ml
d-Amphetamine	15 ng/ml
Ephedrine	55 ng/ml
l-Amphetamine	150 ng/ml
Mephentermine	180 ng/ml
Phentermine	120 ng/ml
Phenylpropanolamine	400 ng/ml

I-50 in Equine Serum

d-Methamphetamine	2.8 ng/ml
Fenfluramine	10 ng/ml
d-Amphetamine	15 ng/ml
Ephedrine	75 ng/ml
l-Amphetamine	150 ng/ml
Mephentermine	160 ng/ml
Phentermine	300 ng/ml
Phenylpropanolamine	650 ng/ml

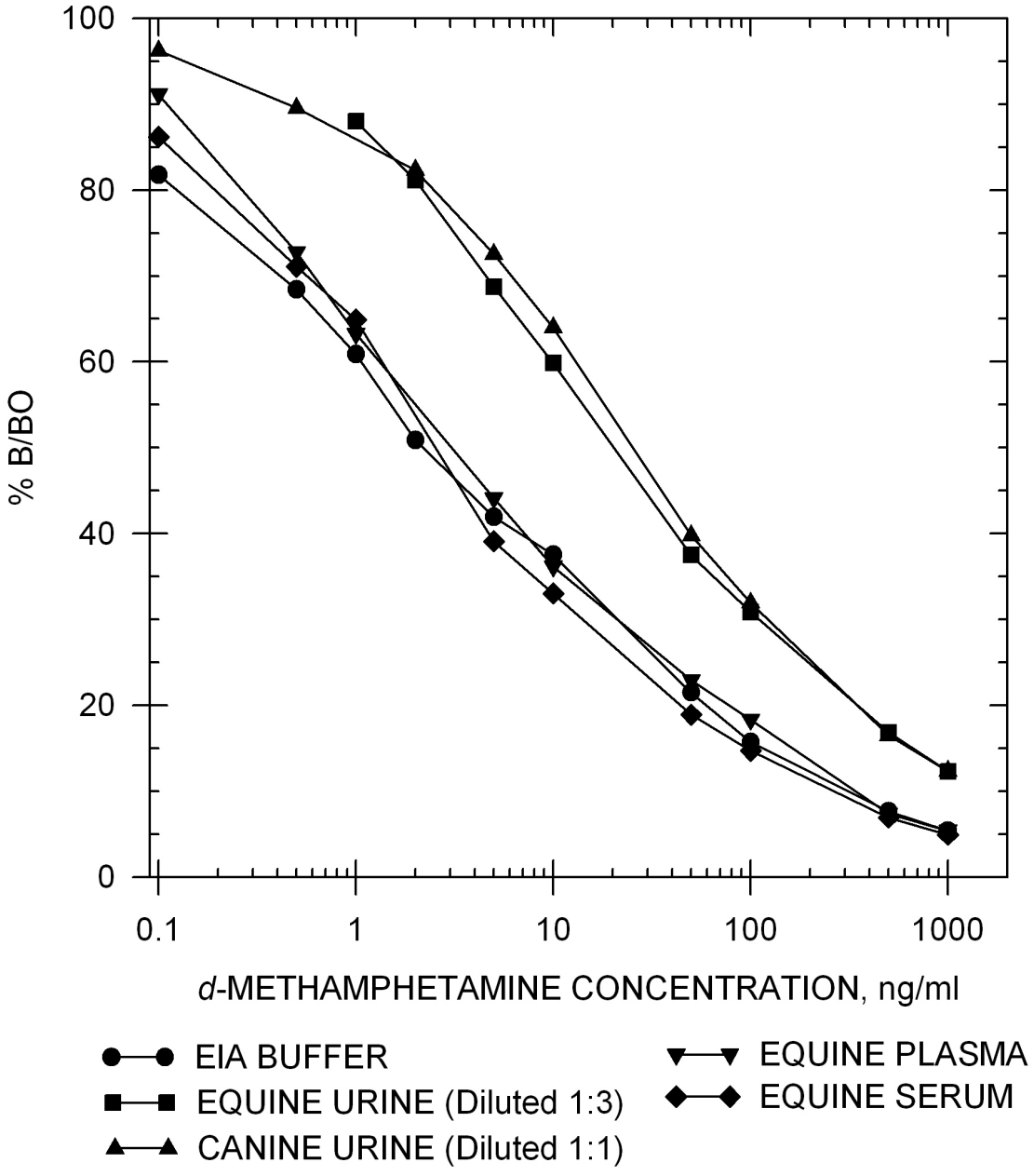
Note: Measuring wavelength was 650 nm**.**

Precision:

Intra-assay	4.56 %
Inter-assay	2.52 %

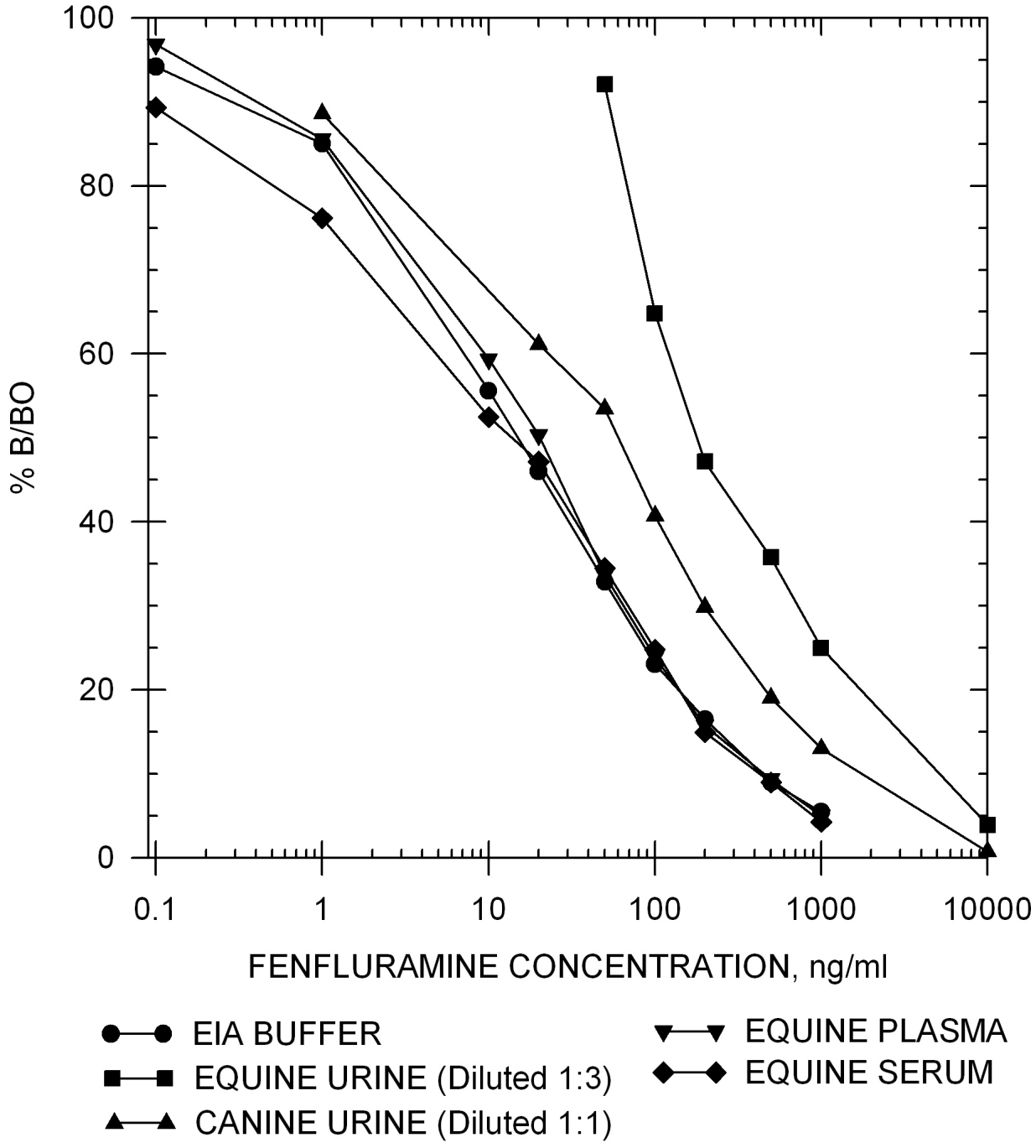
AMPHETAMINE STANDARD CURVE

d-Methamphetamine



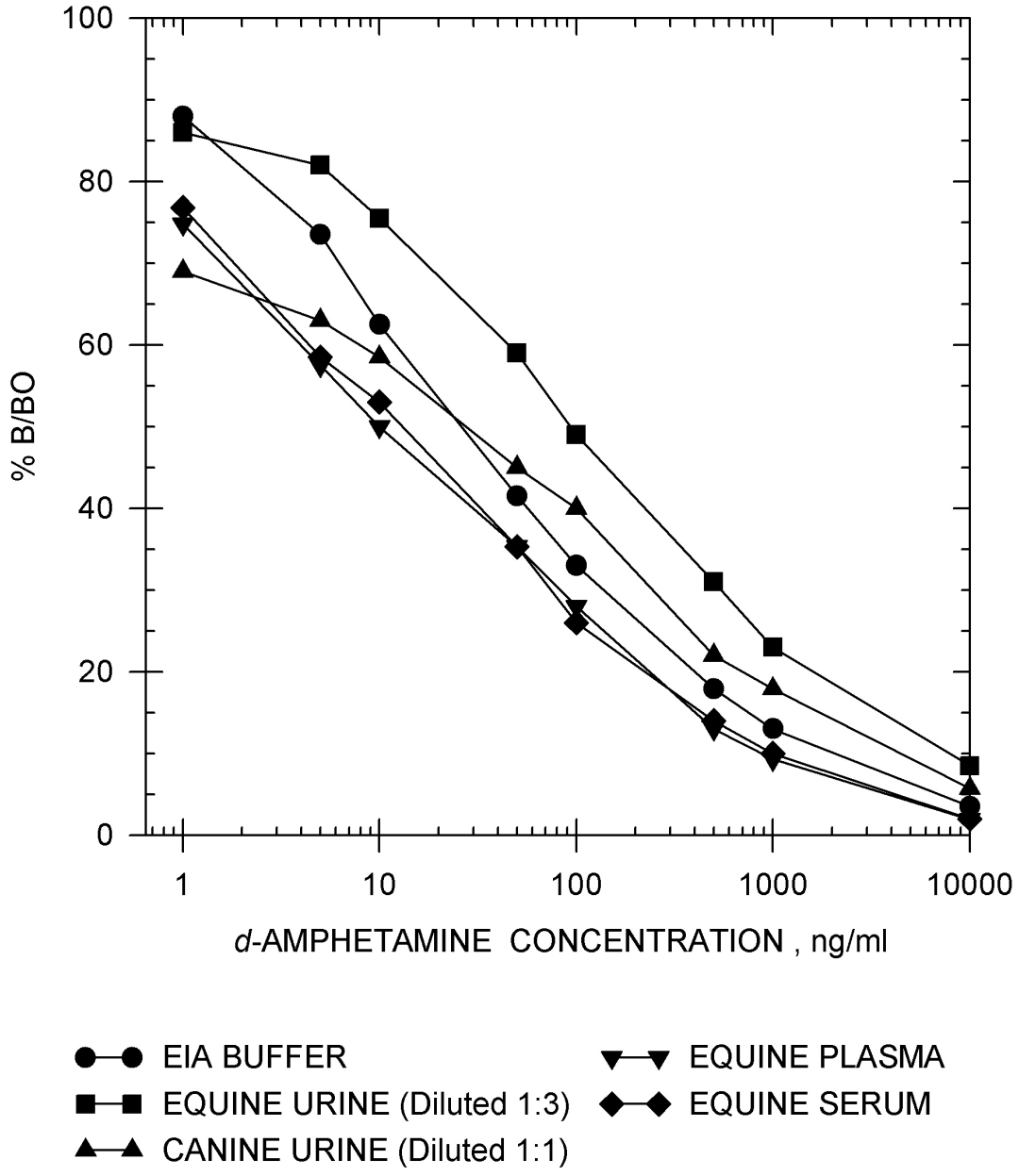
AMPHETAMINE STANDARD CURVE

Fenfluramine



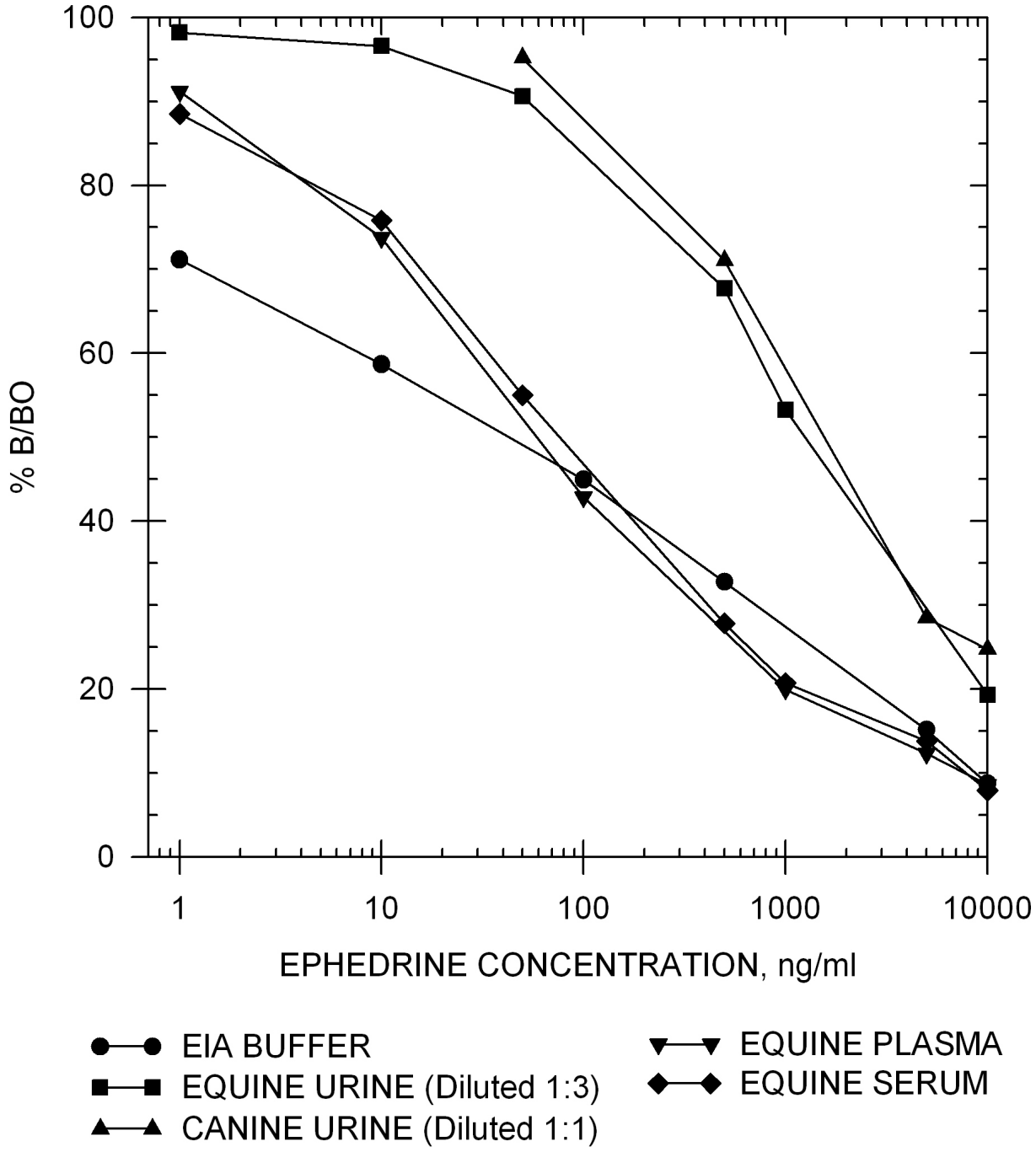
AMPHETAMINE STANDARD CURVE

d-Amphetamine



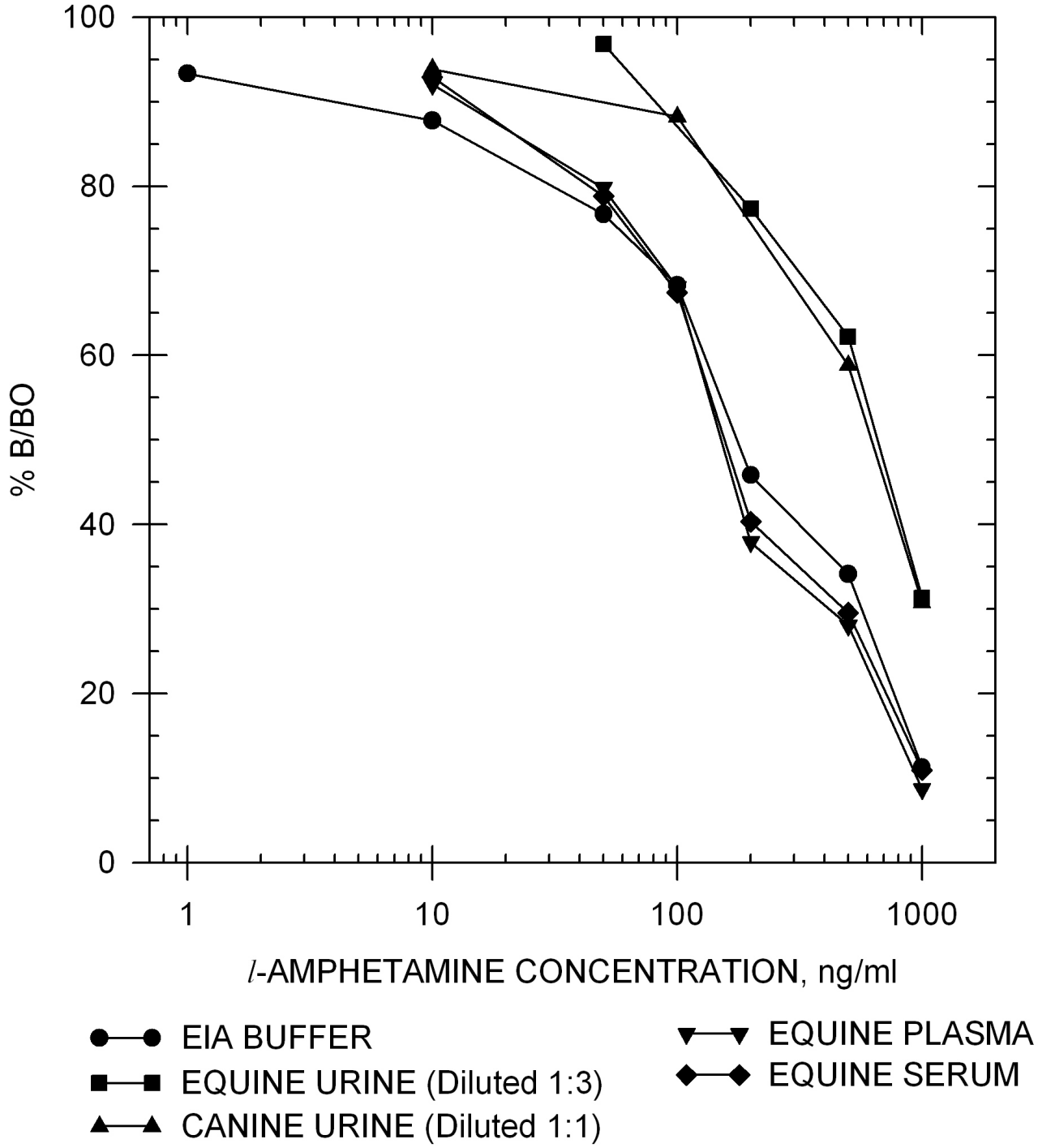
AMPHETAMINE STANDARD CURVE

Ephedrine



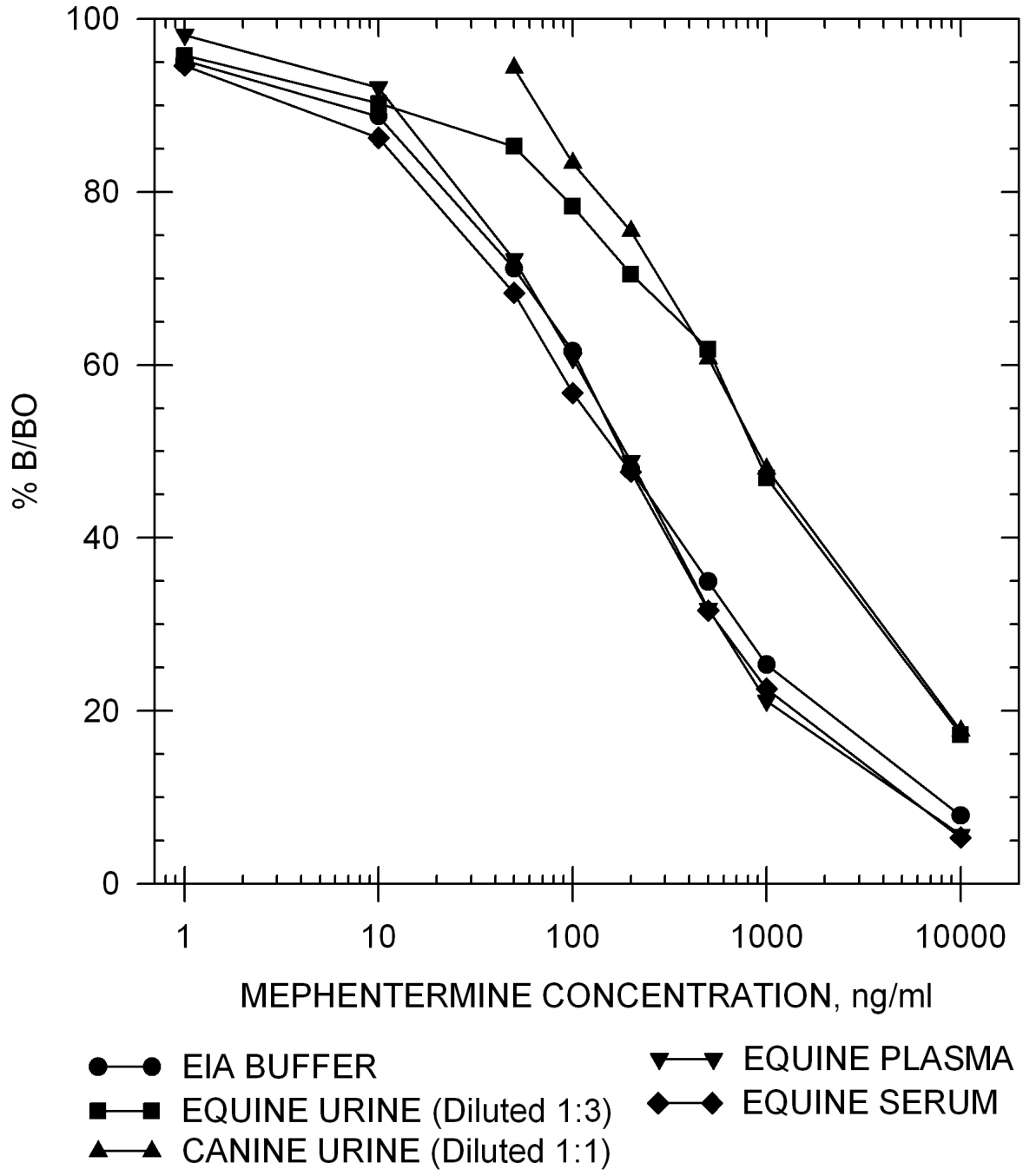
AMPHETAMINE STANDARD CURVE

l-Amphetamine



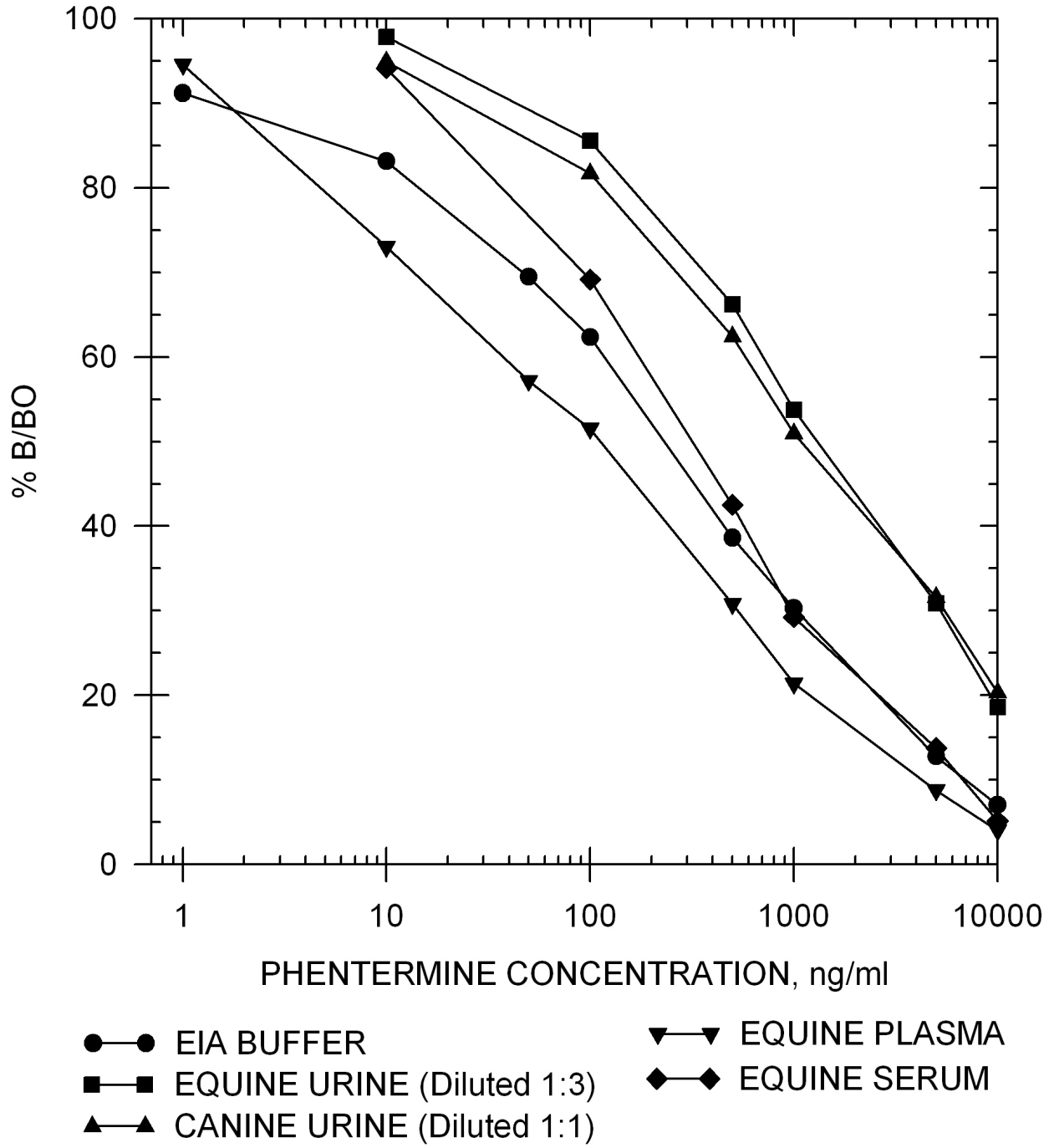
AMPHETAMINE STANDARD CURVE

Mephentermine



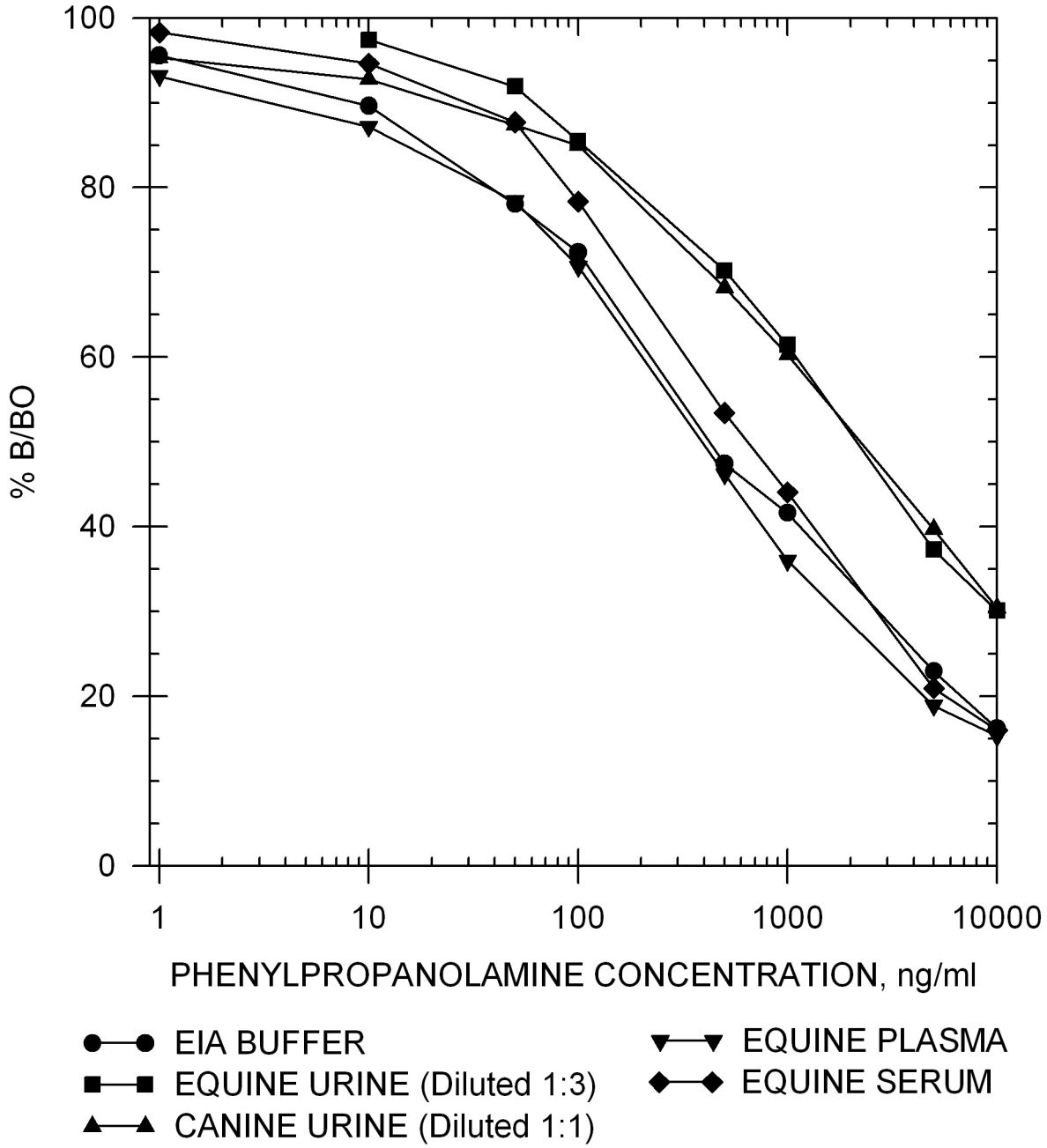
AMPHETAMINE STANDARD CURVE

Phentermine



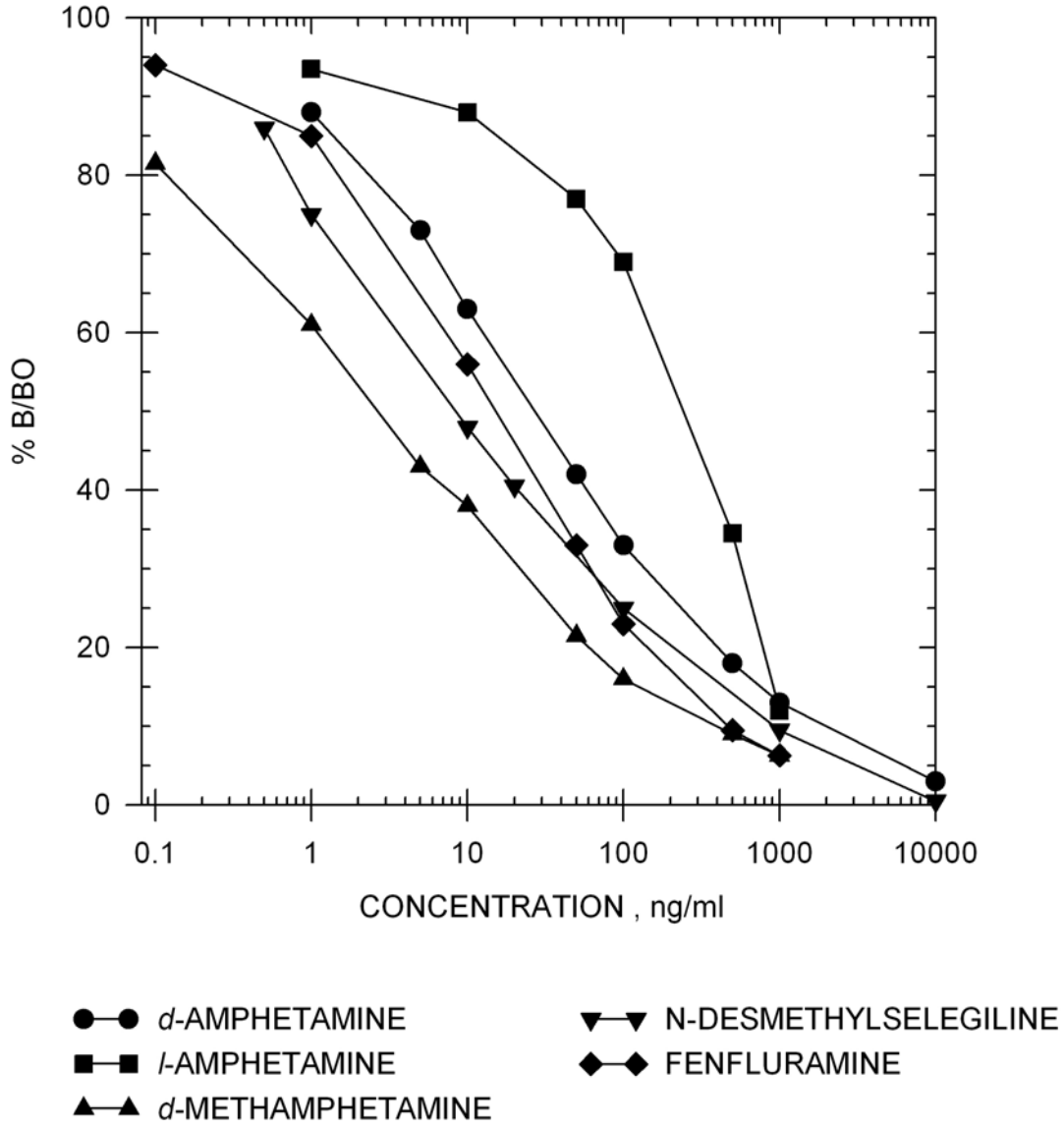
AMPHETAMINE STANDARD CURVE

Phenylpropanolamine



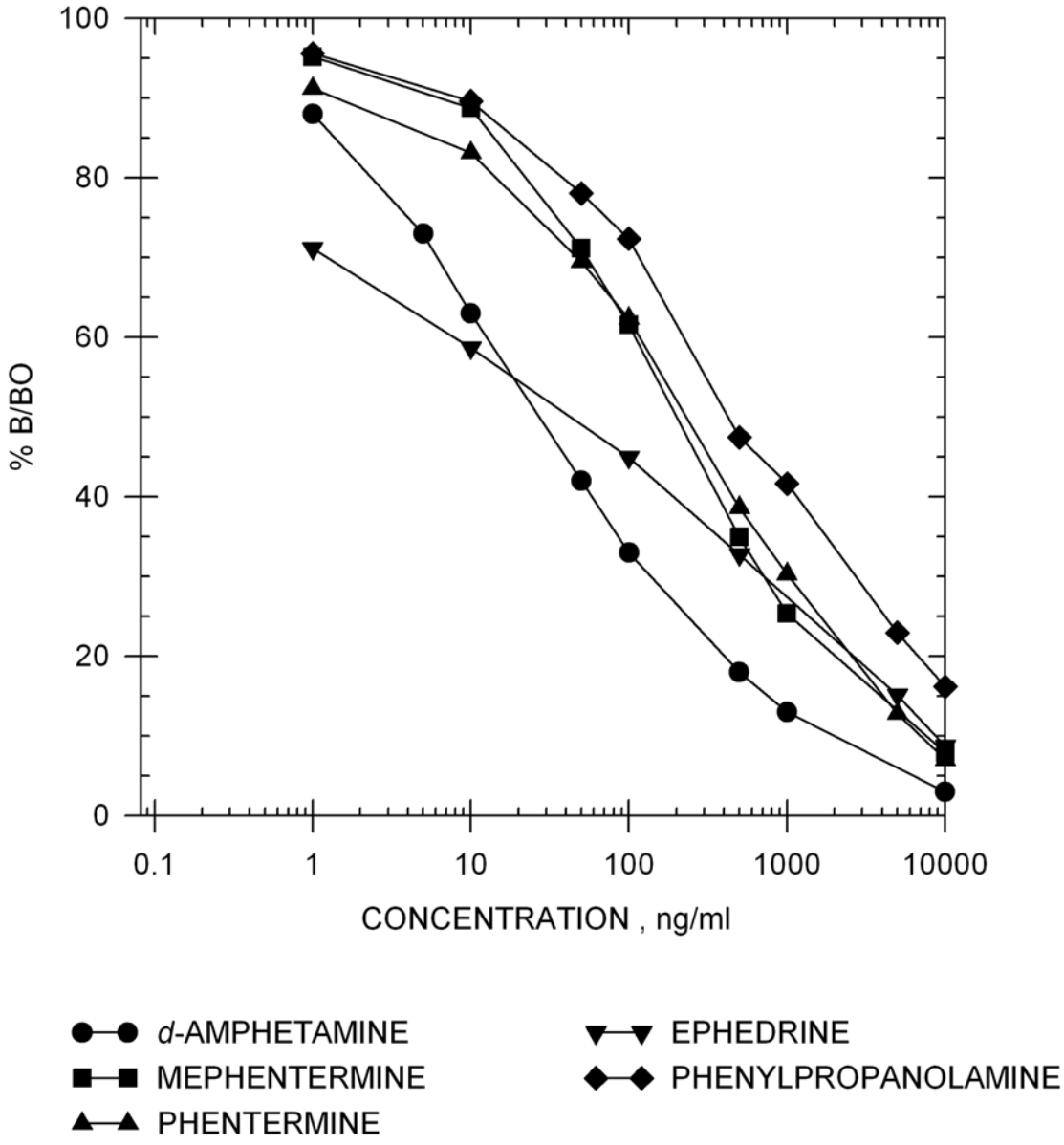
AMPHETAMINE STANDARD CURVE

Drug Standard Curve Comparison in EIA Buffer



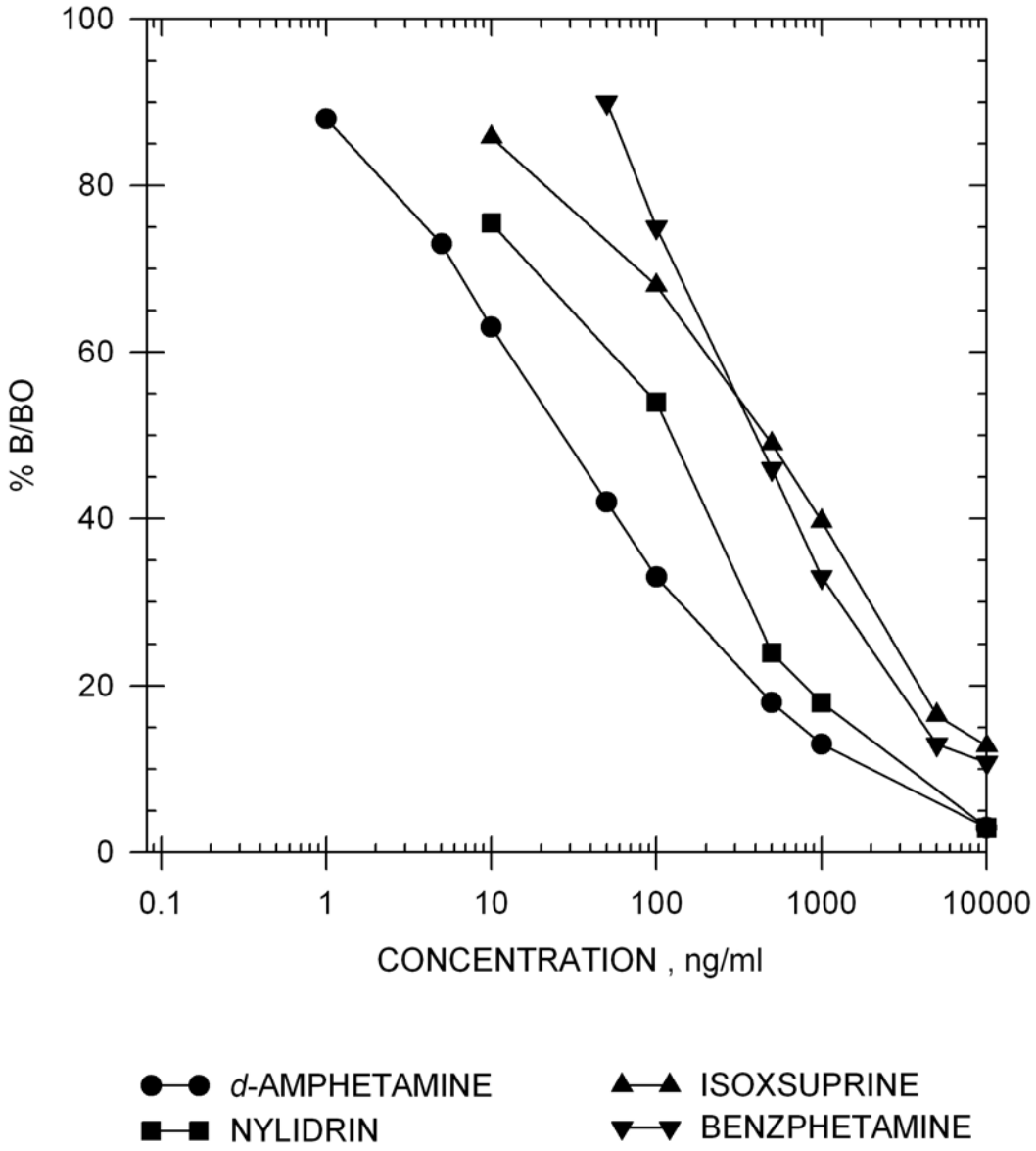
AMPHETAMINE STANDARD CURVE

Drug Standard Curve Comparison in EIA Buffer



AMPHETAMINE STANDARD CURVE

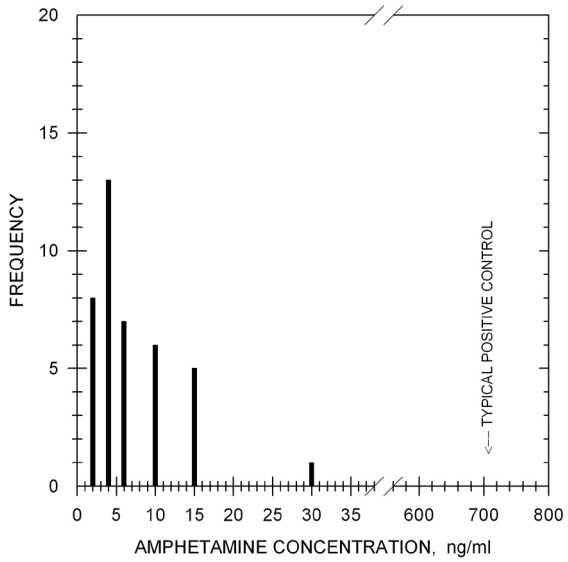
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples diluted 1:3 has shown no background levels above 30 ng/ml.

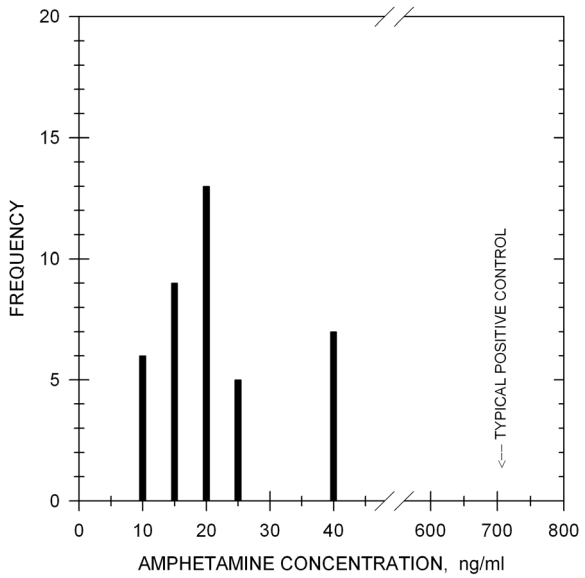
Sample Treatment: A dilution of 1:3 (i.e., 1 part sample to 3 parts EIA buffer) is recommended to reduce natural background.



TYPICAL DURATION OF DETECTION

Backgrounds: Analysis of 40 post-race canine urine samples diluted 1:1 has shown no background levels above 40 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e., 1 part sample to 1 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Fenproporex	1578%	Phendimetrazine	0.7%
d-Methamphetamine	1000%	4-Hydroxyamphetamine	0.6%
N-Desmethylselegiline	203%	p-Hydroxymethamphetamine	0.5%
d-Amphetamine	100%	Tuaminoheptane	0.5%
Fenfluramine	87%	MDA (3,4-methylenedioxyamphetamine)	0.4%
Ephedrine	56%	Phenylephrine	0.4%
4-Fluoroamphetamine	50%	DOM (2,5-4-bromoamphetamine)	0.12%
Nylidrin	21%	DOB (2,5-dimethoxyamphetamine)	0.11%
l-Amphetamine	17%	Amitriptyline	0.06%
Mephentermine	14%	Quinidine	0.06%
Phentermine	11%	Amfepramone	0.05%
Phenethylamine	9.7%	Mescaline	0.03%
Benzphetamine	8.3%	(+/-) Synephrine	0.03%
Phenylpropanolamine	6.3%	Tyramine	0.03%
Isoxsuprine	5.6%	Imipramine	0.02%
MDMA (3,4-methylenedioxymethamphetamine)	2.2%	Glutethimide	0.01%
Pseudoephedrine	2.2%	Nortriptyline	0.01%
Clenbuterol	1.6%	(+/-) Octopamine	0.01%
Fencamfamine	1.6%	Diethylpropion	<0.5%
α-Ethyltryptamine	1.2%	Hordenine	<0.1%
		Pyrantel	<0.1%

Acepromazine	< 0.01%	Gentisic Acid	< 0.01%	Pemoline	< 0.01%
Acetaminophen	< 0.01%	Glipizide	< 0.01%	Penicillin G-Potassium	< 0.01%
E-Amino-n-Caproic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Penicillin G-Procaine	< 0.01%
Ascorbic Acid (Vitamin C)	< 0.01%	Heptaminol	< 0.01%	Pentoxifylline	< 0.01%
Aspirin	< 0.01%	Hydrocortisone	< 0.01%	Pentylenetetrazol	< 0.01%
Caffeine	< 0.01%	Ibuprofen	< 0.01%	Phencyclidine	< 0.01%
Chlordiazepoxide	< 0.01%	Lidocaine	< 0.01%	Phenothiazine	< 0.01%
Chlorpromazine	< 0.01%	Magnesium	< 0.01%	Phenylalanine	< 0.01%
Cocaine	< 0.01%	Mazindol	< 0.01%	Phenylbutazone	< 0.01%
Cotinine	< 0.01%	Meperidine	< 0.01%	Picrotoxin	< 0.01%
Dexamethasone	< 0.01%	Metaproterenol	< 0.01%	Polyethylene Glycol	< 0.01%
Diclofenac	< 0.01%	Methadone	< 0.01%	Prednisolone	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methaqualone	< 0.01%	Primidone	< 0.01%
Dipyrone	< 0.01%	Methocarbamol	< 0.01%	Procainamide	< 0.01%
Dextromethorphan	< 0.01%	Methylene Blue	< 0.01%	Procaine	< 0.01%
Doxepin	< 0.01%	Methylphenidate	< 0.01%	Promazine	< 0.01%
Erythromycin	< 0.01%	6α-Methylprednisolone	< 0.01%	Pyrilamine	< 0.01%
Ethamivan	< 0.01%	Nalorphine	< 0.01%	Quinine	< 0.01%
Ethyl-p-Amino-Benzoate (Benzocaine)	< 0.01%	Naproxen	< 0.01%	Salbutamol	< 0.01%
		Niacinamide	< 0.01%	Salicylamide	< 0.01%
Fenoprofen	< 0.01%	Nikethamide	< 0.01%	Salicylic Acid	< 0.01%
Flunixin	< 0.01%	Orphenadrine	< 0.01%	Theophylline	< 0.01%
Furosemide	< 0.01%	Oxymetazoline	< 0.01%	Thiamine	< 0.01%
Gemfibrozil	< 0.01%	Oxyphenbutazone	< 0.01%	Trimipramine	< 0.01%

ENHANCED ANILERIDINE

Product# 105510 & 105515 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Anileridine	1.0 ng/ml
Meperidine	70 ng/ml
Diphenoxylate	222 ng/ml

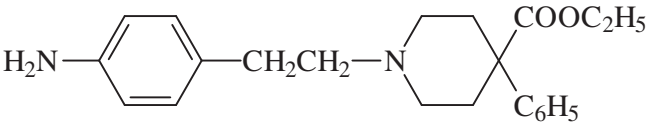
Precision:

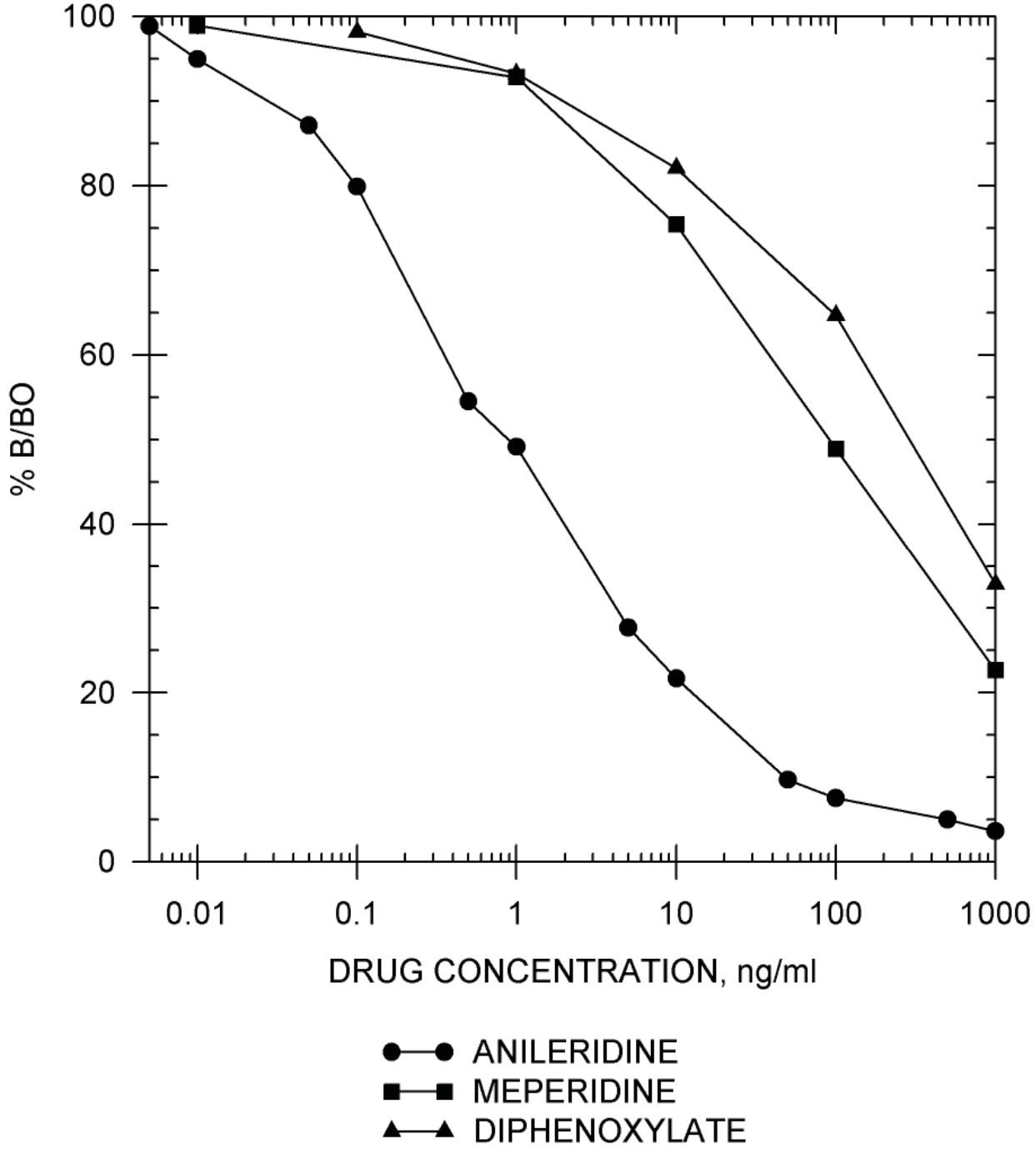
Intra-assay	4.51 %
Inter-assay	5.99 %

Note: Measuring wavelength was 650 nm**.**

ANILERIDINE STANDARD CURVES

Anileridine

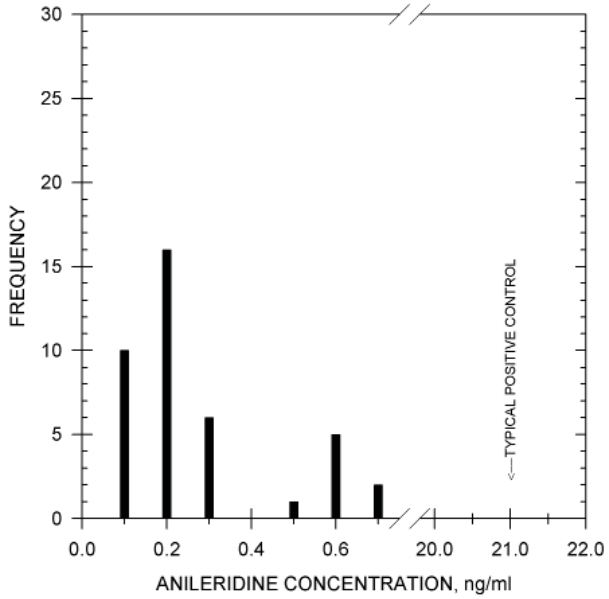




TYPICAL EQUINE URINE BACKGROUND LEVELS

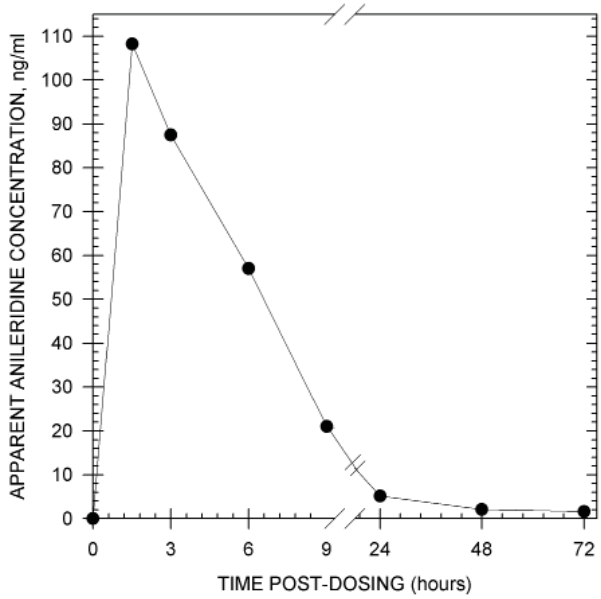
Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.6 ng/ml.

Sample Treatment: No sample treatment, or a dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



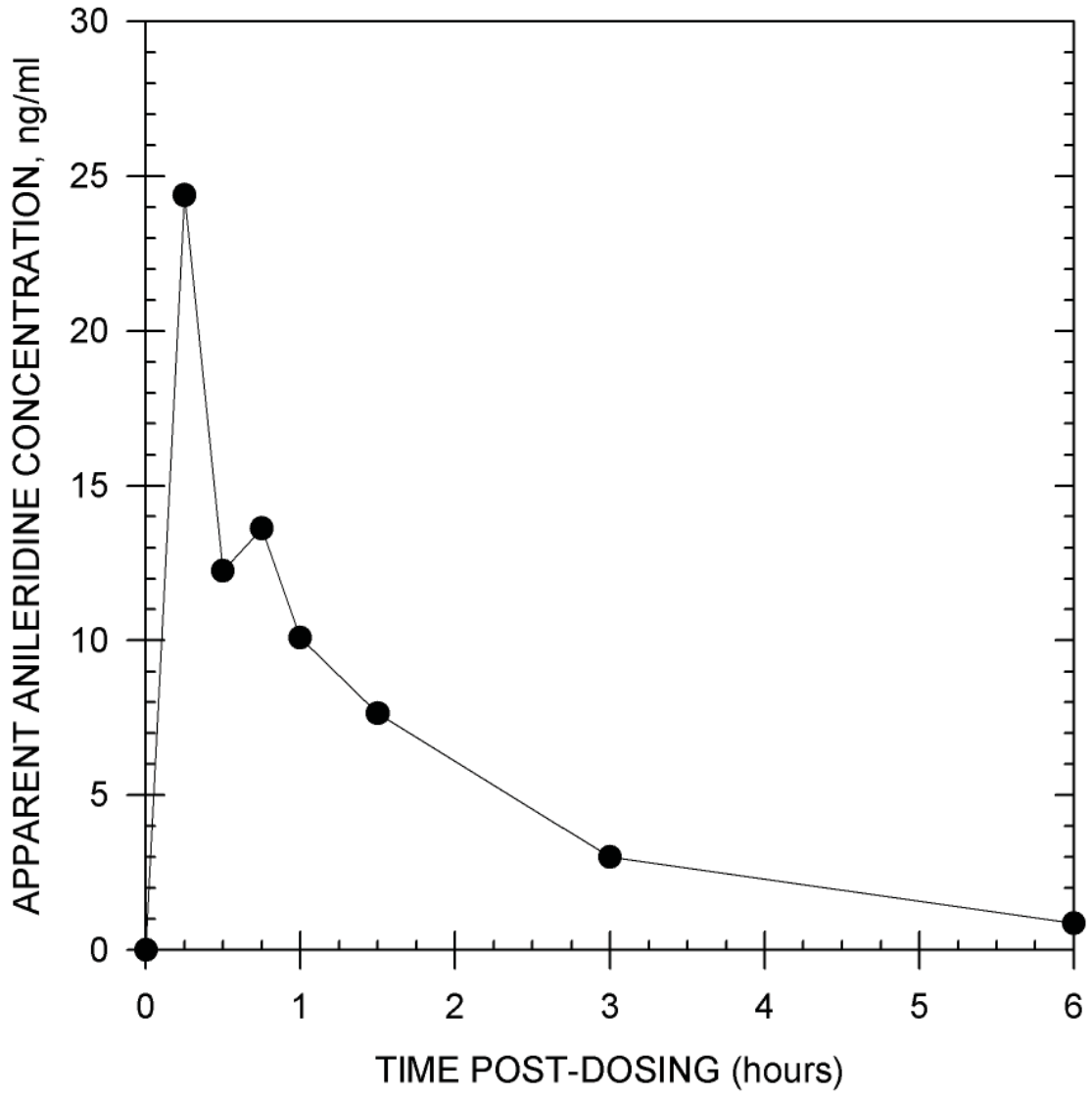
TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 10 mg of anileridine by intravenous injection to one horse, the presence of this drug was detected for 9 hours in equine urine.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 10 mg of anileridine by intravenous injection to one horse, the presence of this drug was detected for 2 hours in equine serum.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Anileridine	100%
Meperidine	1.45%
Diphenoxylate	0.45%
Fentanyl	0.05%
Amitriptyline	0.02%
Chlorpromazine	0.02%
Alfentanil	0.01%
Doxepin	0.01%
Imipramine	0.01%
Loperamide	0.01%
Nortriptyline	0.01%

Acetaminophen	<0.01%	Methadone	<0.01%
Alphaprodine	<0.01%	Methaqualone	<0.01%
Aspirin	<0.01%	Nalorphine	<0.01%
Carfentanil	<0.01%	Naproxen	<0.01%
Chlordiazepoxide	<0.01%	Penicillin G-Potassium	<0.01%
Cotinine	<0.01%	Penicillin G-Procaine	<0.01%
Dextromethorphan	<0.01%	Phencyclidine	<0.01%
Erythromycin	<0.01%	Primadone	<0.01%
Fenoprofen	<0.01%	Procainamide	<0.01%
Gemfibrozil	<0.01%	Procaine	<0.01%
Gentisic Acid	<0.01%	Quinidine	<0.01%
Glipizide	<0.01%	Quinine	<0.01%
Glutethimide	<0.01%	Sufentanil	<0.01%
Ibuprofen	<0.01%	Theophylline	<0.01%
Lidocaine	<0.01%	Trimipramine	<0.01%

ENHANCED KIT
APOMORPHINE/APOCODEINE

Product #109110 &
109115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Apomorphine	38.3 ng/ml
Apocodeine	3.9 ng/ml

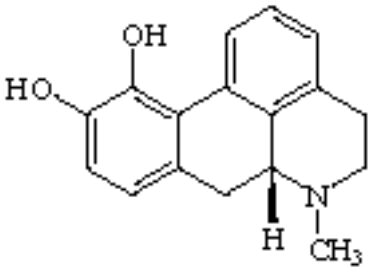
I-50 in Equine Urine		I-50 in Canine Urine	
Apomorphine	35.4 ng/ml	Apomorphine	40.6 ng/ml
Apocodeine	4.0 ng/ml	Apocodeine	3.6 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Apomorphine	100.2 ng/ml	Apomorphine	136.0 ng/ml
Apocodeine	8.1 ng/ml	Apocodeine	6.0 ng/ml

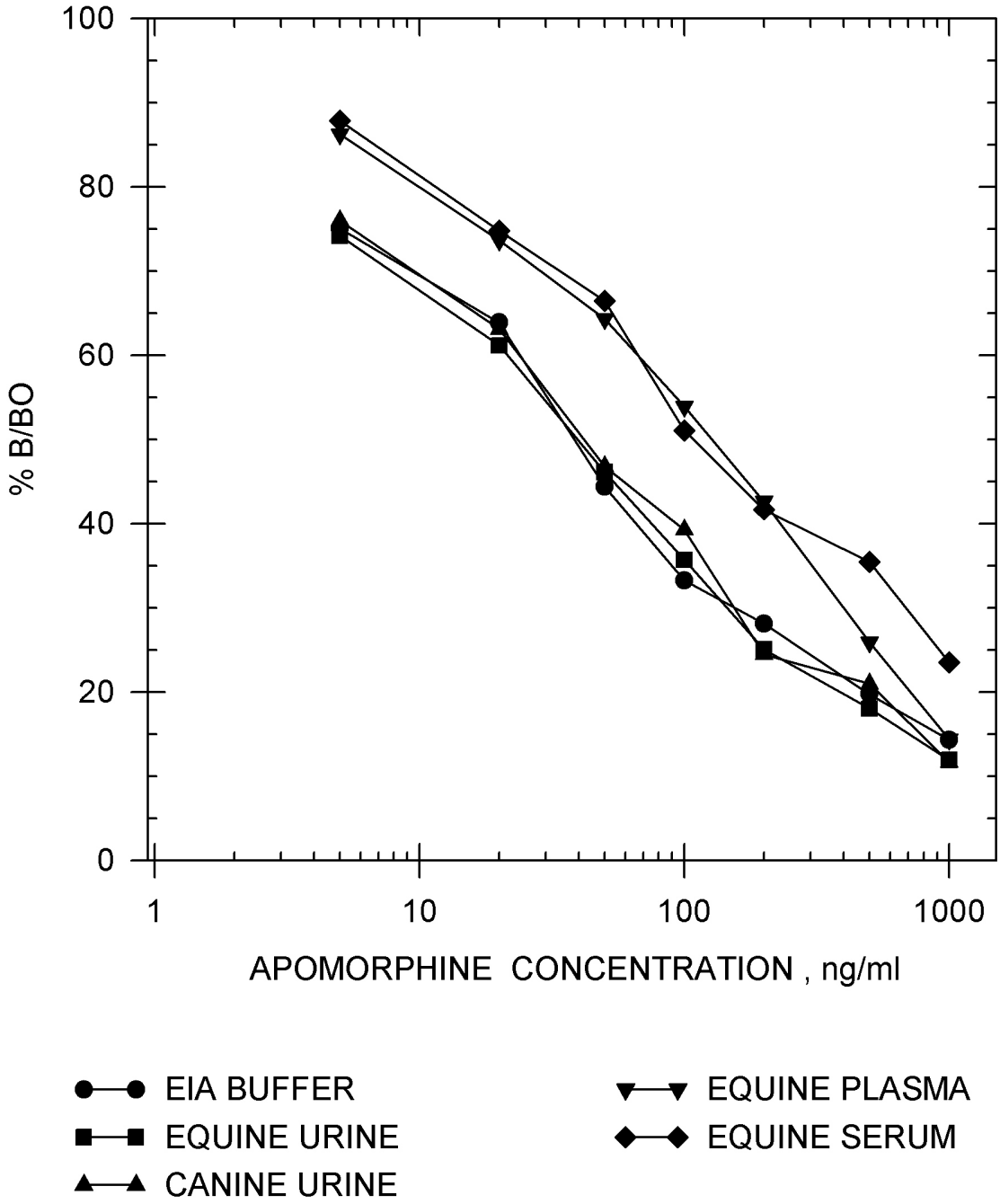
Note: Measuring wavelength was 650 nm**.**

Precision:	Intra-assay	7.73%
	Inter-assay	2.26%

APOMORPHINE/APOCODEINE STANDARD CURVES

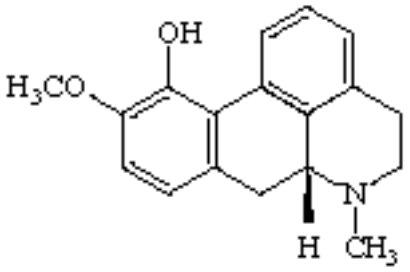
Apomorphine

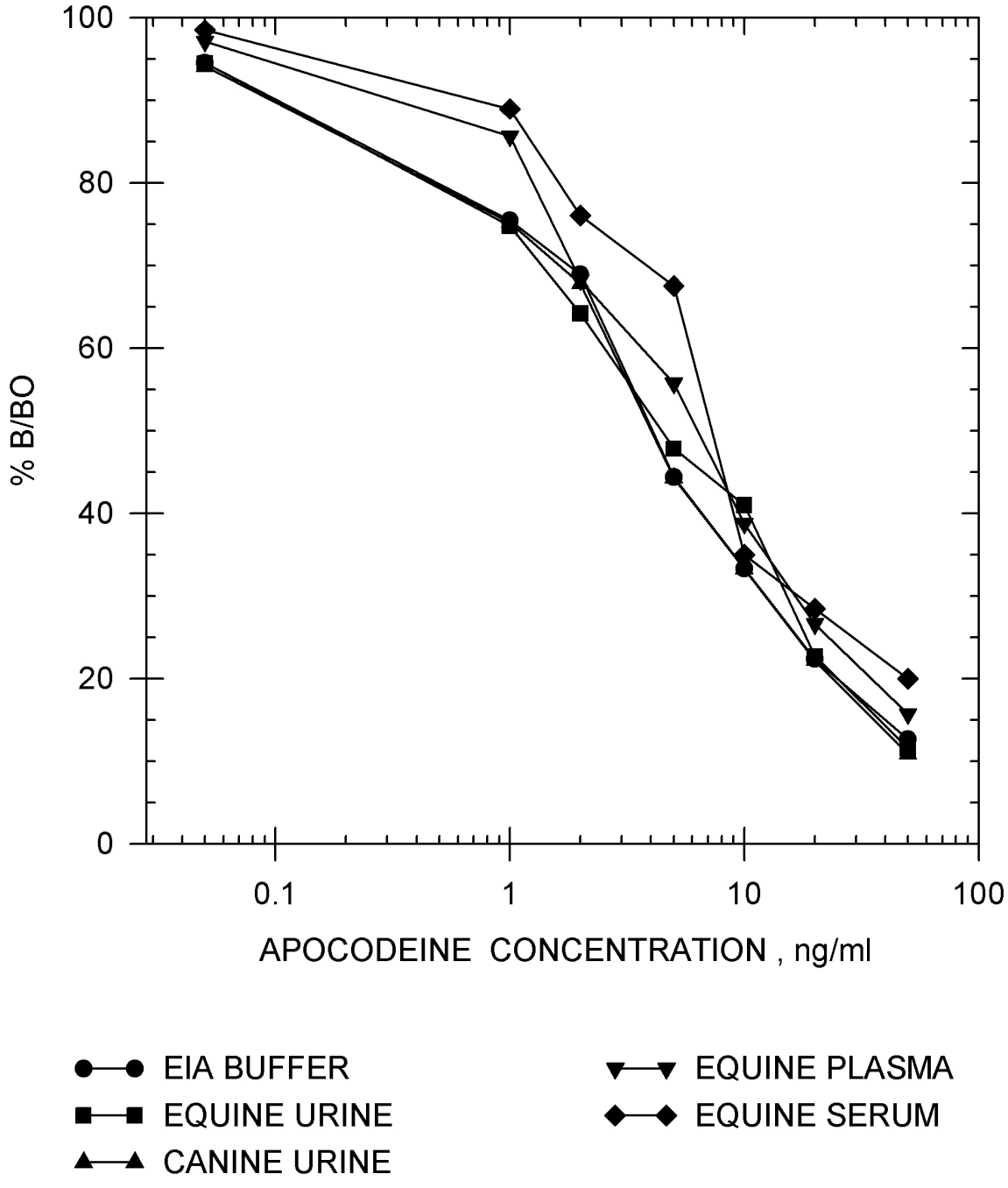




APOMORPHINE/APOCODEINE STANDARD CURVES

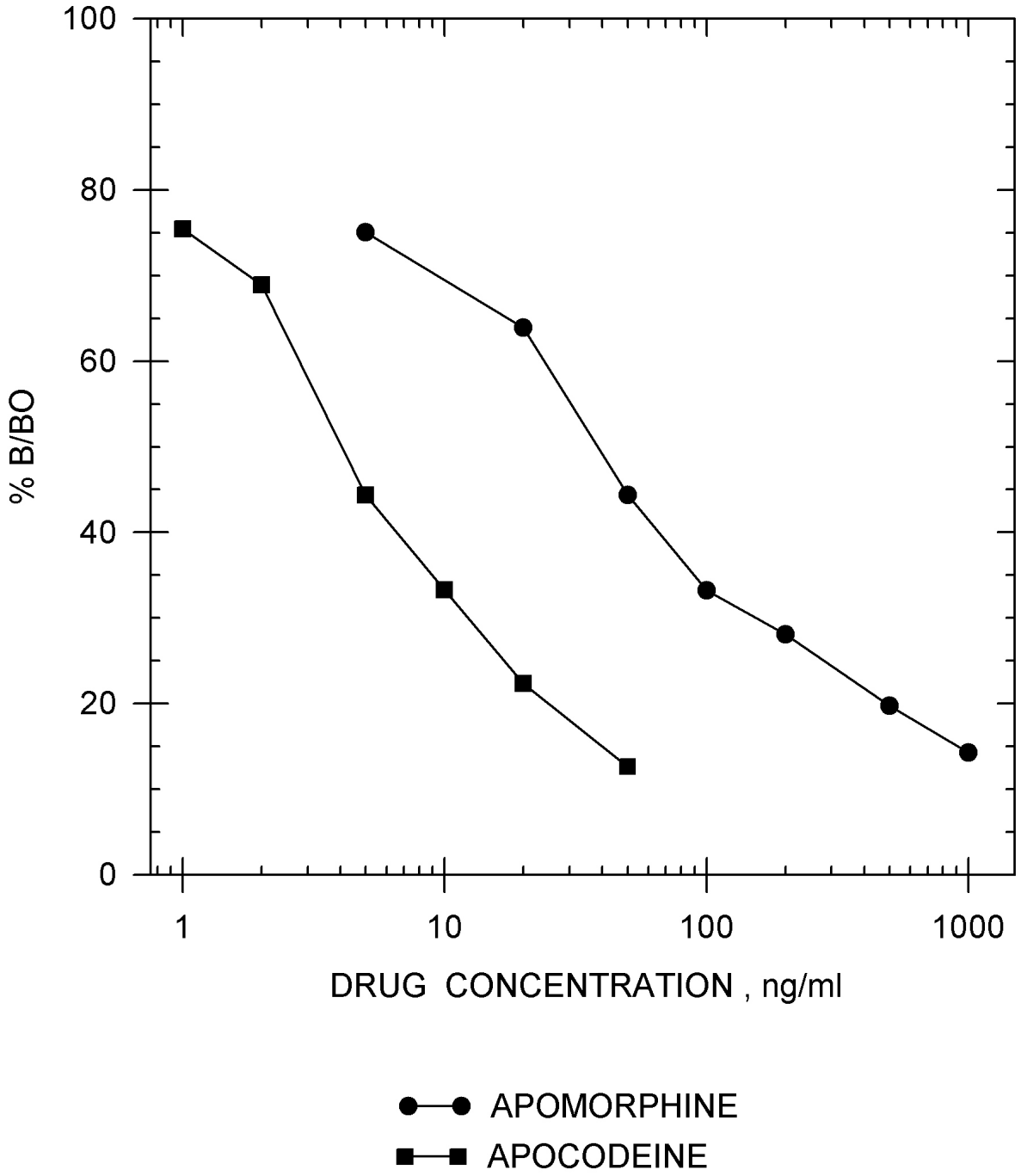
Apocodeine





APOMORPHINE/APOCODEINE STANDARD CURVES

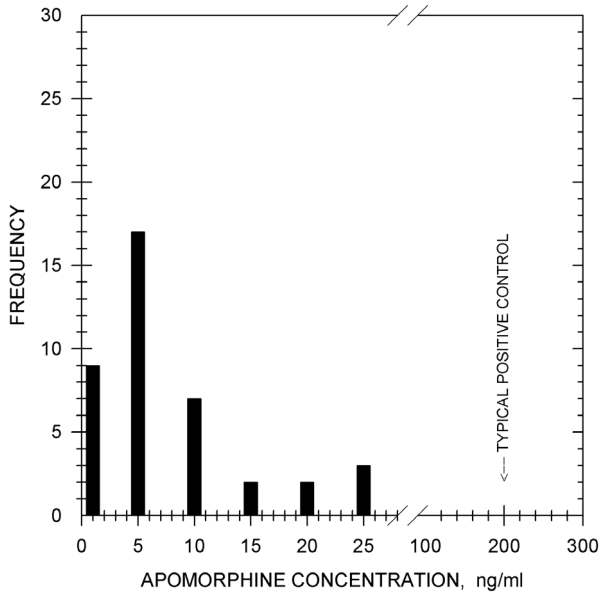
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, neat, has shown no background levels above 25 ng/ml.

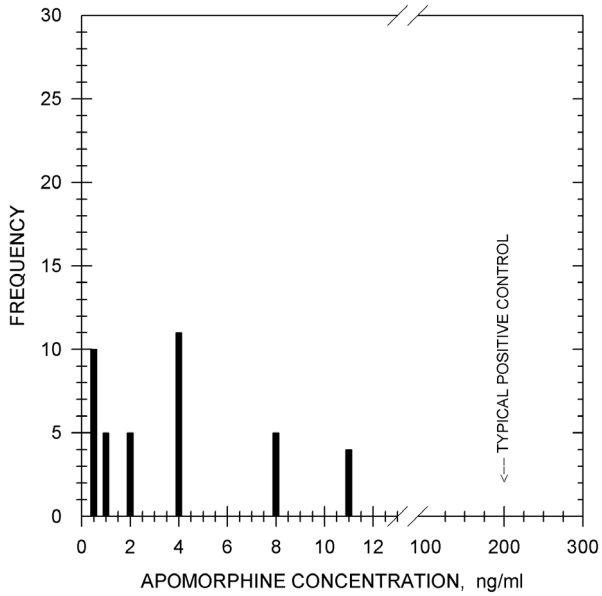
Sample Treatment: No sample dilution or a small dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, neat, has shown no background levels above 10.7 ng/ml.

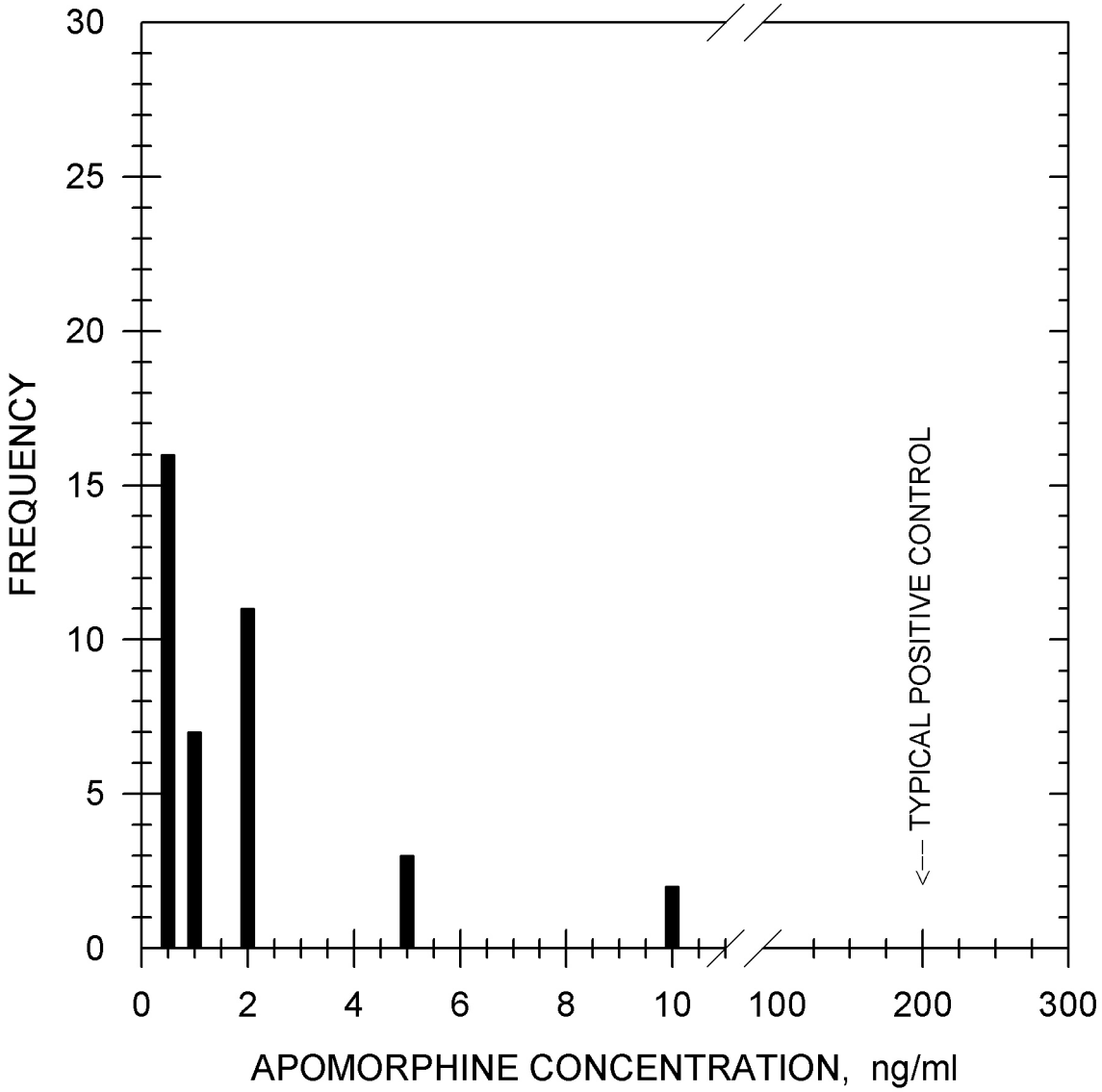
Sample Treatment: No sample dilution is necessary.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 39 equine plasma samples has shown no background levels above 9.2 ng/ml.

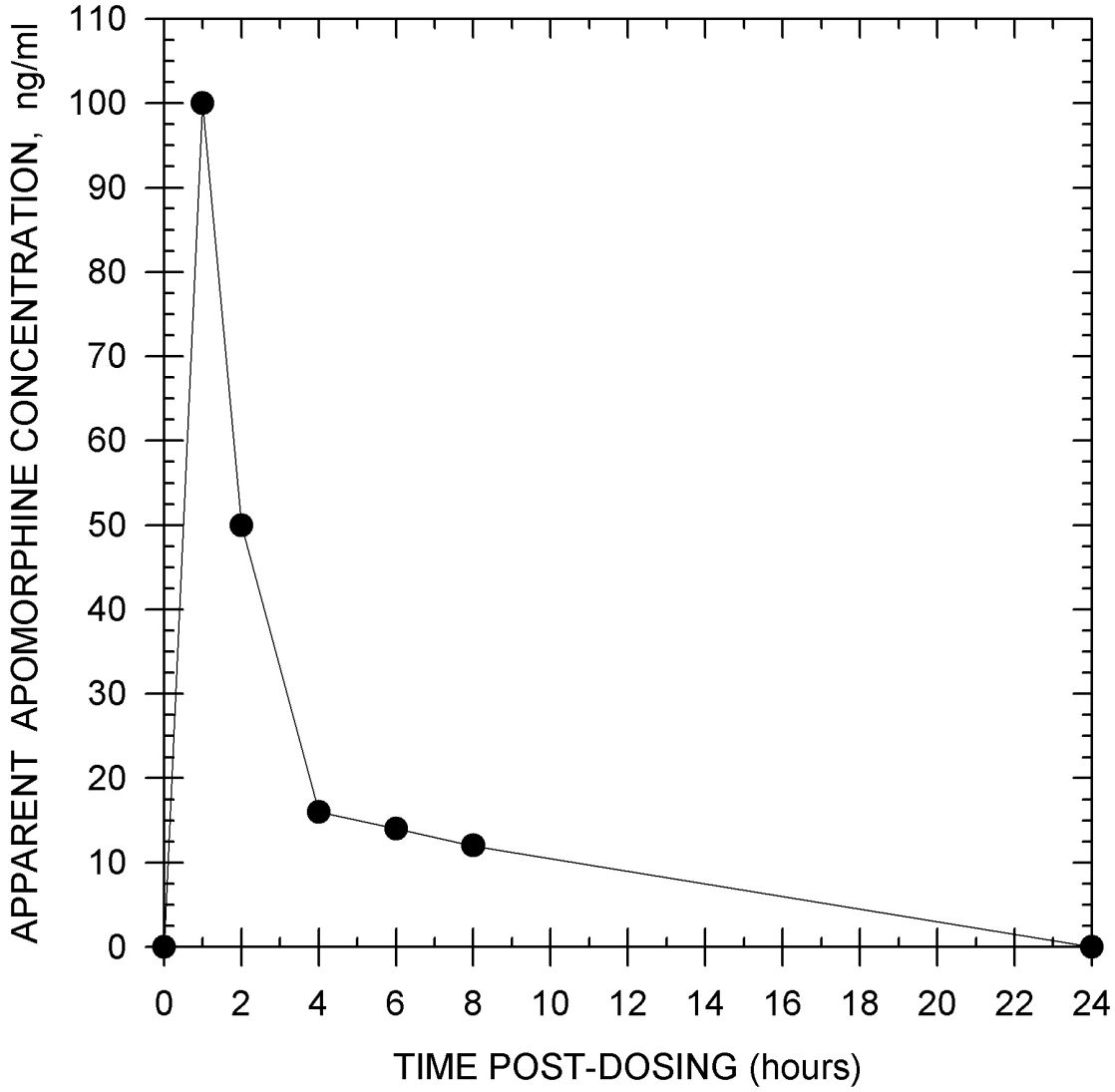
Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 30 mg of Apomorphine by intravenous injection to one horse, the presence of this drug was detected for at least 24 hours in equine urine.

Note: Because all post-dose samples exceeded the range of the assay, all samples were diluted 1:100 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Apocodeine	825%
R(-)-Apomorphine	100%
R(-)-Norapomorphine	17.5%
S(+)-Apomorphine	9.54%
R(-)-Propylnorapomorphine	0.88%
Boldine	0.34%
Imipramine	0.15%
(+)-Isocorydine	0.14%
Codeine	0.05%
Levallorphan	0.03%
Hydromorphone	0.02%

Acepromizine	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%
ε-Amino-n-Caproic Acid	<0.01%
Butorphanol	<0.01%
Clenbuterol	<0.01%
Dexamethasone	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%
Ethyl Morphine	<0.01%
Etorphine	<0.01%
Flunixin	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Heparin	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Isoxsuprine	<0.01%
Lidocaine	<0.01%
Meperidine	<0.01%
Metaproterenol	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%

6α-Methylprednisolone	<0.01%
Morphine	<0.01%
Nalbuphine	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Noroxymorphone	<0.01%
Orphenadrine	<0.01%
Oxymorphone	<0.01%
Oxyphenbutazone	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Procaine	<0.01%
Promazine	<0.01%
Pyrantel	<0.01%
Pyridoxine	<0.01%
Pyrilamine	<0.01%
Salbutamol (Albuterol)	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Thebaine	<0.01%
Thiamine	<0.01%

ENHANCED KIT
AZAPERONE

Product #100910
& 100915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Azaperone	0.13 ng/ml
5'-Hydroxyazaperone	0.5 ng/ml
Bromperidol	0.8 ng/ml
Haloperidol	0.9 ng/ml
Benperidol	1.2 ng/ml
Trifluperidol	1.3 ng/ml
Fluanisone	1.3 ng/ml
Droperidol	2.0 ng/ml
Spiperone	16 ng/ml
5'-Hydroxyazaperol	56 ng/ml

I-50 in Equine Urine (Diluted 1:1)

Azaperone	0.4 ng/ml
5'-Hydroxyazaperone	0.7 ng/ml
Bromperidol	3.0 ng/ml
Haloperidol	2.3 ng/ml
Benperidol	14.0 ng/ml
Trifluperidol	1.3 ng/ml
Fluanisone	1.0 ng/ml
Droperidol	4.0 ng/ml
Spiperone	20 ng/ml
5'-Hydroxyazaperol	51 ng/ml

I-50 in Canine Urine (Diluted 1:3)

Azaperone	0.6 ng/ml
5'-Hydroxyazaperone	1.1 ng/ml
Bromperidol	3.8 ng/ml
Haloperidol	5.5 ng/ml
Benperidol	8.2 ng/ml
Trifluperidol	4.0 ng/ml
Fluanisone	5.7 ng/ml
Droperidol	5.5 ng/ml
Spiperone	18 ng/ml
5'-Hydroxyazaperol	69 ng/ml

I-50 in Equine Plasma

Azaperone	0.2 ng/ml
5'-Hydroxyazaperone	0.2 ng/ml
Bromperidol	6.7 ng/ml
Haloperidol	7.7 ng/ml
Benperidol	5.8 ng/ml
Trifluperidol	31 ng/ml
Fluanisone	0.7 ng/ml
Droperidol	0.5 ng/ml
Spiperone	25 ng/ml
5'-Hydroxyazaperol	15 ng/ml

I-50 in Equine Serum

Azaperone	0.3 ng/ml
5'-Hydroxyazaperone	0.2 ng/ml
Bromperidol	23 ng/ml
Haloperidol	16 ng/ml
Benperidol	14 ng/ml
Trifluperidol	54 ng/ml
Fluanisone	1.5 ng/ml
Droperidol	1.2 ng/ml
Spiperone	13 ng/ml
5'-Hydroxyazaperol	22 ng/ml

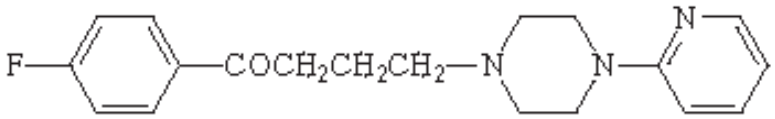
Precision:

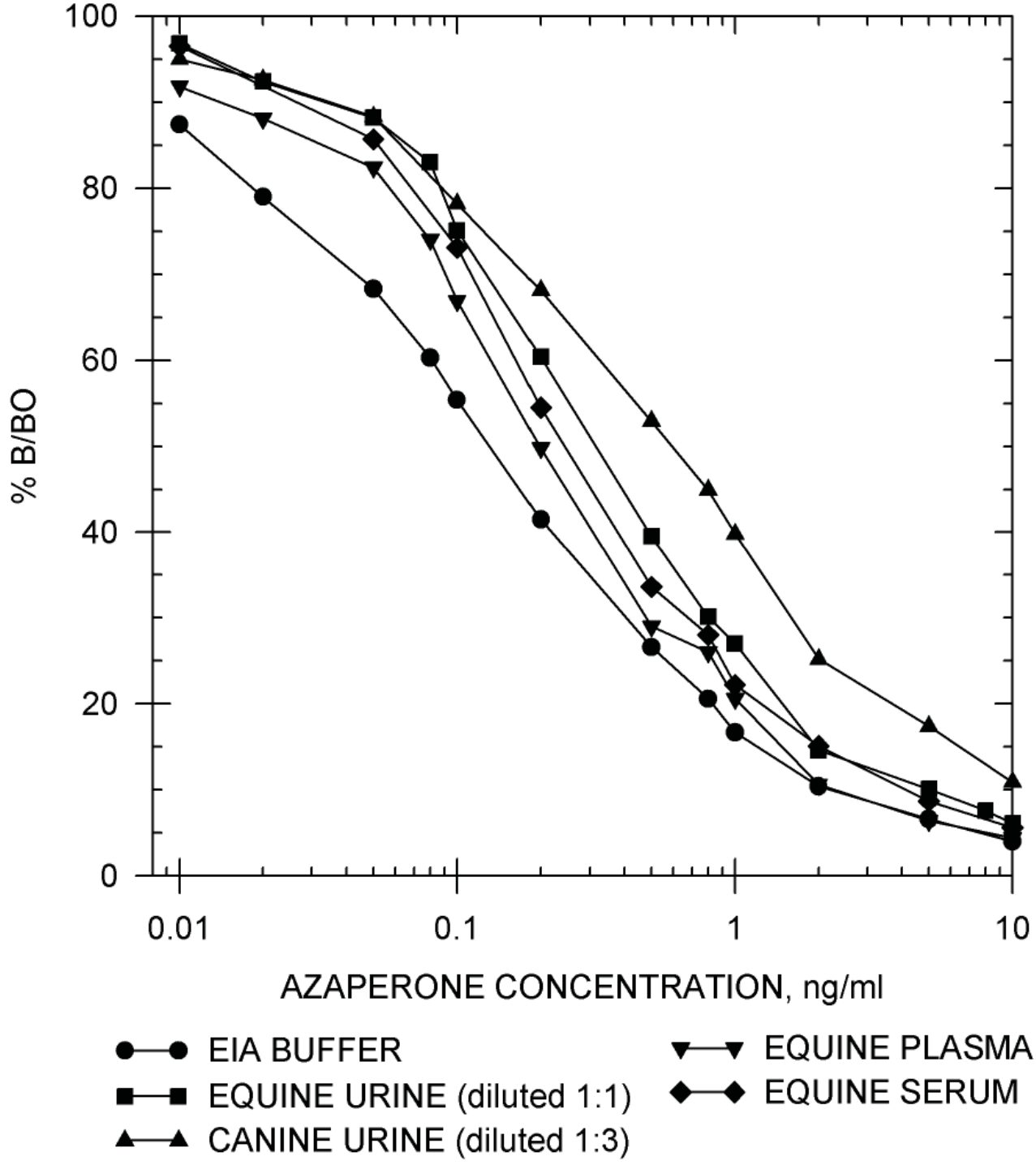
Intra-assay	4.21 %
Inter-assay	4.42 %

Note: Measuring wavelength was 650 nm**.**

AZAPERONE STANDARD CURVES

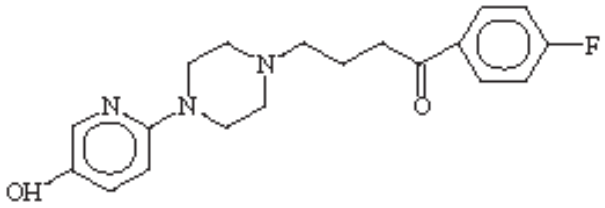
Azaperone

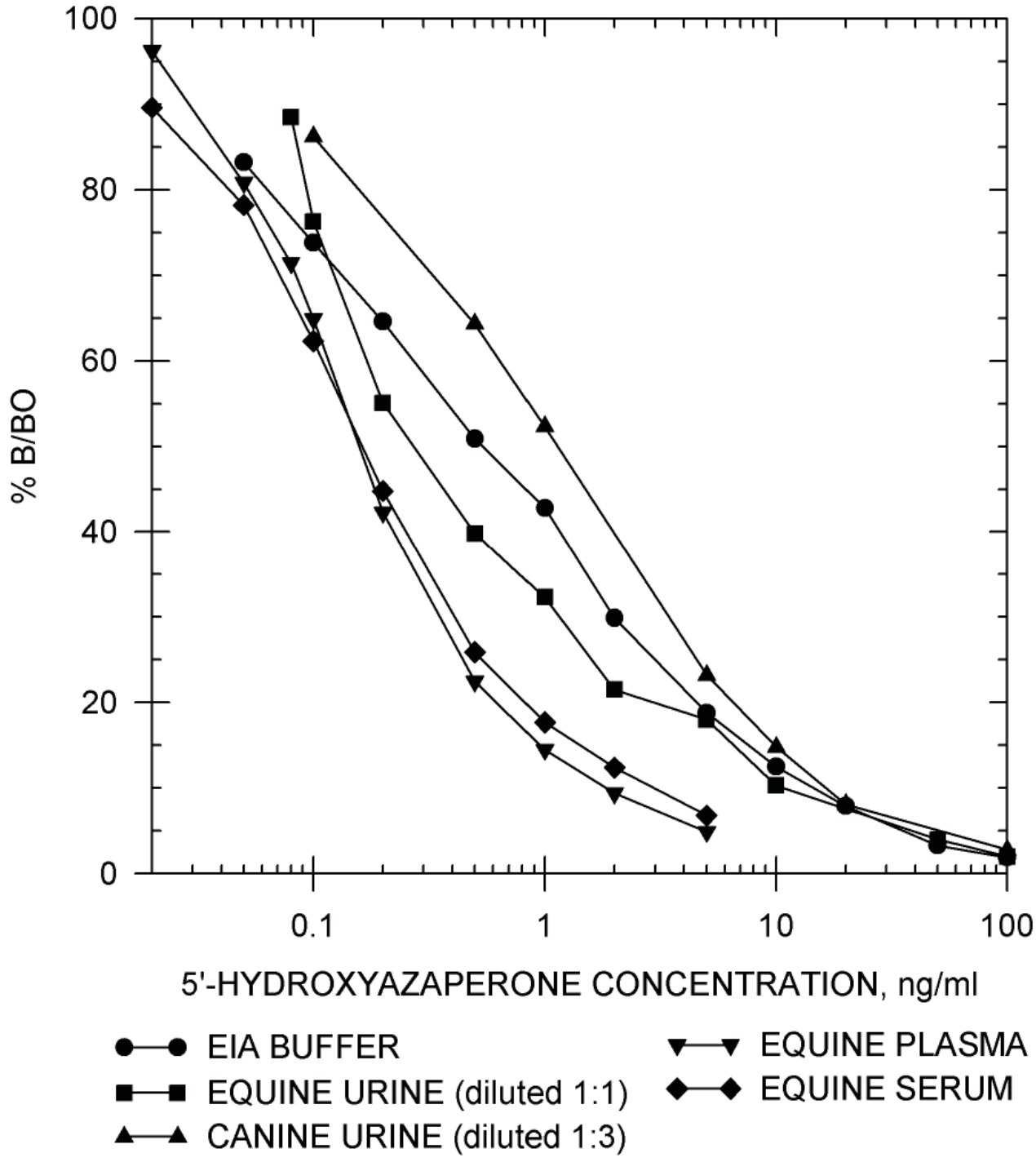




AZAPERONE STANDARD CURVES

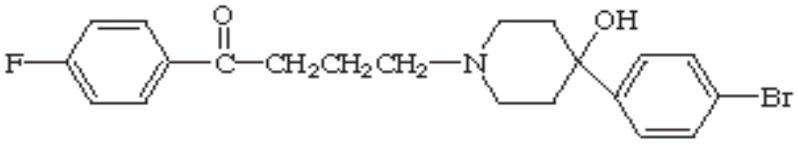
5'-Hydroxyazaperone

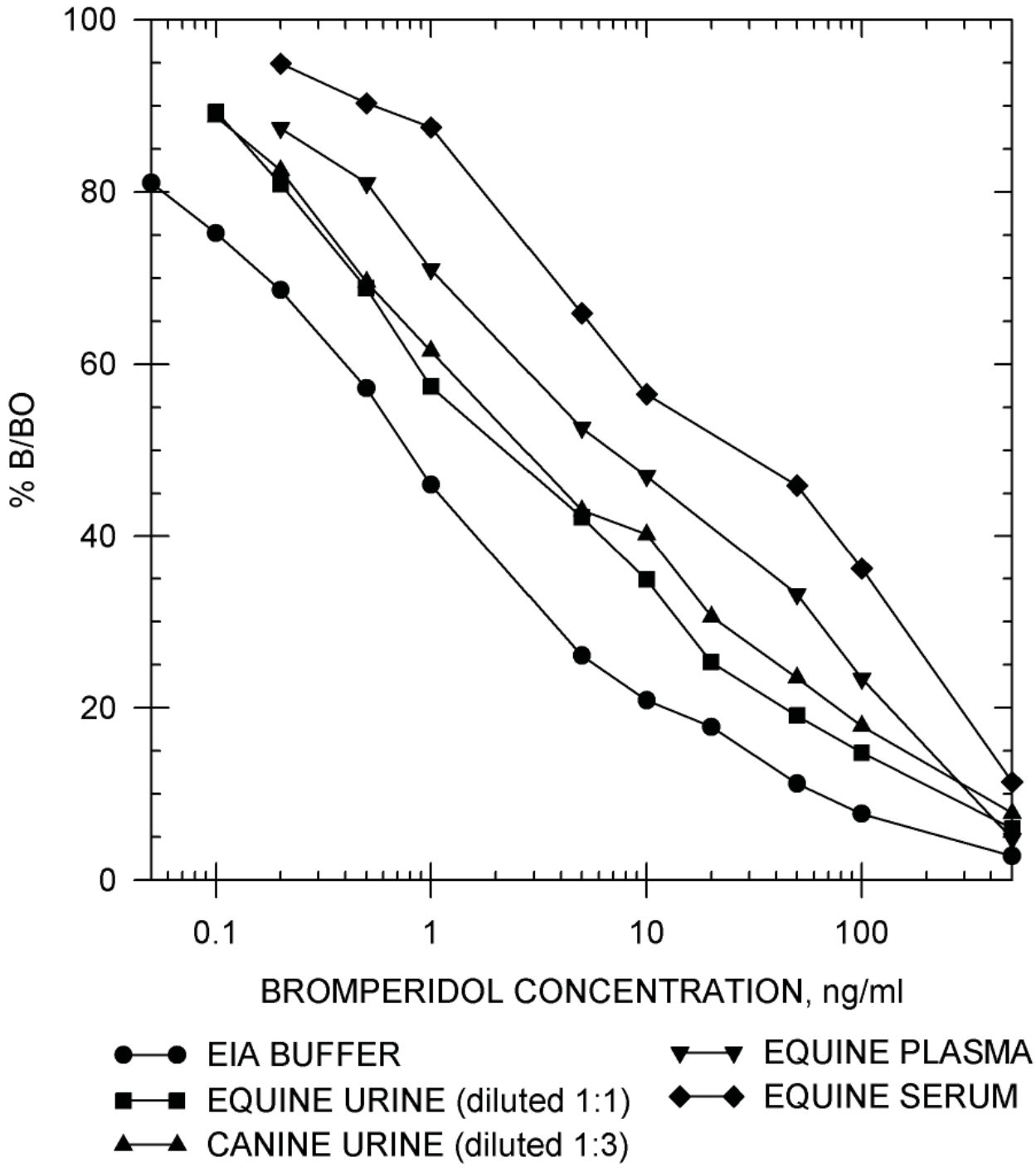




AZAPERONE STANDARD CURVES

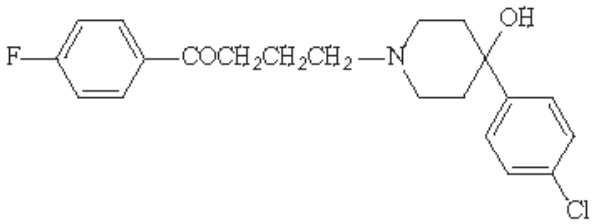
Bromperidol

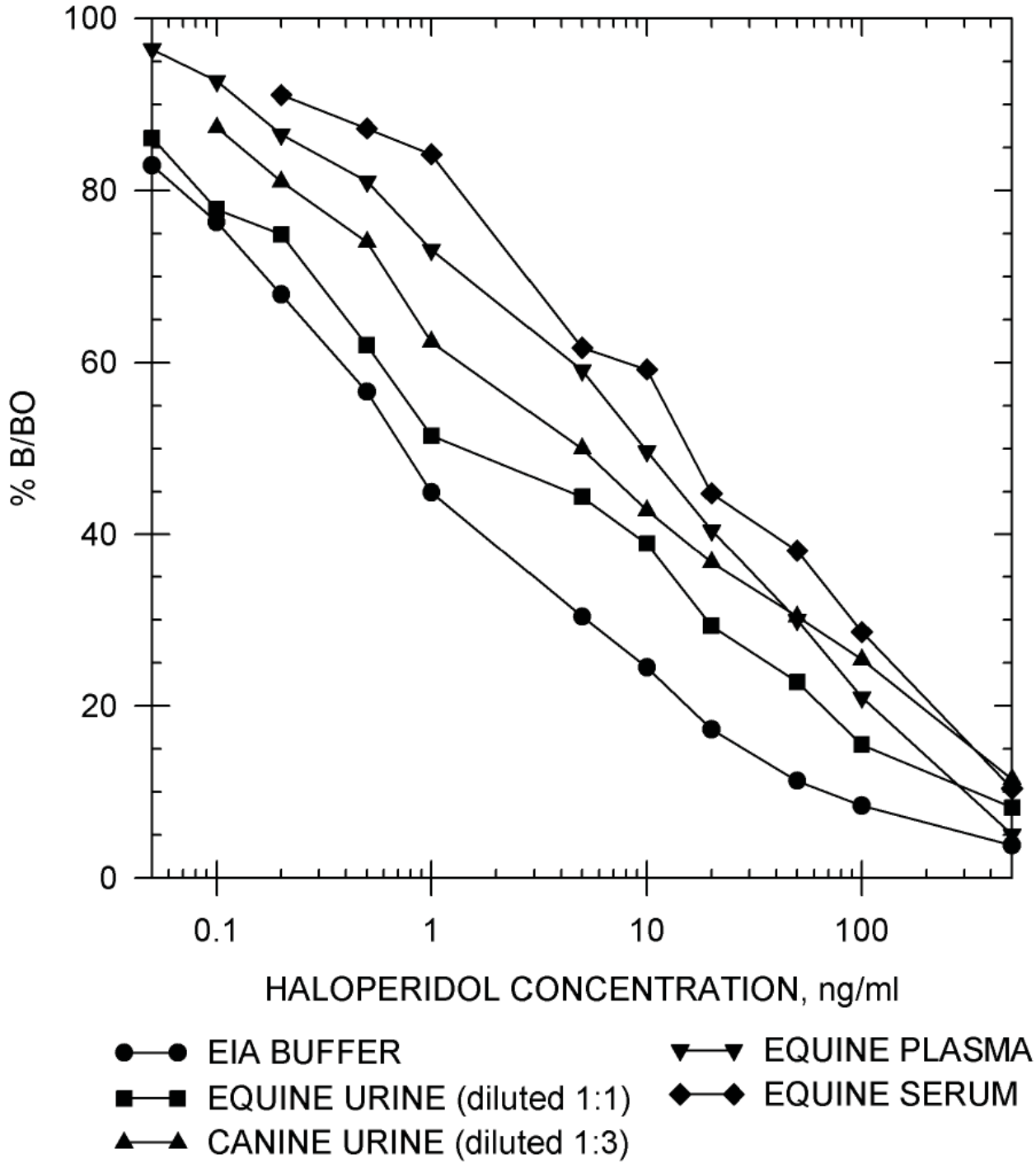




AZAPERONE STANDARD CURVES

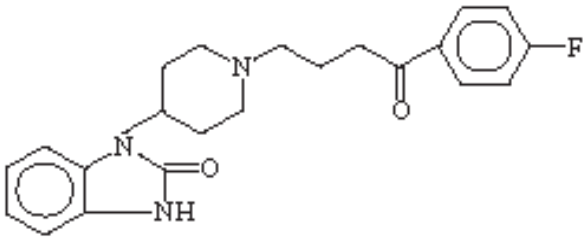
Haloperidol

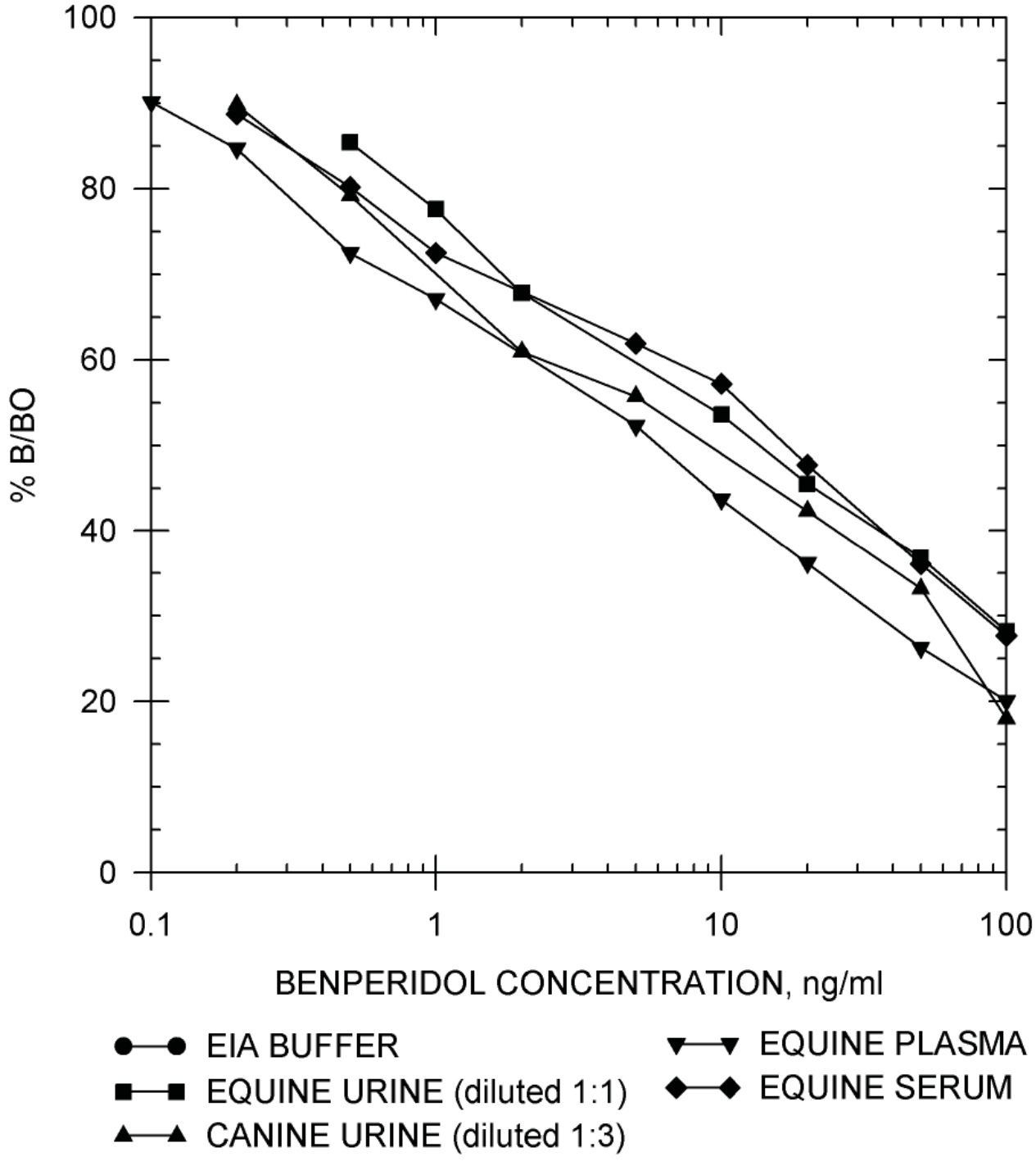




AZAPERONE STANDARD CURVES

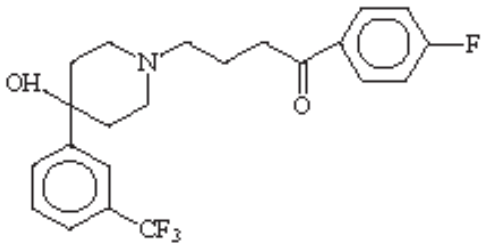
Benperidol

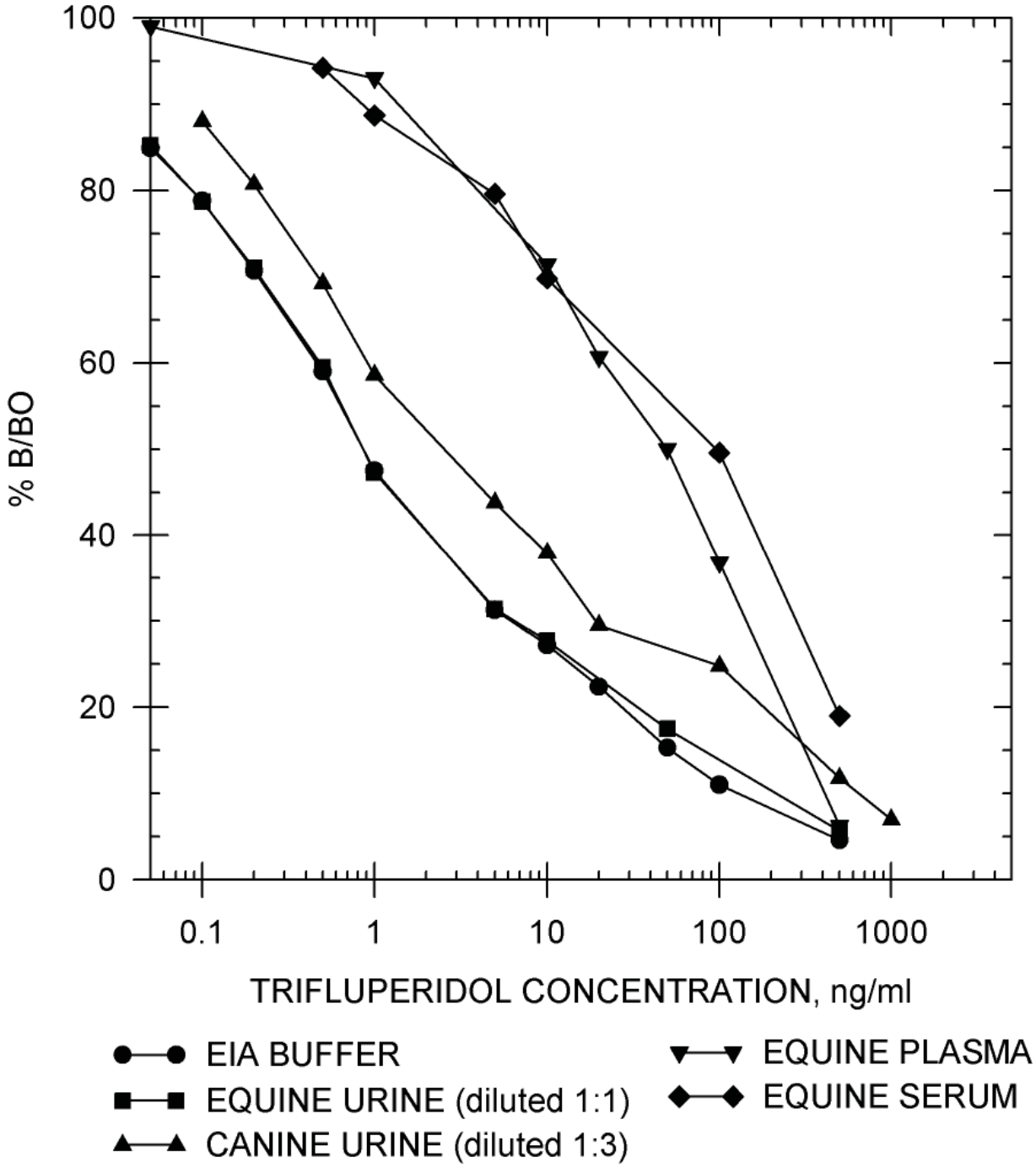




AZAPERONE STANDARD CURVES

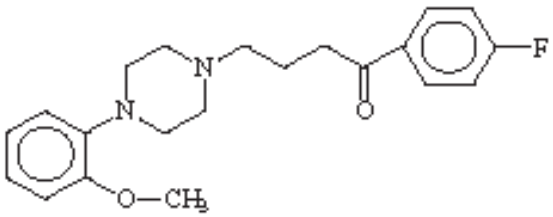
Trifluperidol

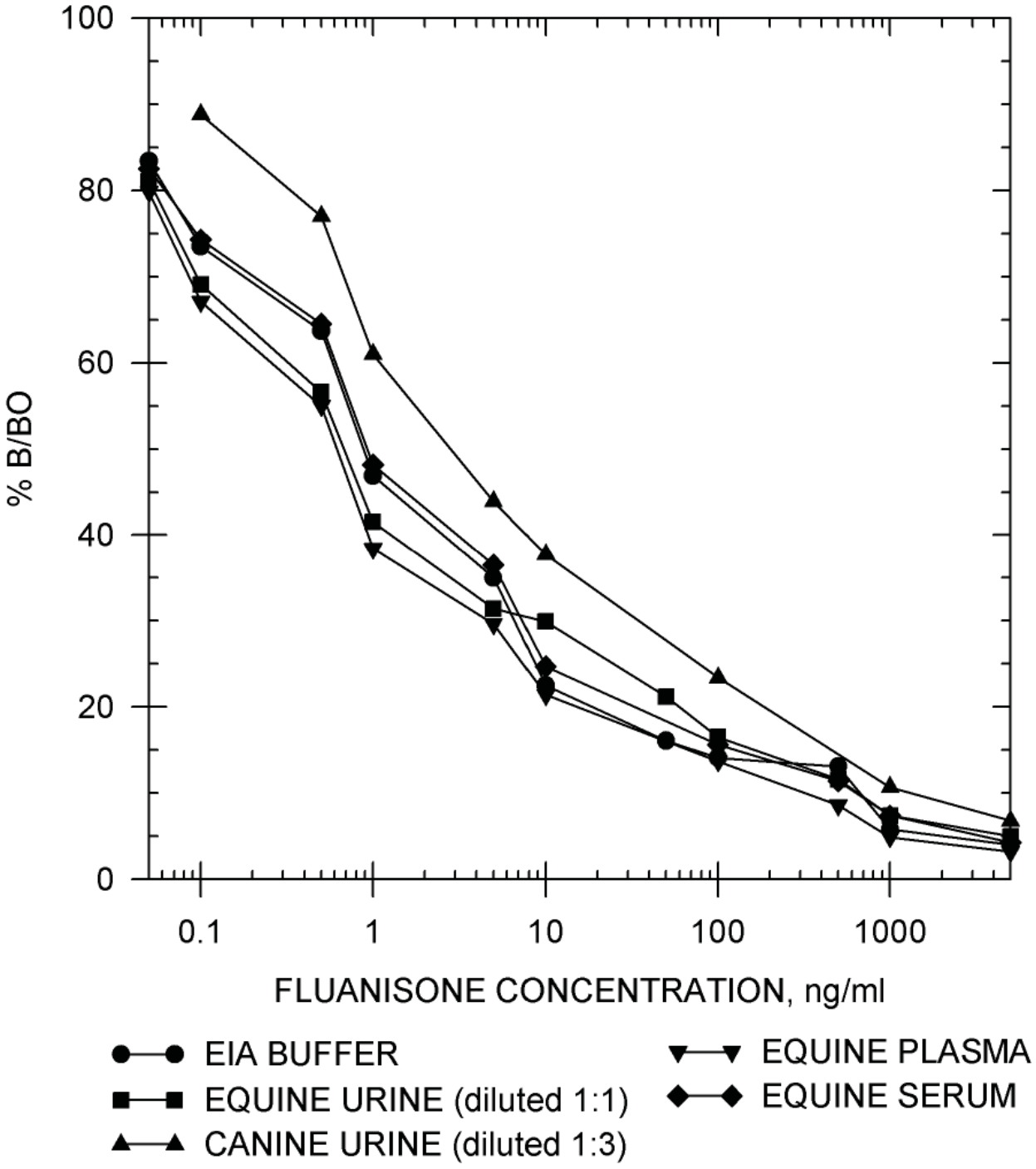




AZAPERONE STANDARD CURVES

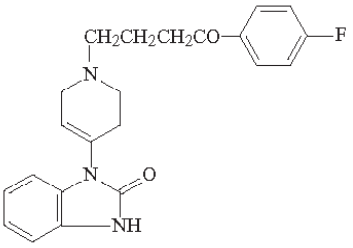
Fluanisone

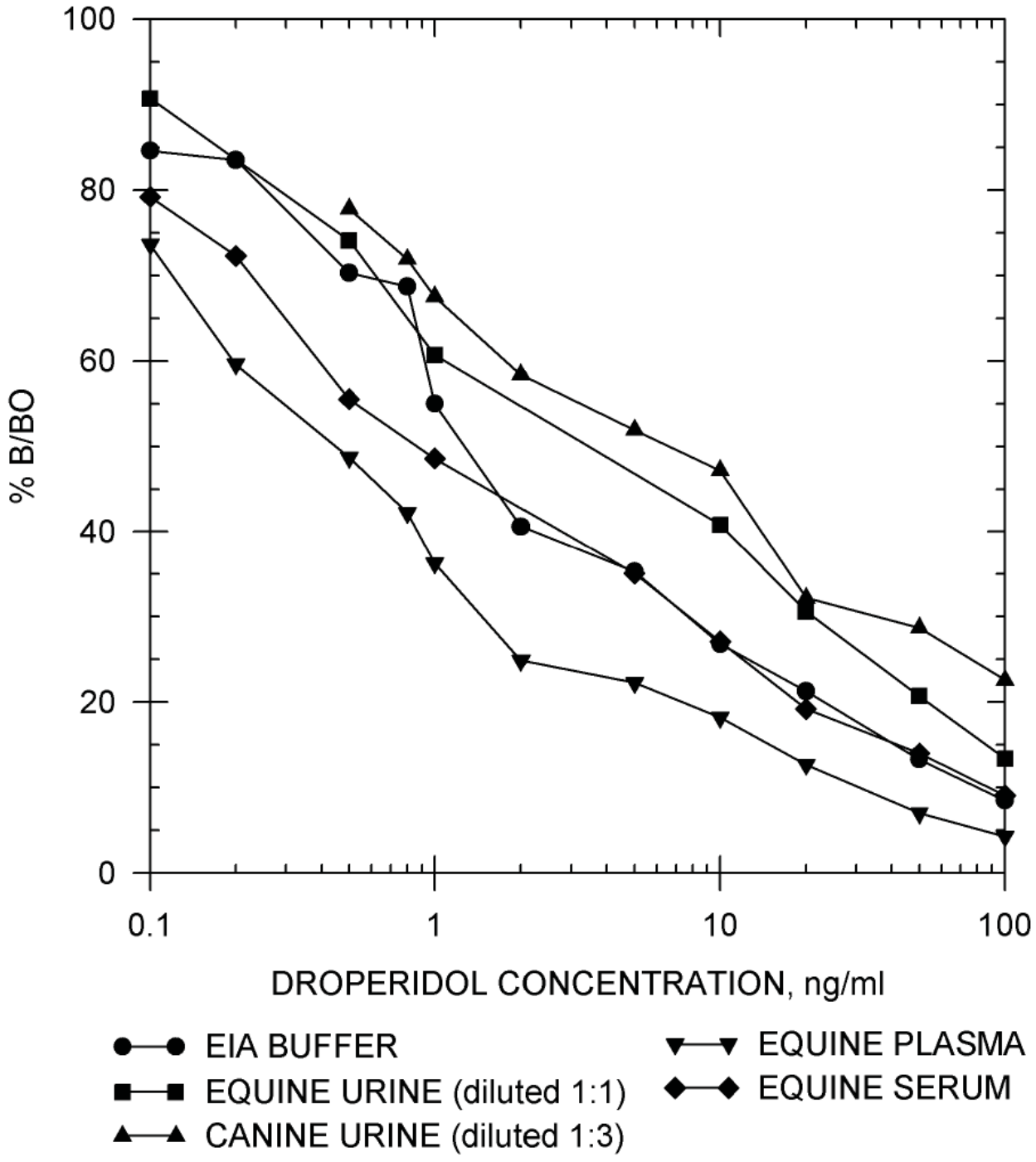




AZAPERONE STANDARD CURVES

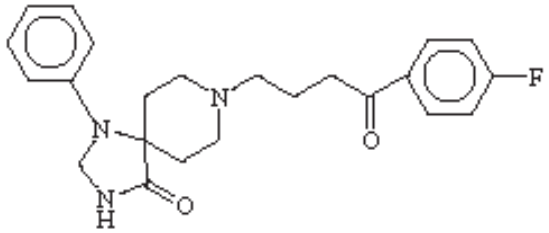
Droperidol

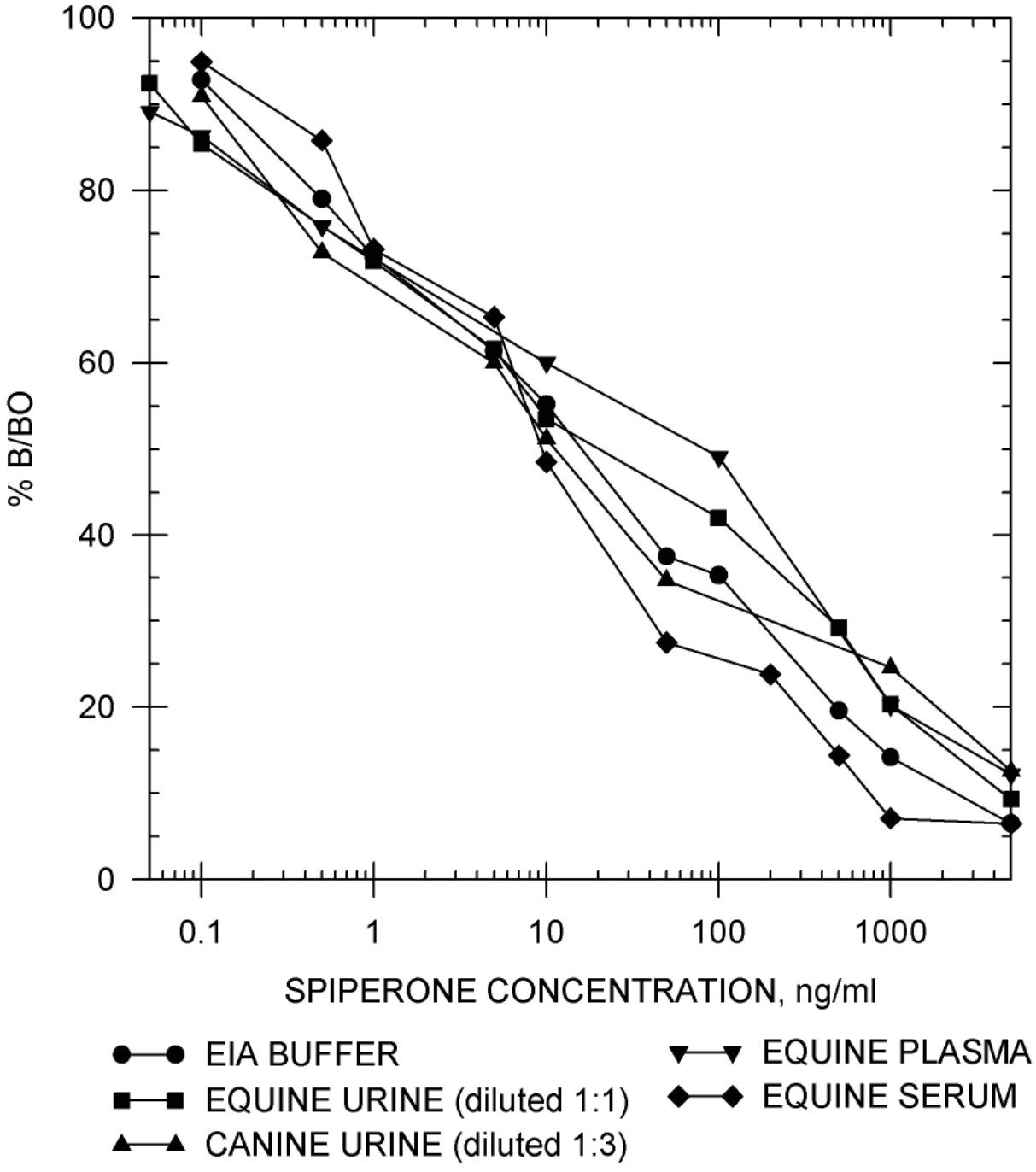




AZAPERONE STANDARD CURVES

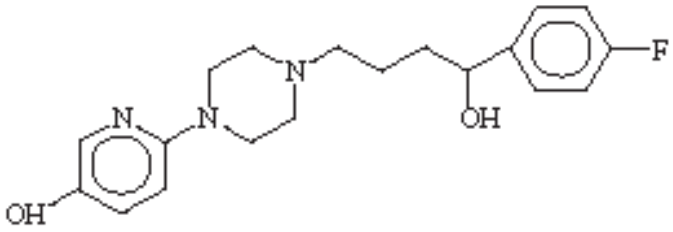
Spiperone

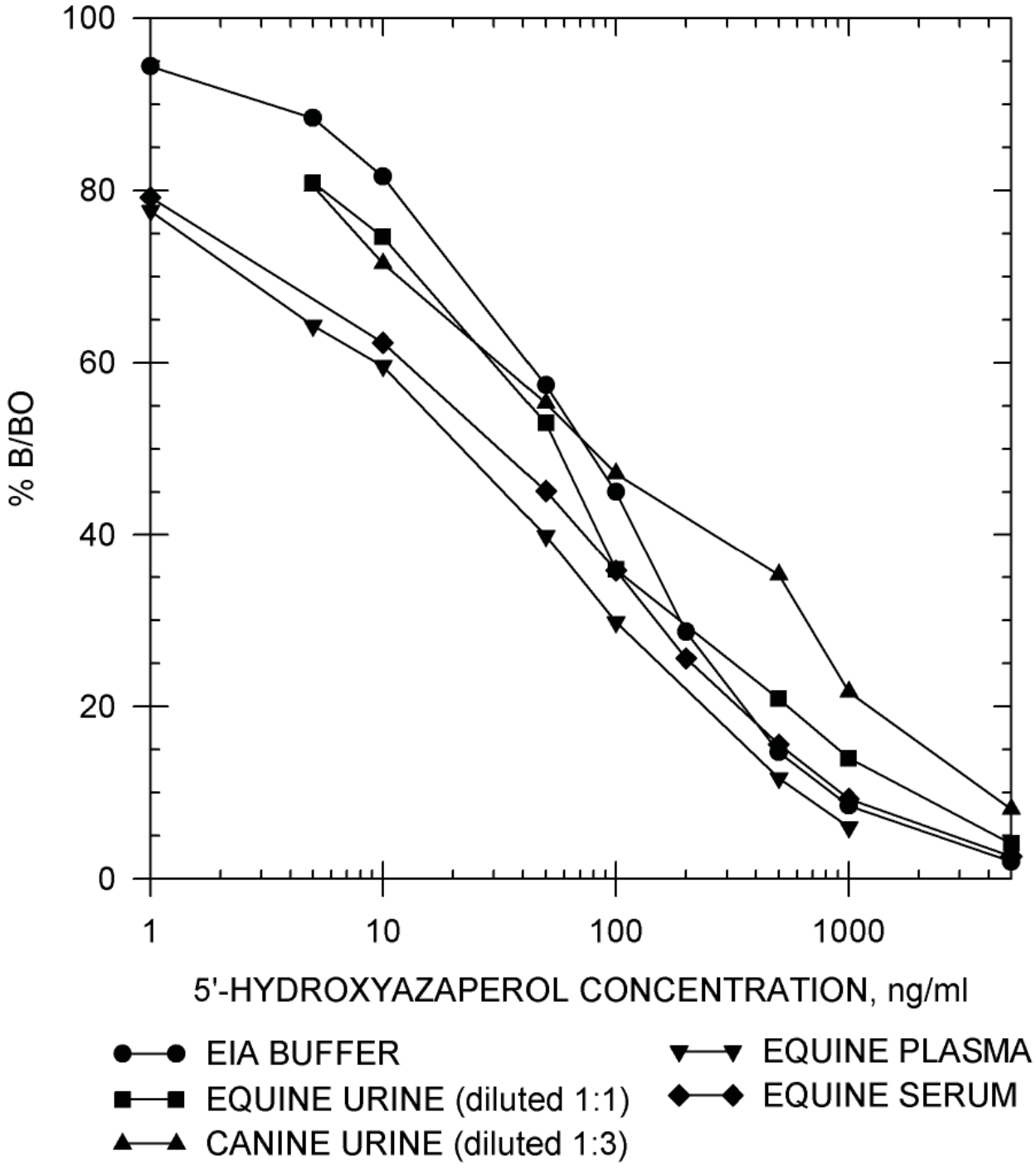




AZAPERONE STANDARD CURVES

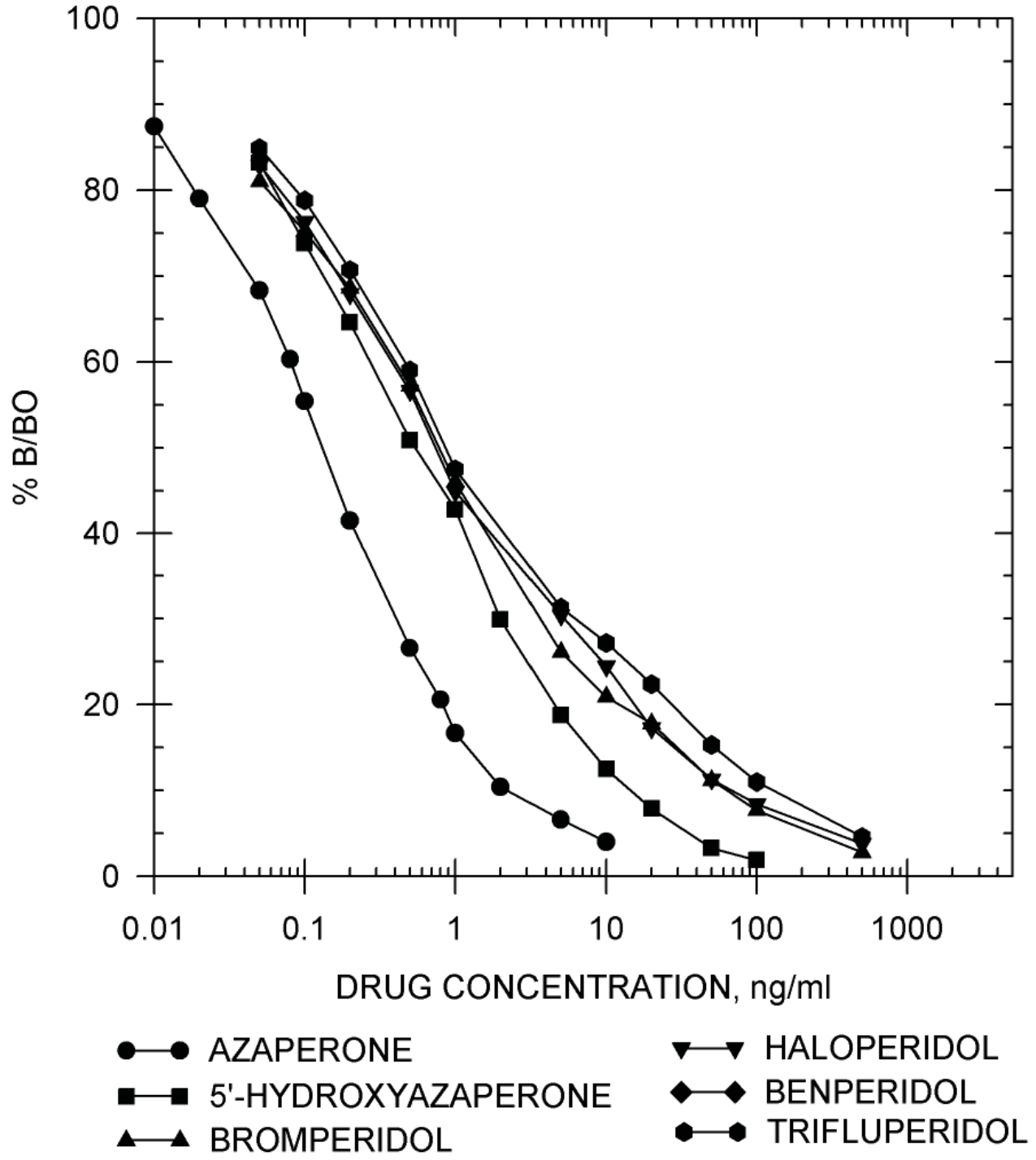
5'-Hydroxyazaperol





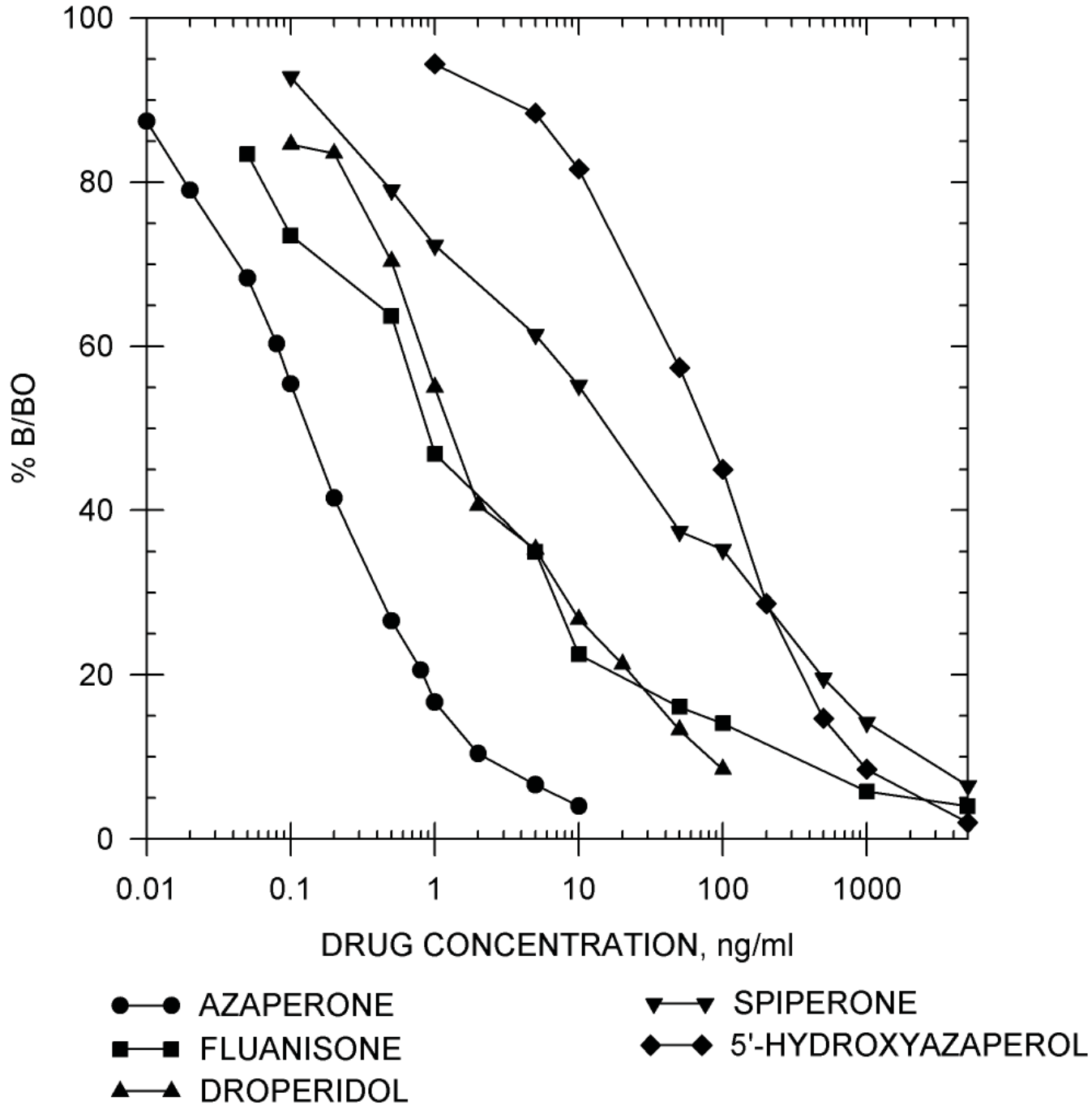
AZAPERONE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



AZAPERONE STANDARD CURVES

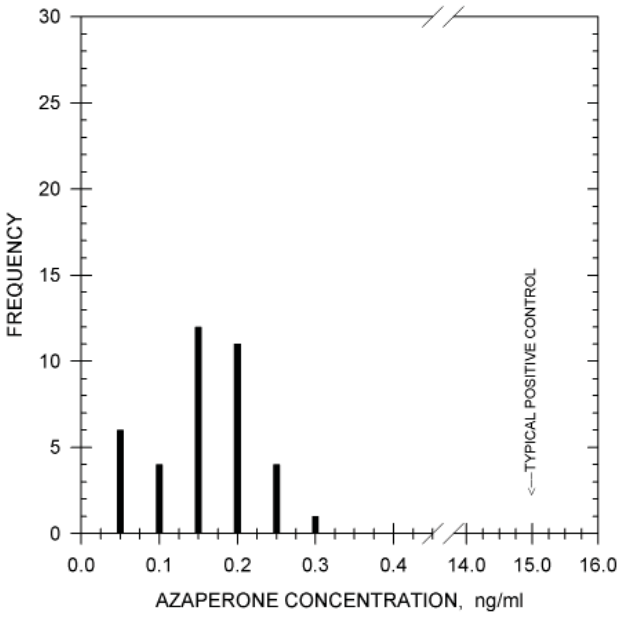
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 38 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.27 ng/ml.

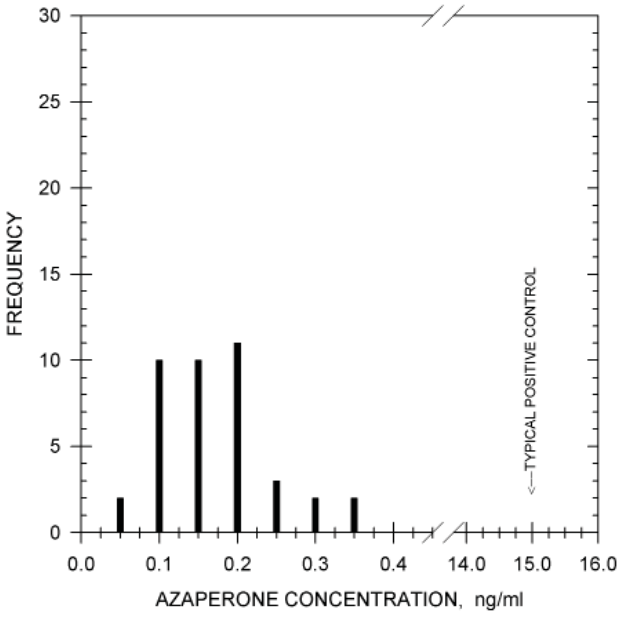
Sample Treatment: No treatment or a dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:3, has shown no background levels above 0.33 ng/ml.

Sample Treatment: A dilution of 1:3 (i.e. 1 part urine to 3 parts EIA buffer) is recommended to reduce natural backgrounds.

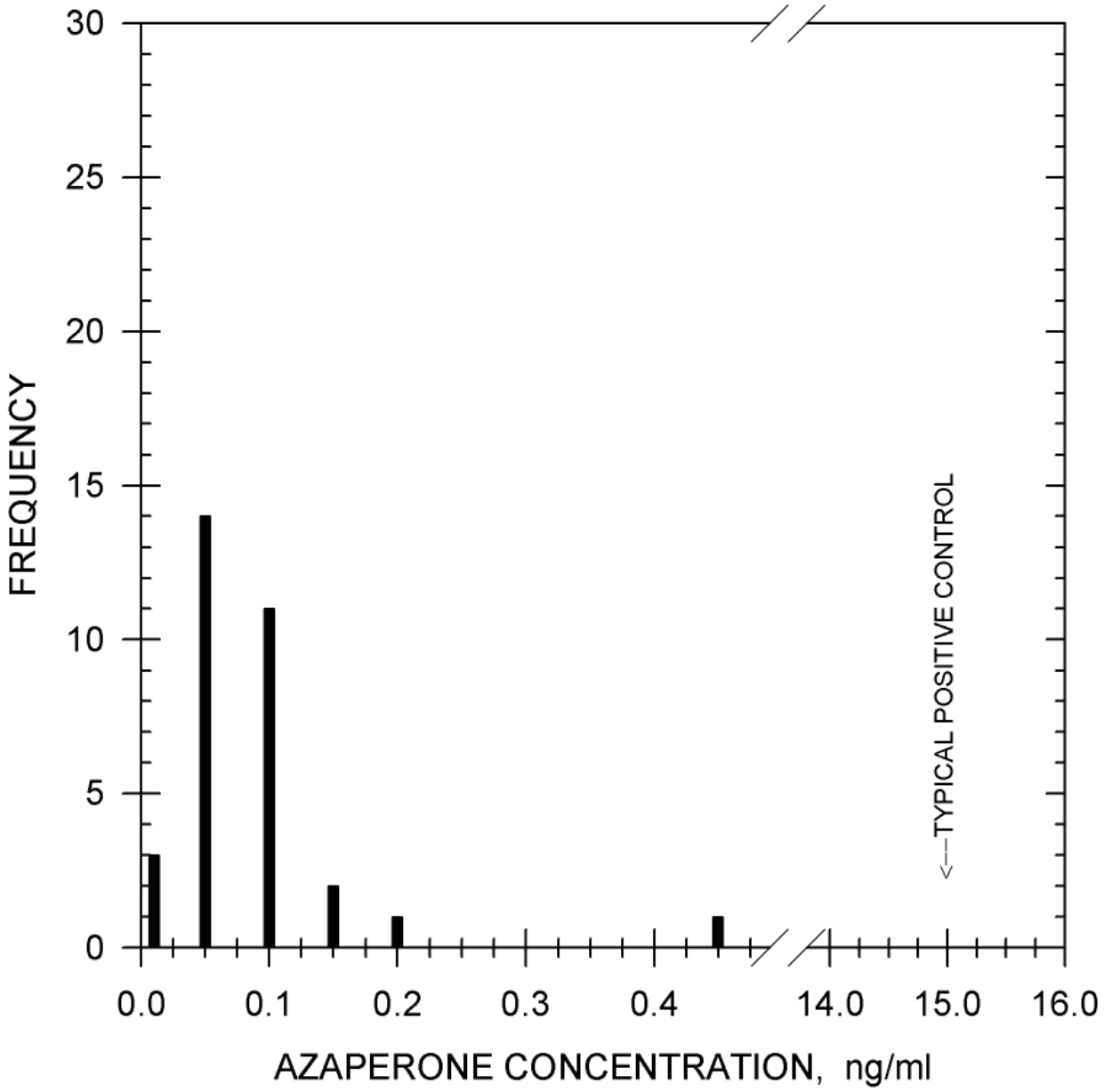


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 32 post-race equine plasma samples has shown no background levels above 0.43 ng/ml.

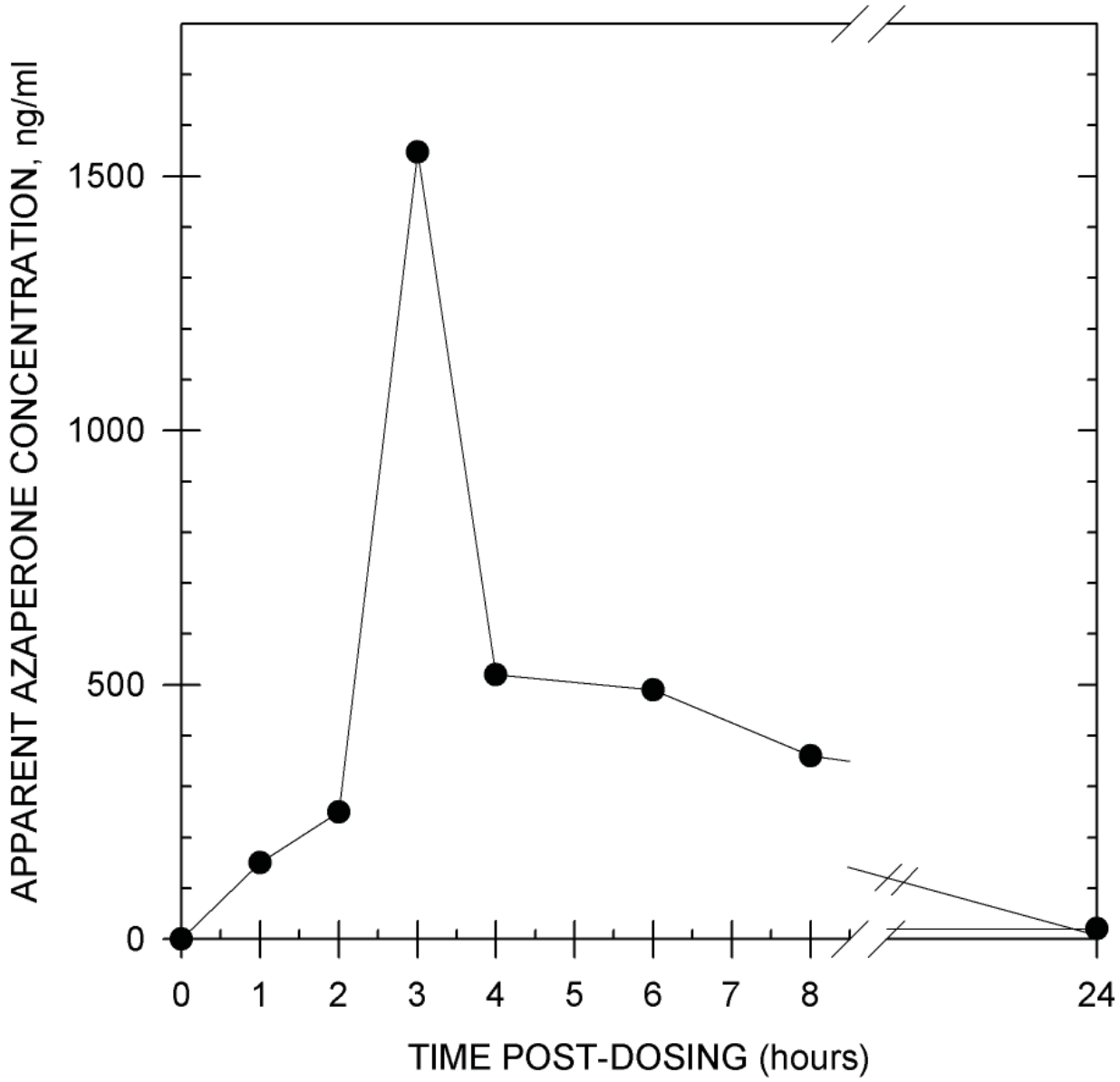
Sample Treatment: No sample treatment is necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 40 mg of analysis by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine urine.
Because the post-dose time points exceeded the range of the assay, samples were diluted 1:1000 with EIA buffer and back calculated to the recommended 1:1 dilution.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/ml.

Azaperone	100%
5'-Hydroxyazaperone	26%
Bromperidol	16%
Haloperidol	14%
Benperidol	11%
Trifluperidol	10%
Fluanisone	10%
Droperidol	7%
Spiperone	1%
5'-Hydroxyazaperol	0.20%

Acepromazine	<0.01%	Furosemide	<0.01%	PCP	<0.01%
Acetaminophen	<0.01%	Gemfibrozil	<0.01%	Penicillin G-Potassium	<0.01%
Acetylsalicylic Acid	<0.01%	Gentisic Acid	<0.01%	Penicillin G-Procaine	<0.01%
ε-amino-n-caproic acid	<0.01%	Glipizide	<0.01%	Pentazocine	<0.01%
Amitriptyline	<0.01%	L-Glutamic Acid	<0.01%	Pentoxifylline	<0.01%
Ascorbic Acid	<0.01%	Glutethimide	<0.01%	Phenothiazine	<0.01%
Benzoic Acid	<0.01%	Glycopyrrolate	<0.01%	Phenylbutazone	<0.01%
Buspirone	<0.01%	Heparin	<0.01%	Pimozide	<0.01%
Butorphanol	<0.01%	Hippuric Acid	<0.01%	Polyethylene Glycol	<0.01%
Butyrophenone	<0.01%	Hordenine	<0.01%	Prednisolone	<0.01%
Caffeine	<0.01%	Hydrocortisone	<0.01%	Primadone	<0.01%
Chlordiazepoxide	<0.01%	Ibuprofen	<0.01%	Procaine	<0.01%
Chlorpromazine	<0.01%	Imipramine	<0.01%	Procainamide	<0.01%
Clenbuterol	<0.01%	Isoxsuprine	<0.01%	Promazine	<0.01%
Codeine	<0.01%	Lidocaine	<0.01%	Pseudoephedrine	<0.01%
Cotinine	<0.01%	Meperidine	<0.01%	Pyrantel	<0.01%
Dexamethasone	<0.01%	Metaproterenol	<0.01%	Pyrilamine	<0.01%
Dextromethorphan	<0.01%	Methadone	<0.01%	Pyrimethamine	<0.01%
Diazepam	<0.01%	Methaqualone	<0.01%	Quinidine	<0.01%
Diclofenac	<0.01%	Methocarbamol	<0.01%	Quinine	<0.01%
Dimethyl Sulfoxide	<0.01%	6a-Methylprednisolone	<0.01%	Salbutamol	<0.01%
Dipyrone	<0.01%	Methylene Blue	<0.01%	Salicylamide	<0.01%
Doxepin	<0.01%	Nalorphine	<0.01%	Salicylic Acid	<0.01%
Ephedrine	<0.01%	Naproxen	<0.01%	Theophylline	<0.01%
Erythromycin	<0.01%	Niaciamide	<0.01%	Thiamine	<0.01%
Ethyl p-amino-benzoate	<0.01%	Nicotine	<0.01%	Triflupromazine	<0.01%
Fenoprofen	<0.01%	Nortriptyline	<0.01%	Trimethoprim	<0.01%
Flunixin	<0.01%	Orphenadrine	<0.01%	Trimipramine	<0.01%
Folic Acid	<0.01%	Oxymorphone	<0.01%	Uric Acid	<0.01%
Folinic Acid	<0.01%	Oxyphenbutazone	<0.01%	Xylazine	<0.01%

ENHANCED BARBITURATE GROUP

Product# 100110 & 100115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

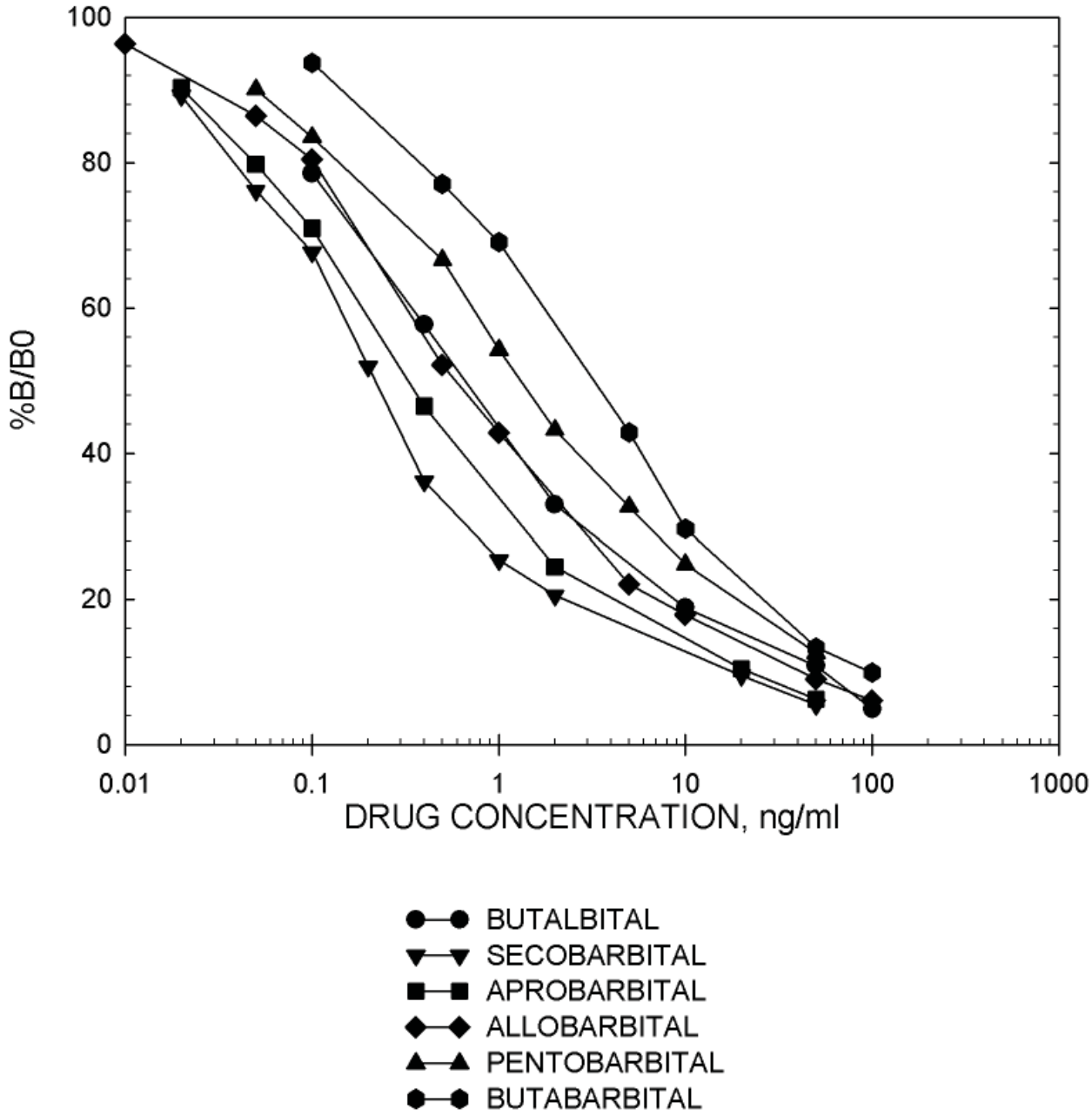
Secobarbital	0.3 ng/ml
Butalbital	0.5 ng/ml
Aprobarbital	0.5 ng/ml
Allobarbital	0.9 ng/ml
Pentobarbital	1.6 ng/ml
Butabarbital	3.5 ng/ml
Amobarbital	7.3 ng/ml
Barbital	14 ng/ml
p-Hydroxyphenobarbital	16 ng/ml
Phenobarbital	17 ng/ml

Precision:	Intra-assay	3.39 %
	Inter-assay	4.68 %

Note: Measuring wavelength was 650 nm**.**

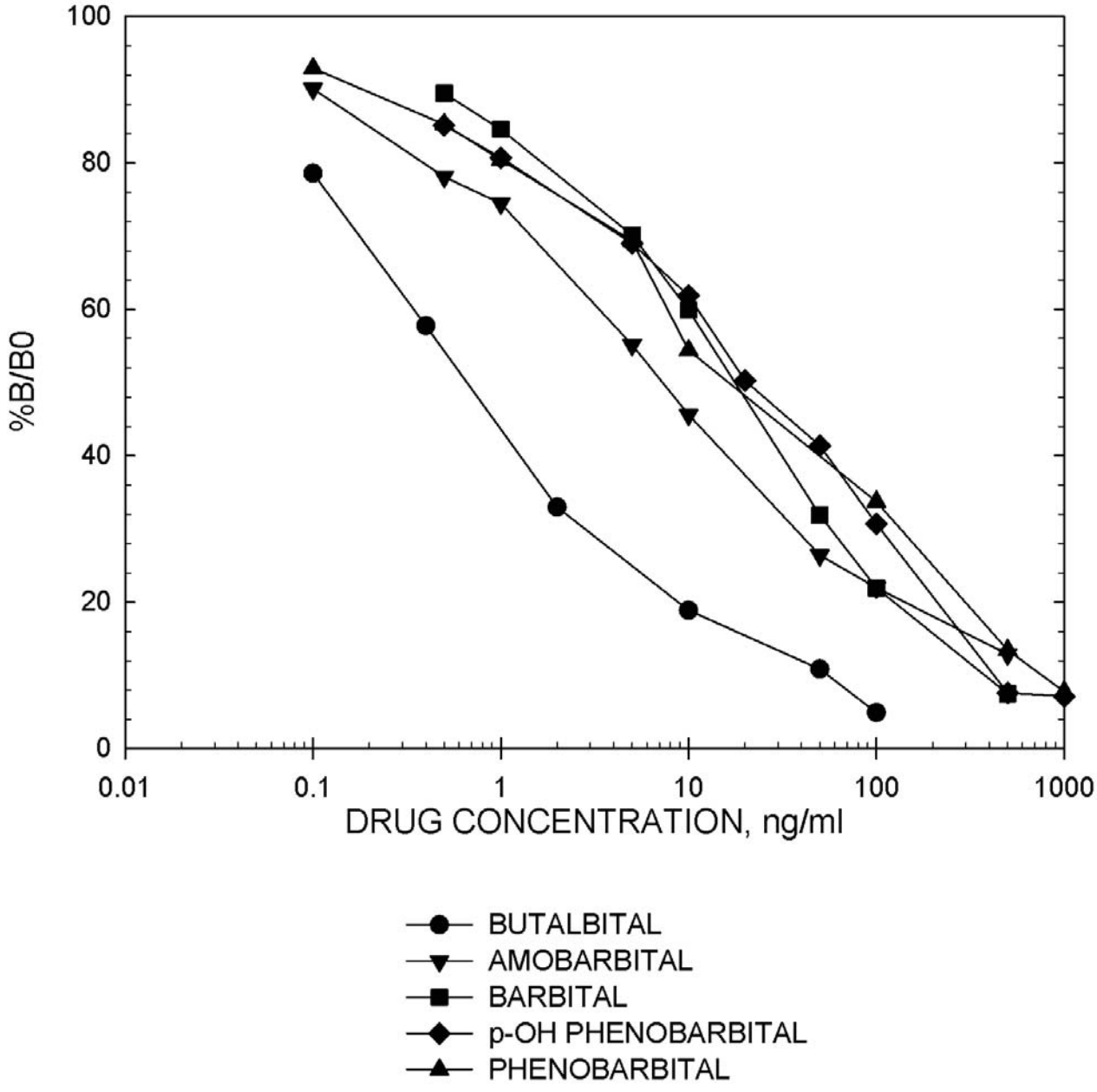
BARBITURATE STANDARD CURVES

Drug Standard Cuve Comparison in EIA Buffer



BARBITURATE STANDARD CURVES

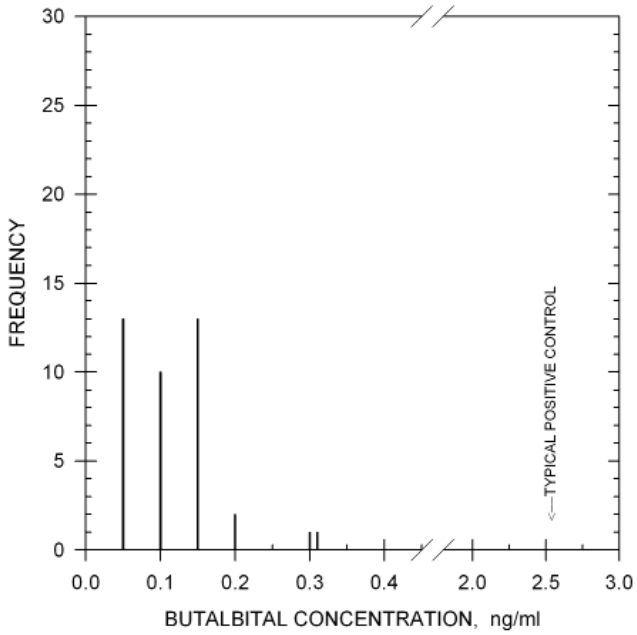
Drug Standard Cuve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:7, has shown no background levels above 0.31 ng/ml.

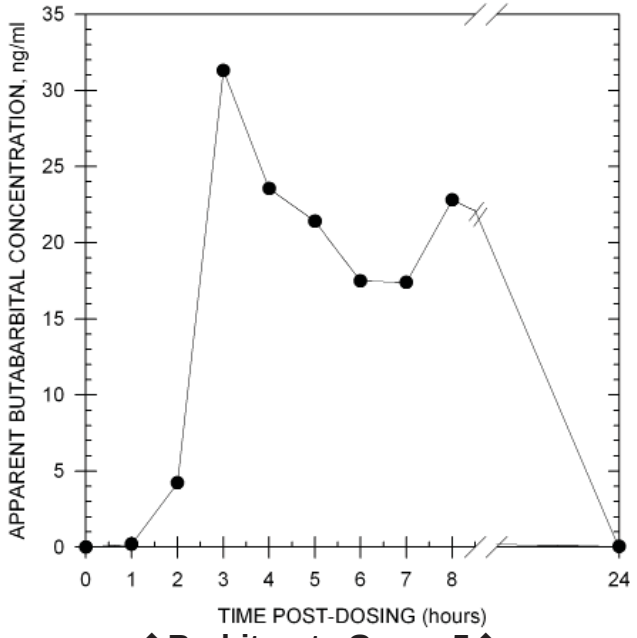
Sample Treatment: A dilution of 1:4 to 1:7 with EIA buffer is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 90 mg of butabarbital orally to one horse, the presence of this drug was detected for 24 hours in equine urine.

Note: Because all post-dose samples exceeded the range of the assay, the samples were diluted 1:100 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/ml.

Secobarbital	166%
Butalbital	100%
Aprobarbital	100%
Allobarbital	53%
Pentobarbital	31%
Butabarbital	14%
Amobarbital	6.8%
Barbital	3.4%
p-Hydroxyphenobarbital	3.2%
Phenobarbital	3.0%
Glutethimide	0.7%
Phenytoin	0.2%
Mephobarbital	0.05%
Barbituric Acid	0.01%

Acetaminophen	<0.01%	Lidocaine	<0.01%
Amitriptyline	<0.01%	Meperidine	<0.01%
Aspirin	<0.01%	Methadone	<0.01%
Chlordiazepoxide	<0.01%	Methaqualone	<0.01%
Chlorpromazine	<0.01%	Nalorphine	<0.01%
Cotinine	<0.01%	Naproxen	<0.01%
Dextromethorphan	<0.01%	Nortriptyline	<0.01%
Doxepin	<0.01%	Penicillin G-Potassium	<0.01%
Erythromycin	<0.01%	Penicillin G-Procaine	<0.01%
Fenoprofen	<0.01%	Phencyclidine	<0.01%
Gemfibrozil	<0.01%	Primadone	<0.01%
Gentisic Acid	<0.01%	Procainamide	<0.01%
Glipizide	<0.01%	Procaine	<0.01%
Hexobarbital	<0.01%	Quinidine	<0.01%
Ibuprofen	<0.01%	Quinine	<0.01%
Imipramine	<0.01%	Theophylline	<0.01%
		Trimipramine	<0.01%

ENHANCED BENZODIAZEPINE GROUP

Product# 180610 & 180615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Diazepam	0.16 ng/mL
Nordiazepam	0.44 ng/mL
Alprazolam	0.53 ng/mL
Estazolam	0.59 ng/mL
Halazepam	0.62 ng/mL
Flurazepam	0.64 ng/mL
Bromazepam	0.82 ng/mL
Triazolam	0.96 ng/mL
Prazepam	1.00 ng/mL
Adinazolam	1.04 ng/mL
Clonazepam	1.04 ng/mL
Nitrazapem	1.27 ng/mL
Temazepam	1.31 ng/mL
N-Desmethyl Flunitrazepam	1.31 ng/mL
Flubromazepam	1.38 ng/mL
Oxazepam	1.38 ng/mL
Clobazam	1.43 ng/mL
Lormetazepam	1.54 ng/mL
Flunitrazepam	1.54 ng/mL
Diclazepam	1.60 ng/mL
3-hydroxyphenazepam	1.62 ng/mL
Midazolam	1.65 ng/mL
Tetrazepam	1.89 ng/mL
Delorazepam	1.92 ng/mL
Pyrazolam	2.11 ng/mL
8-aminoclonazolam	2.12 ng/mL
Lorazepam	2.30 ng/mL
Etizolam	2.55 ng/mL
Deschloroetizolam	3.14 ng/mL
7-amino Flunitrazepam	3.46 ng/mL
7-amino Clonazepam	4.47 ng/mL
Nifoxipam	6.27 ng/mL
α-Hydroxy Alprazolam	8.13 ng/mL
Demoxepam	9.49 ng/mL
Bentazepam	9.86 ng/mL
Chlordiazepoxide	10.88 ng/mL
Meclonazepam	17.25 ng/mL
alpha-hydroxyetizolam	138 ng/mL
Zolazepam	460 ng/mL

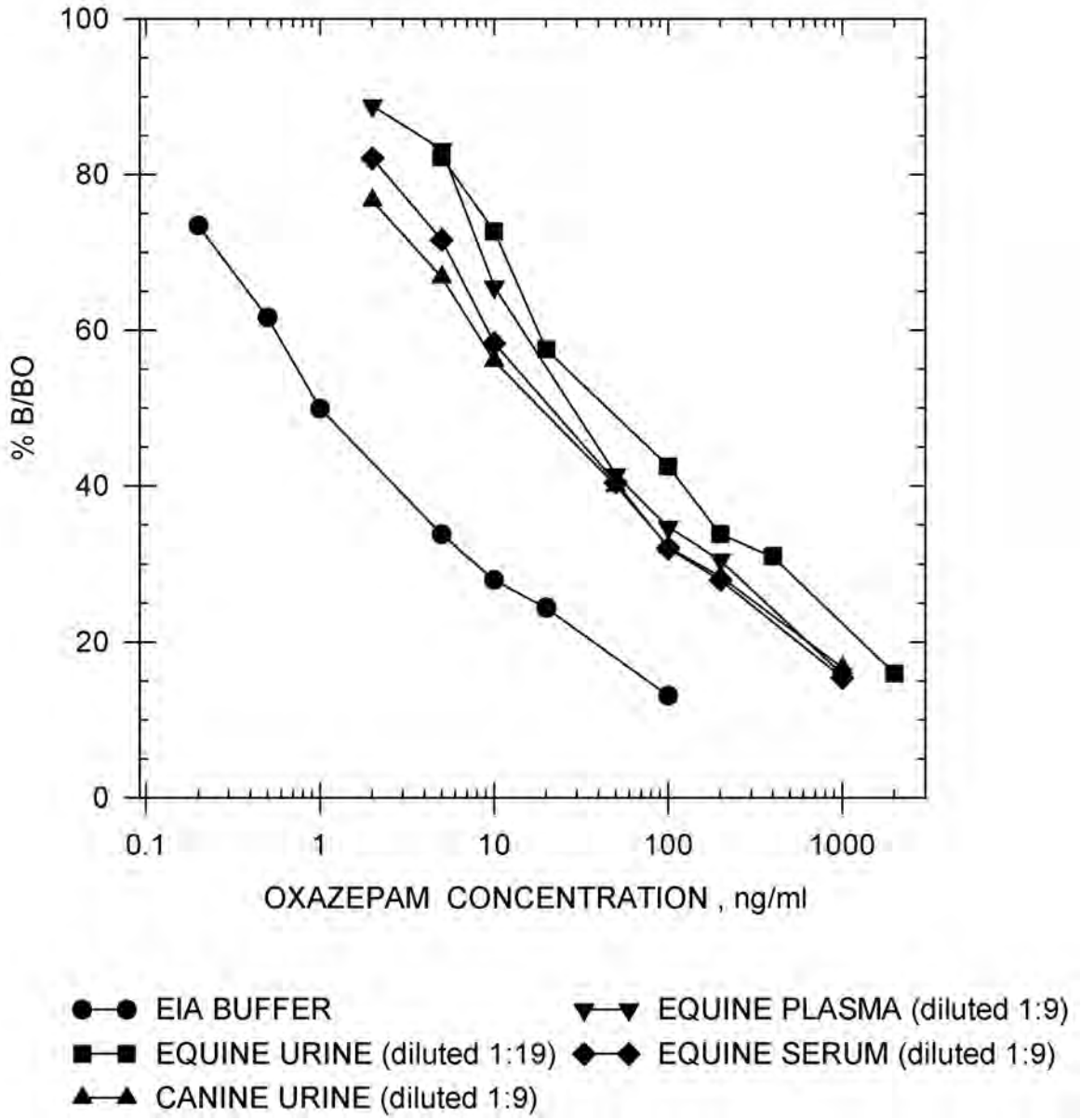
Precision:

Intra-assay	4.77 %
Inter-assay	2.85 %

Note: Measuring wavelength was 650 nm**.**

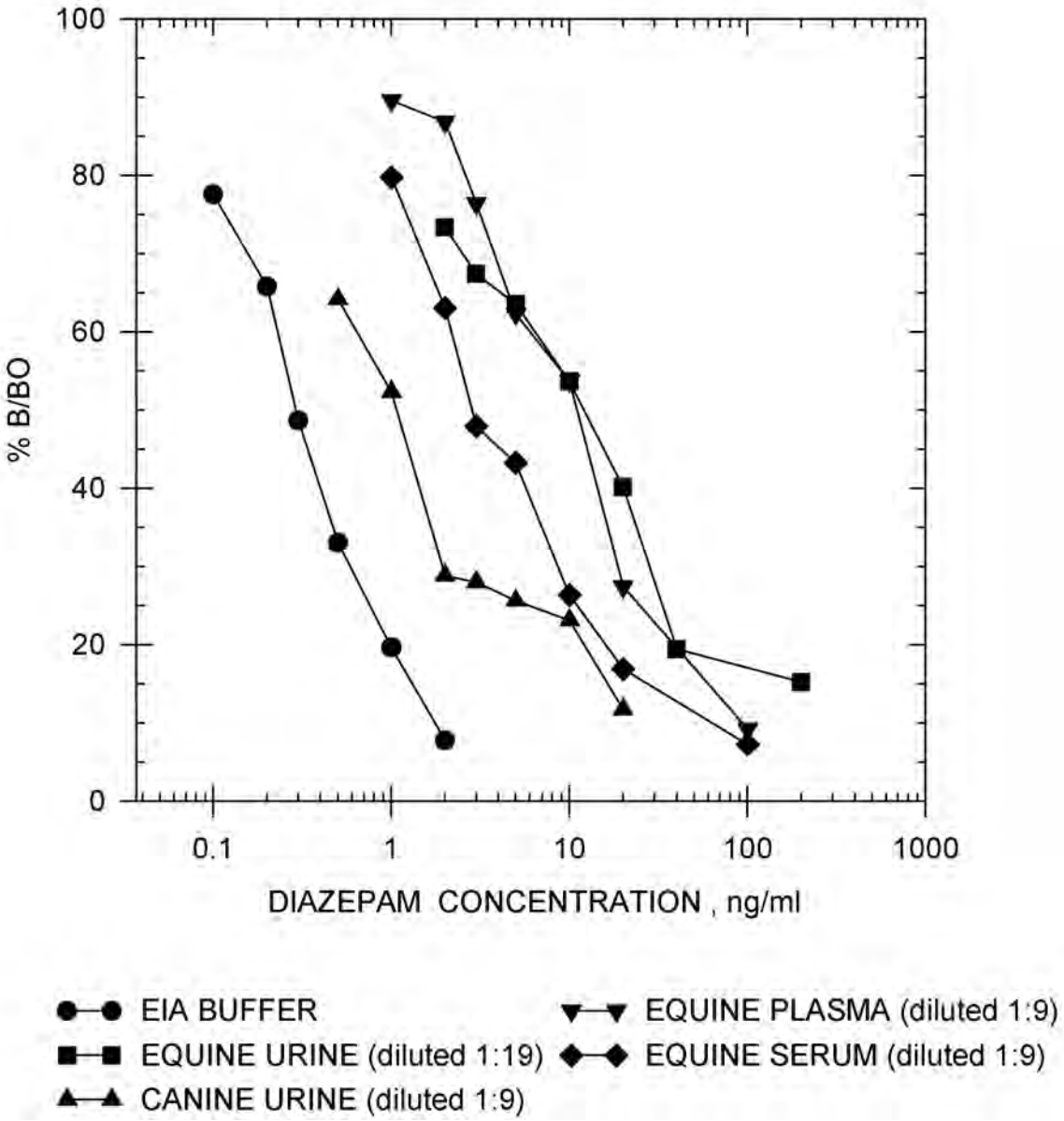
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Oxazepam



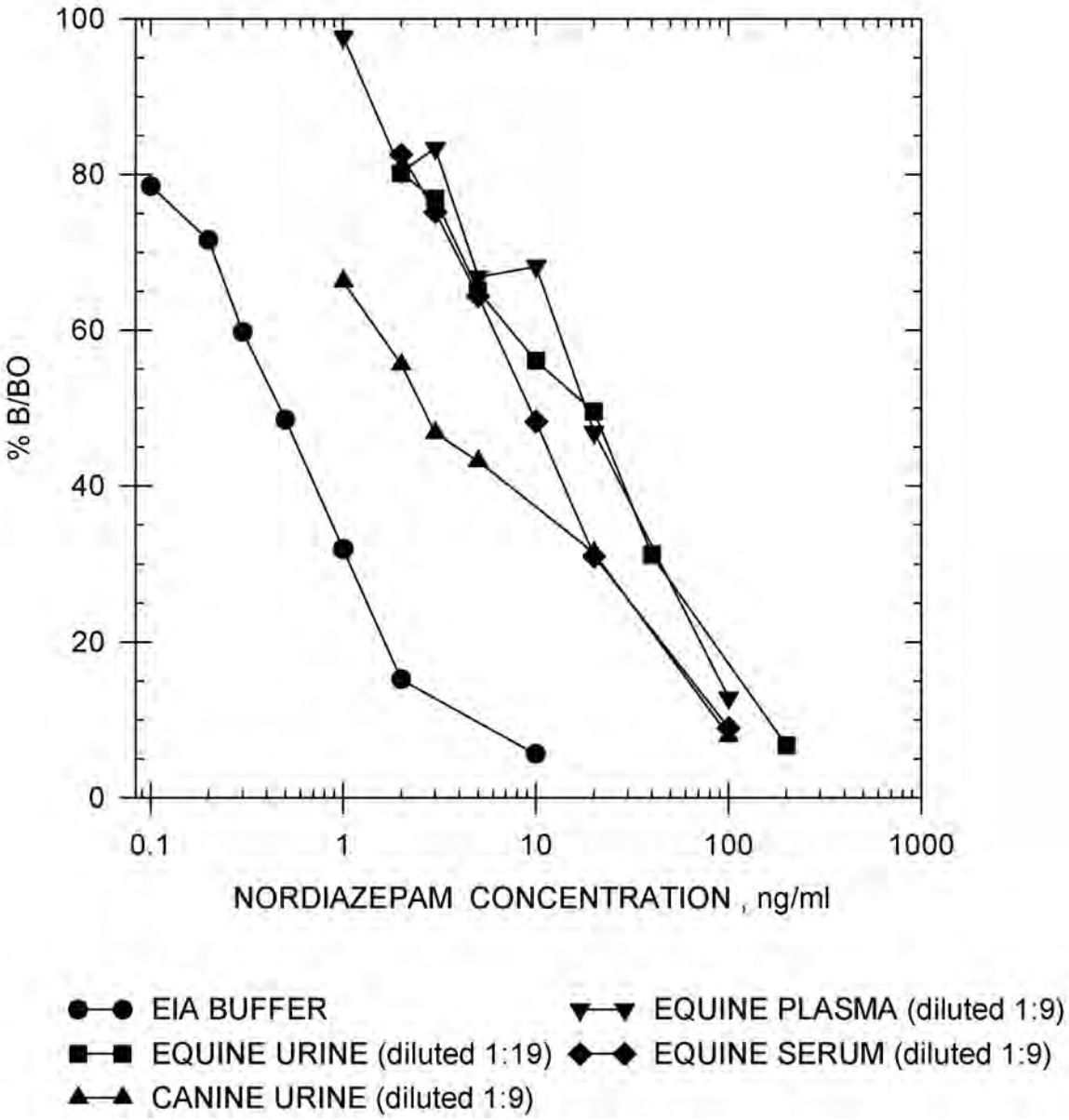
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Diazepam



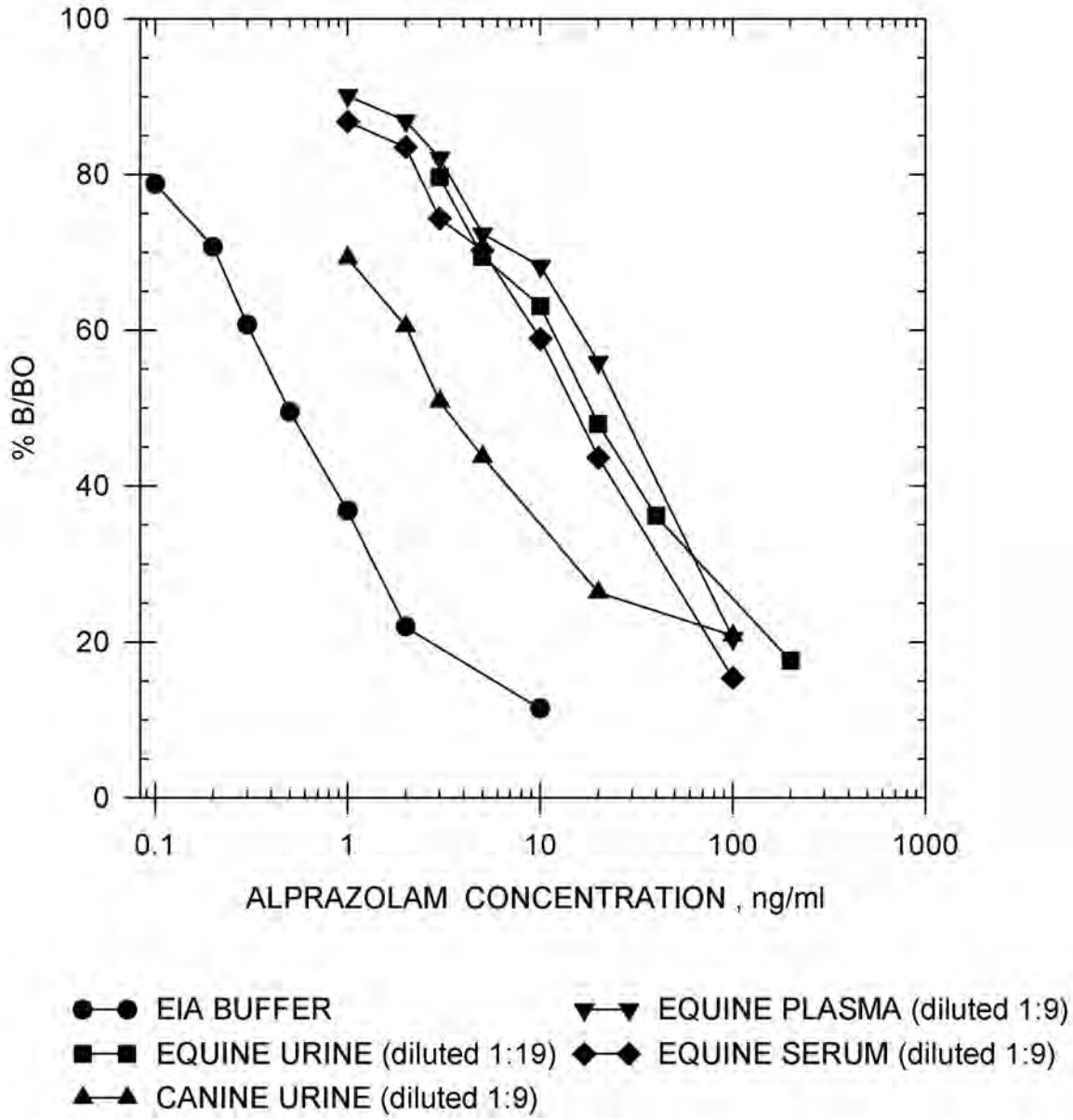
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Nordiazepam



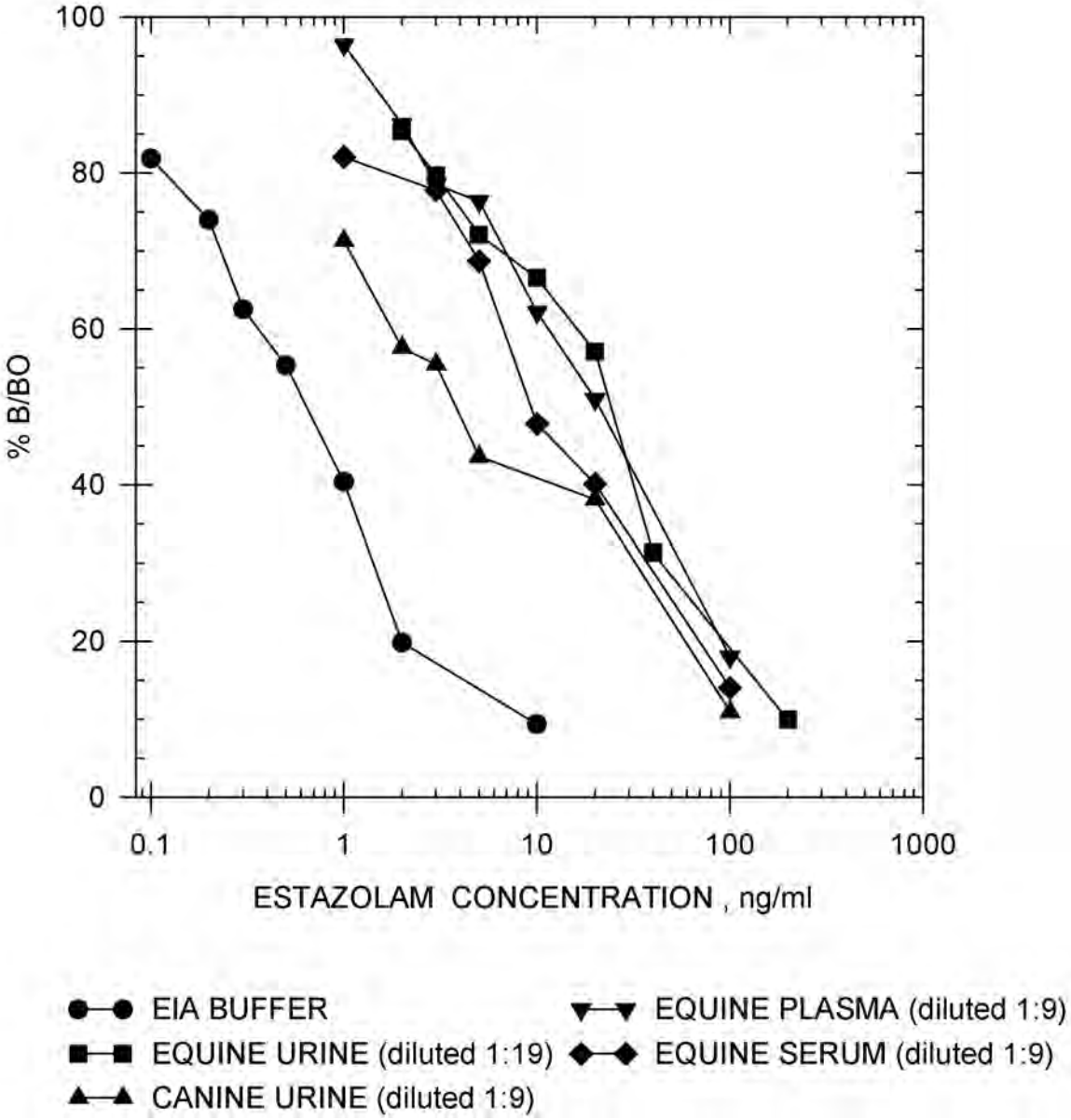
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Alprazolam



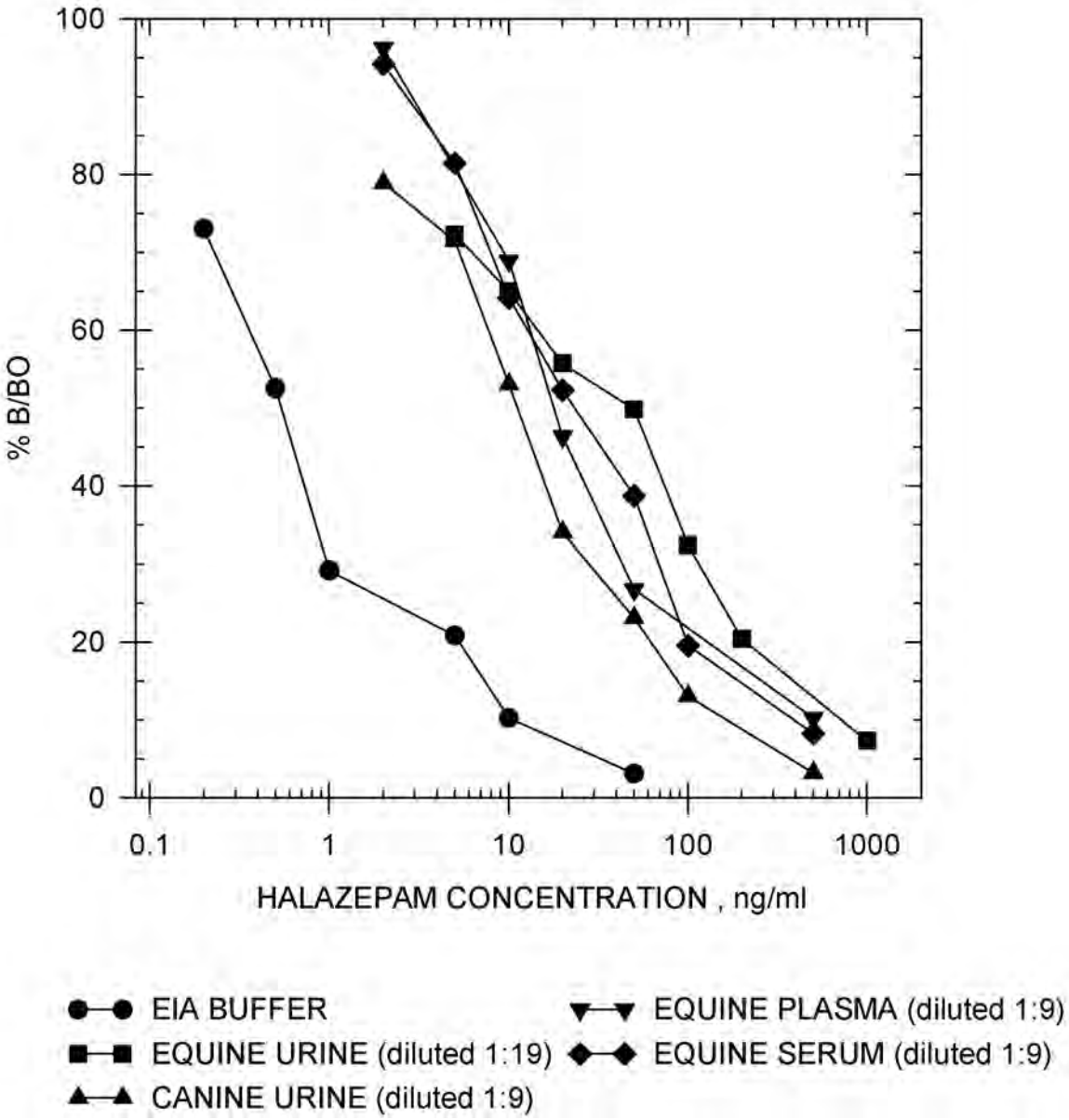
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Estazolam



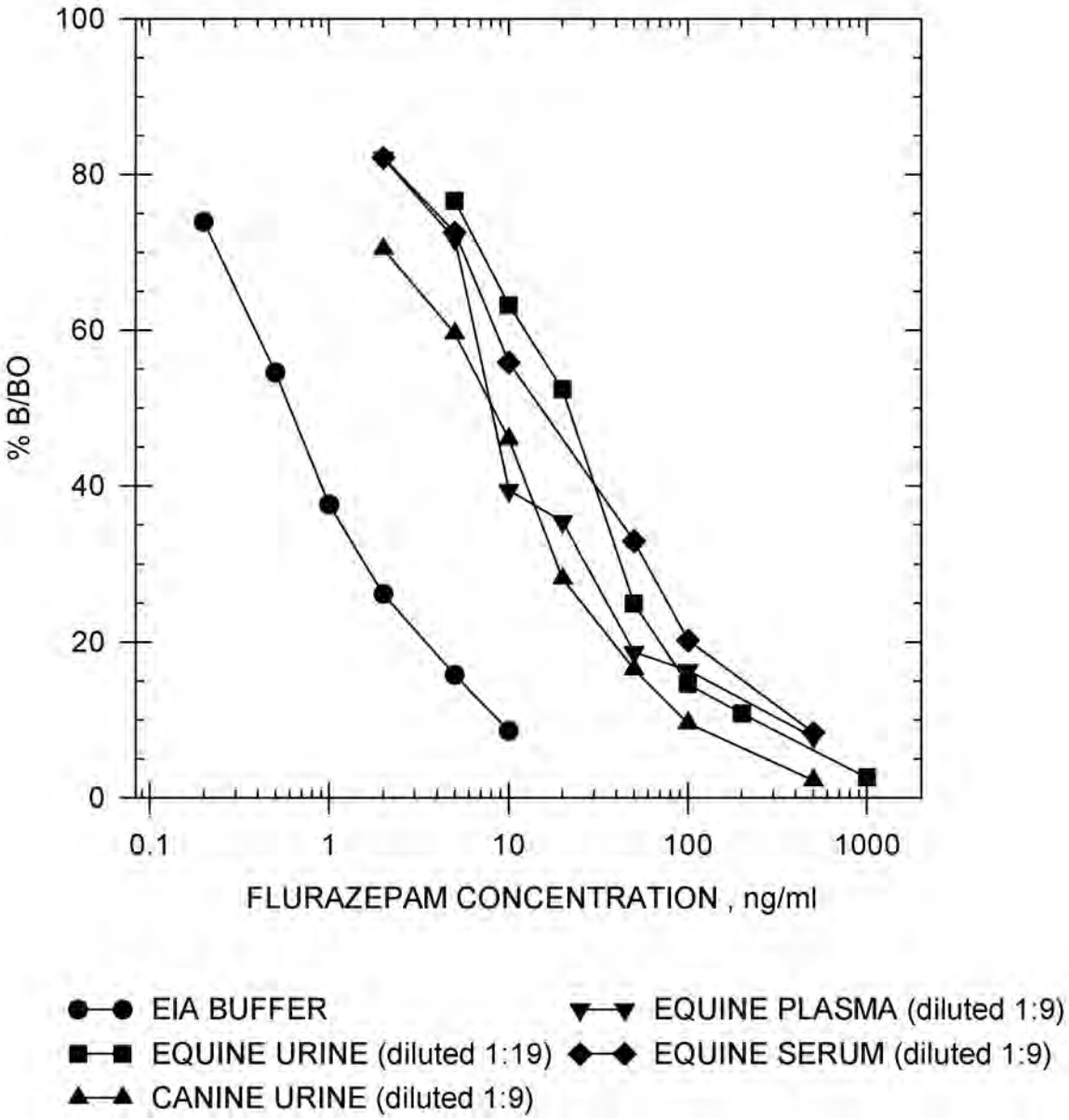
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Halazepam



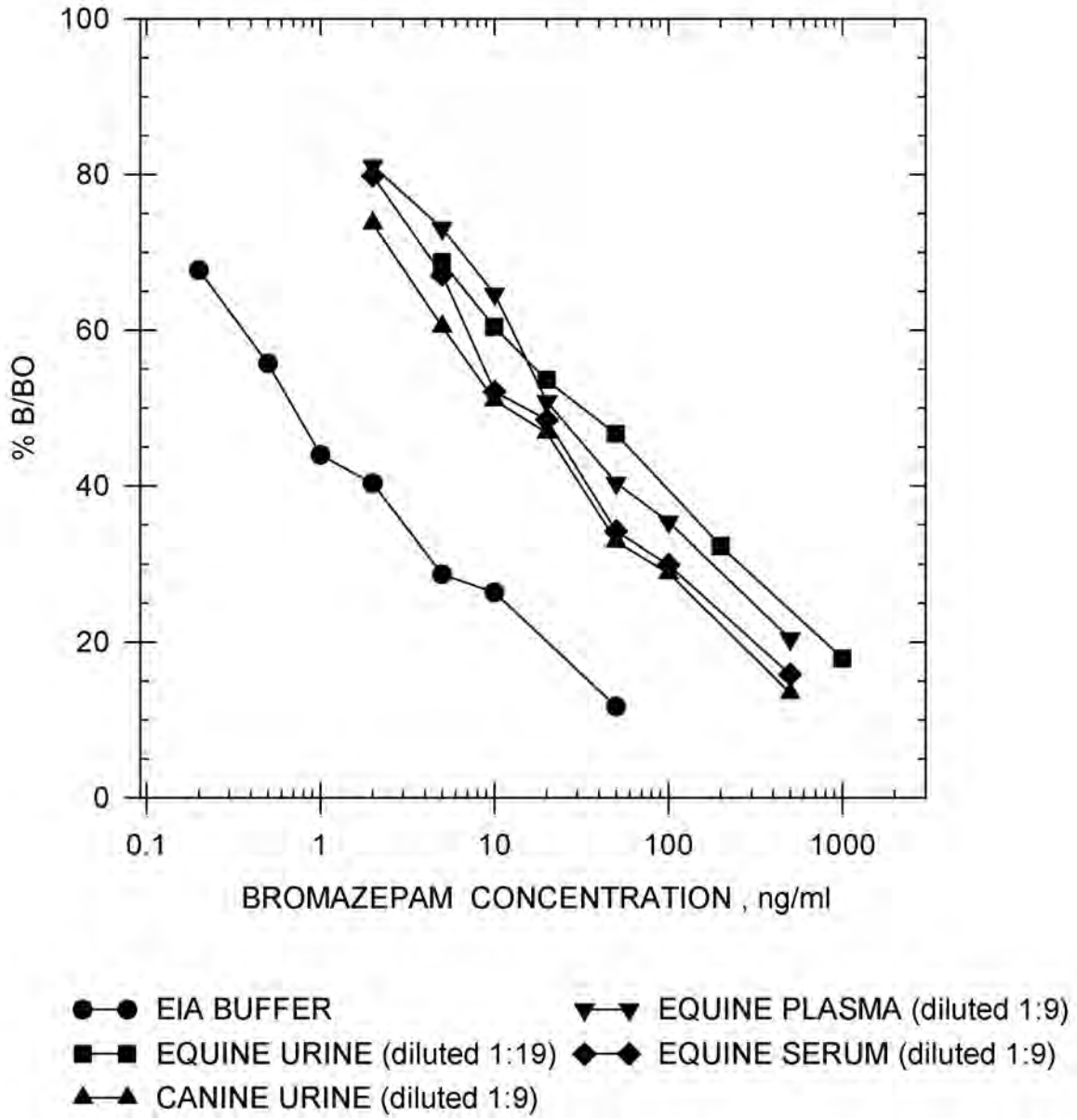
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Flurazepam



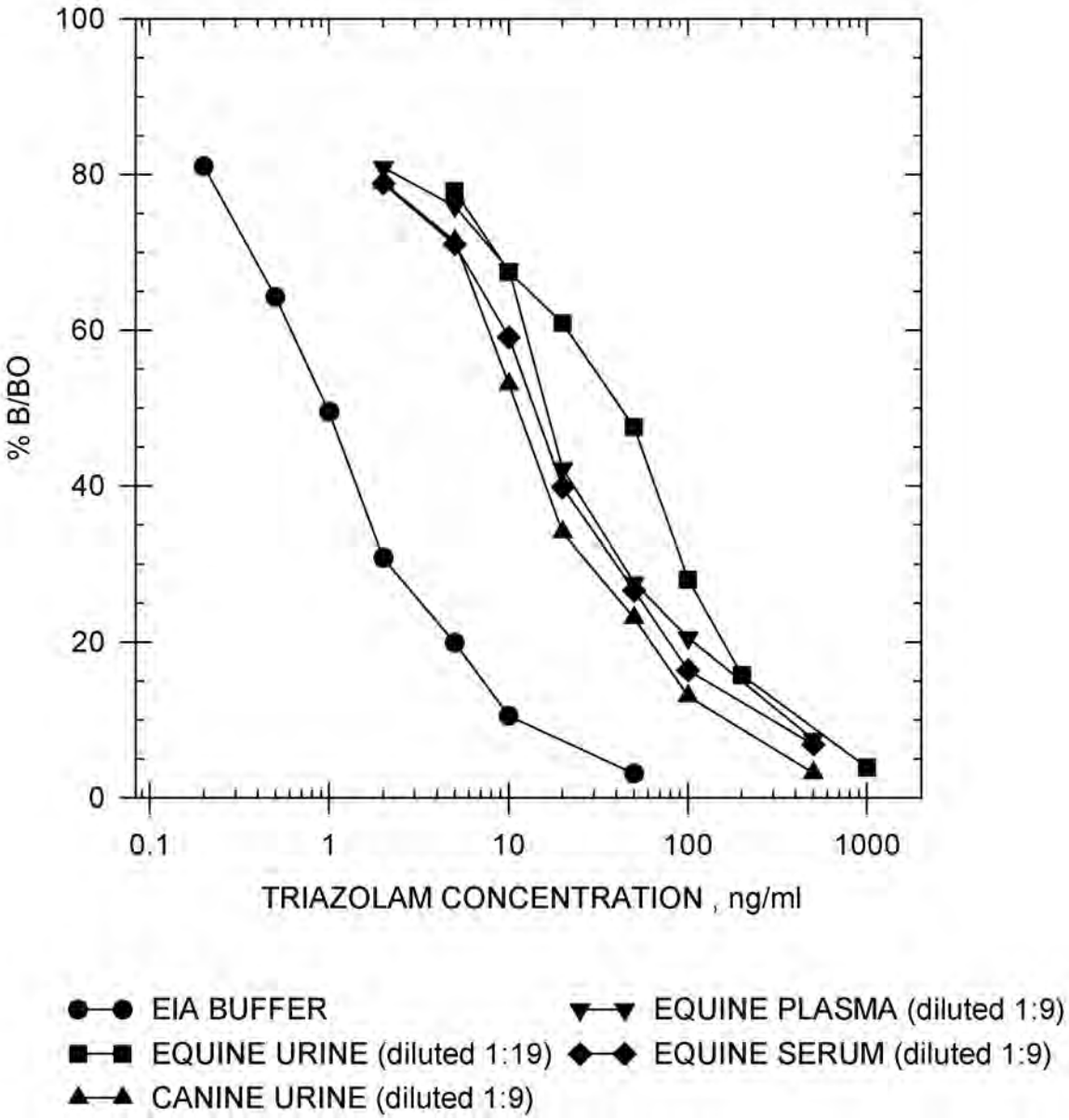
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Bromazepam



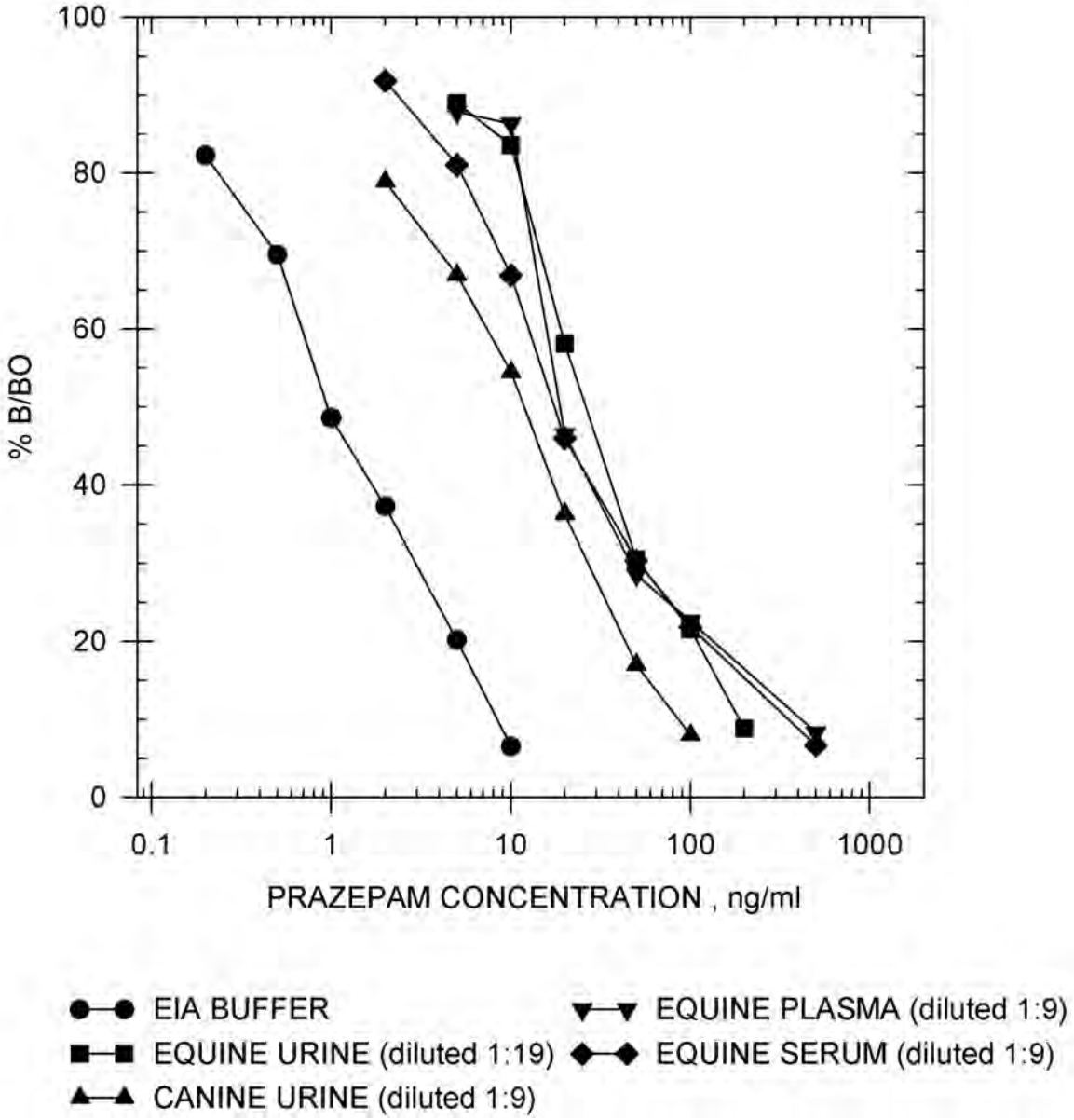
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Triazolam



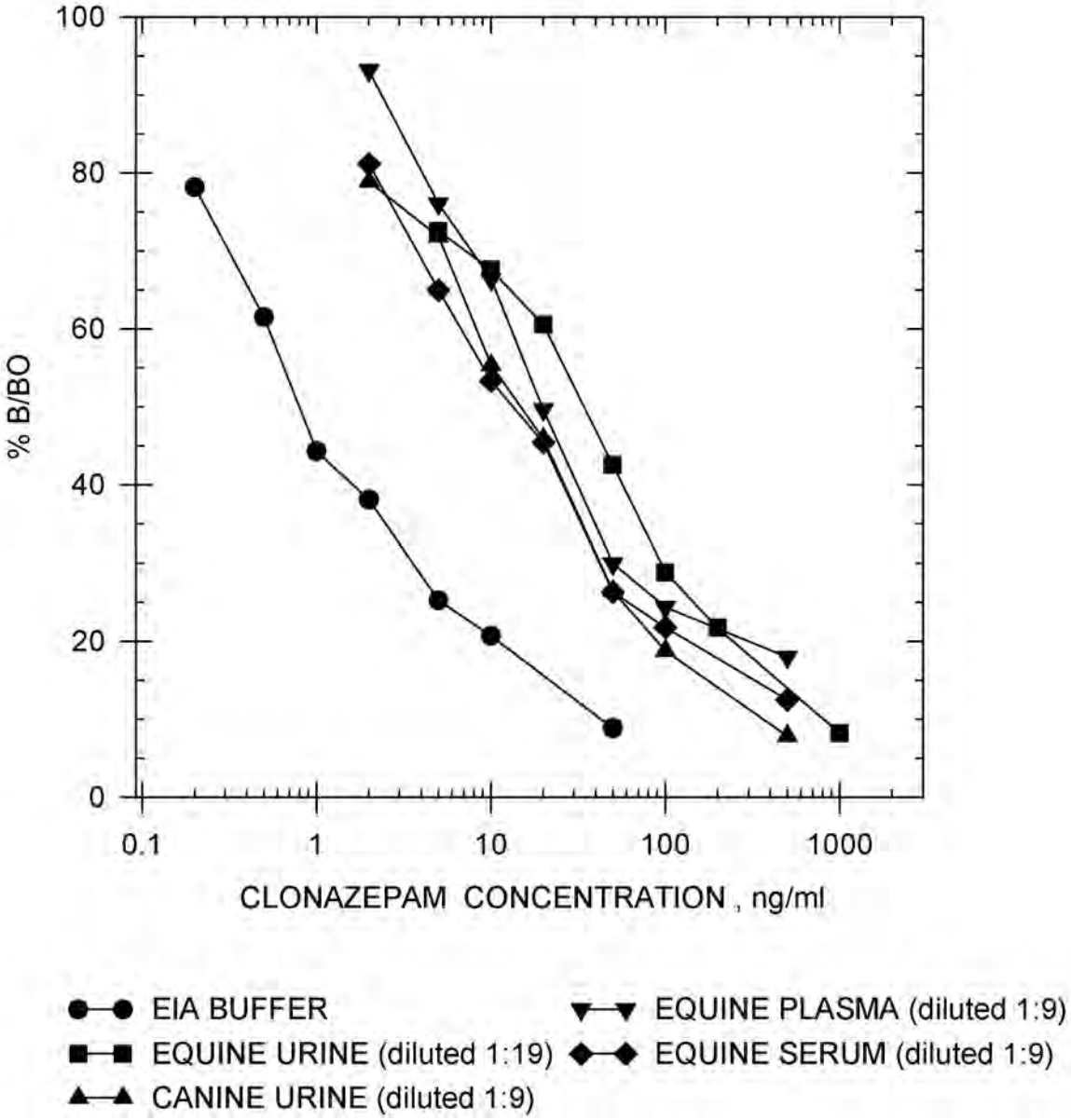
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Prazepam



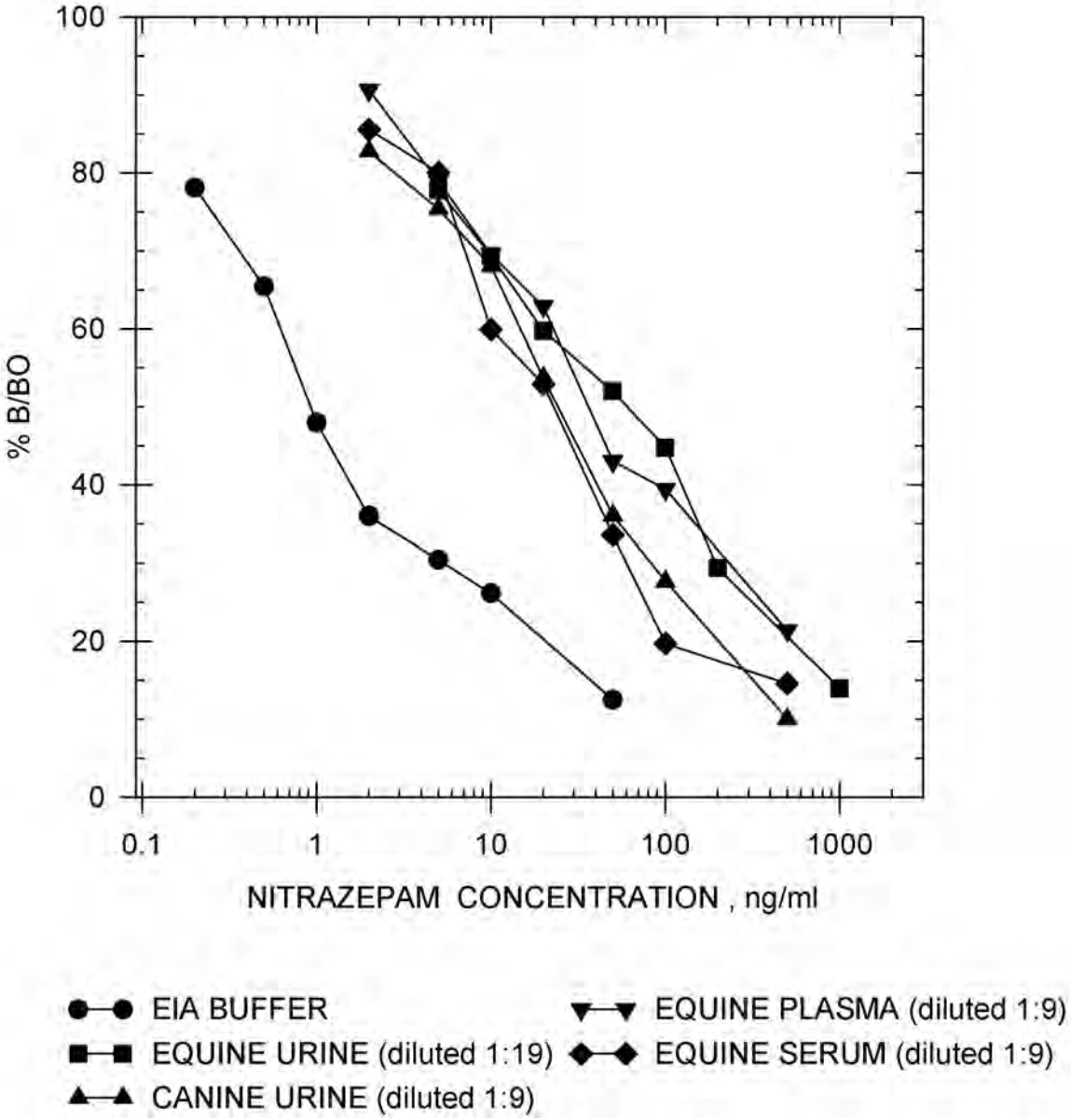
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Clonazepam



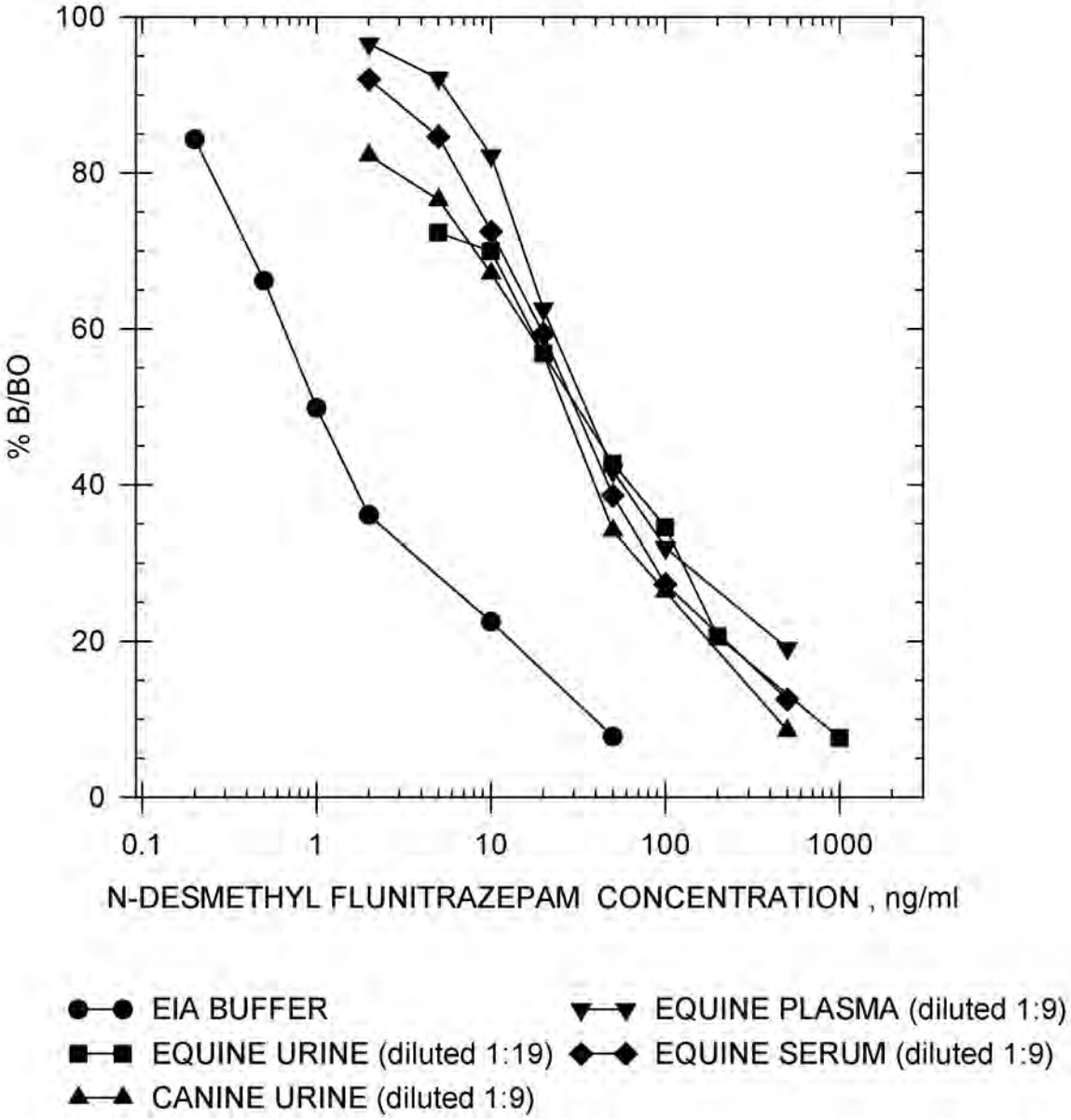
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Nitrazepam



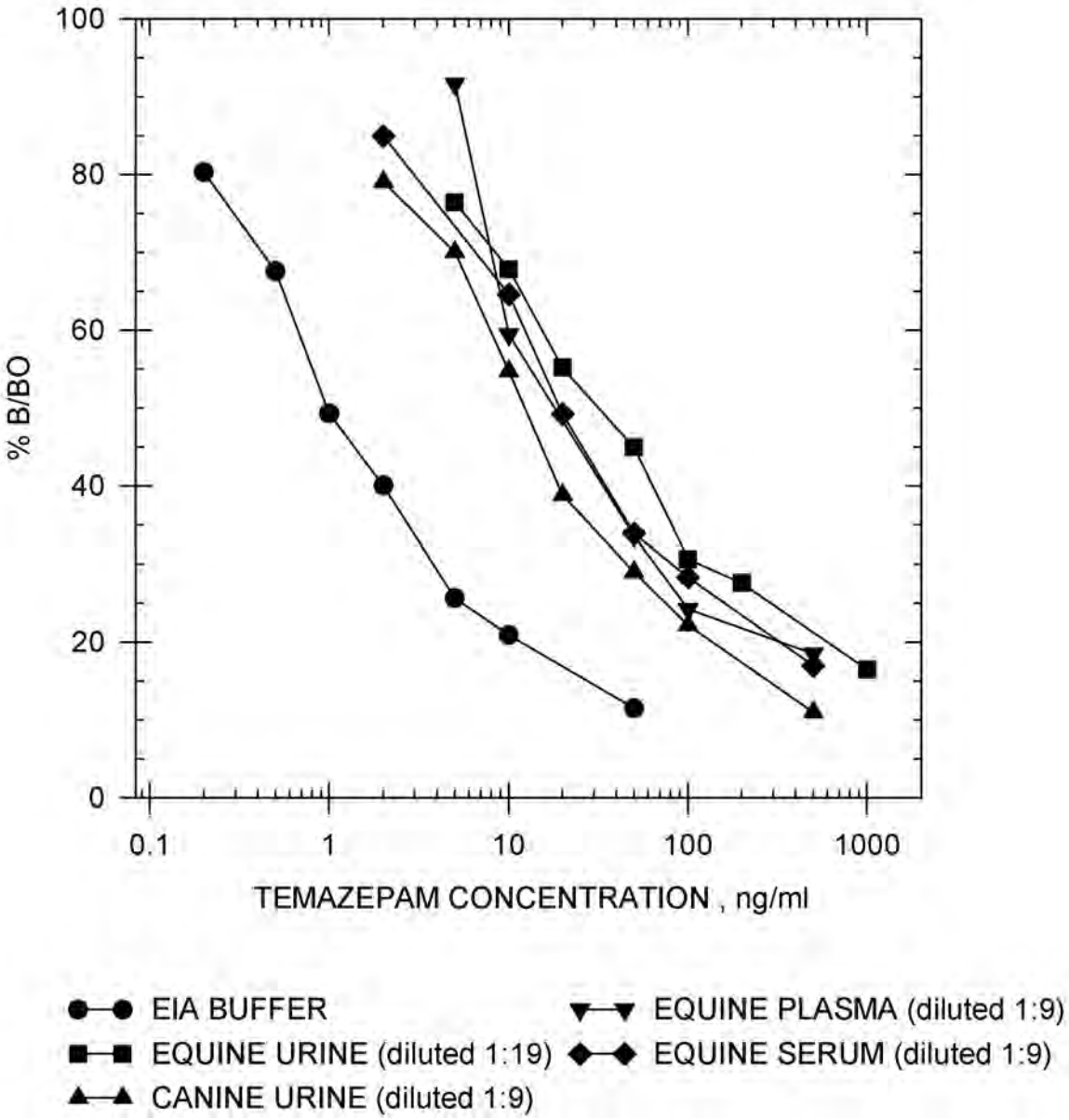
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: N-Desmethyl Flunitrazepam



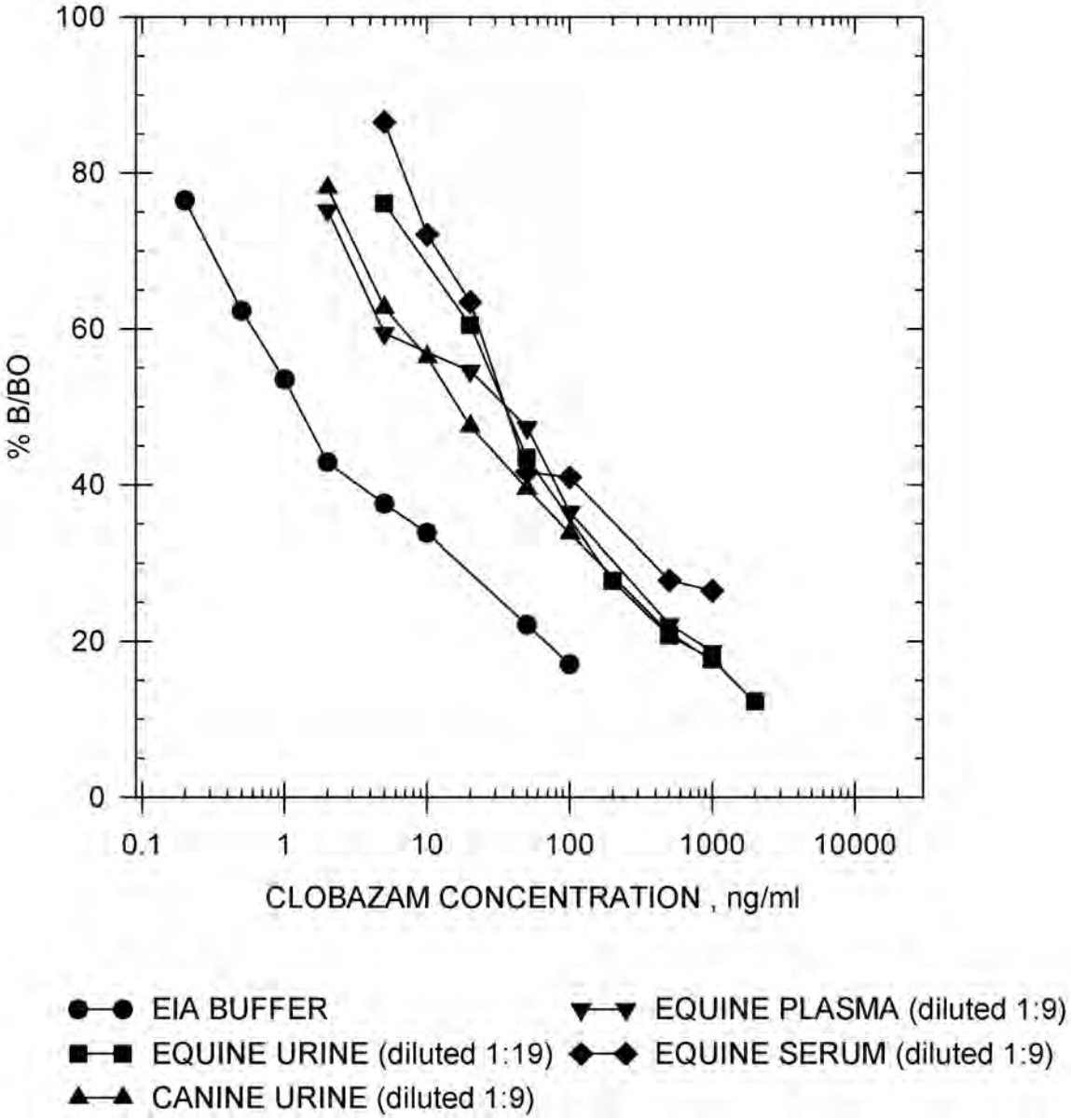
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Temazepam



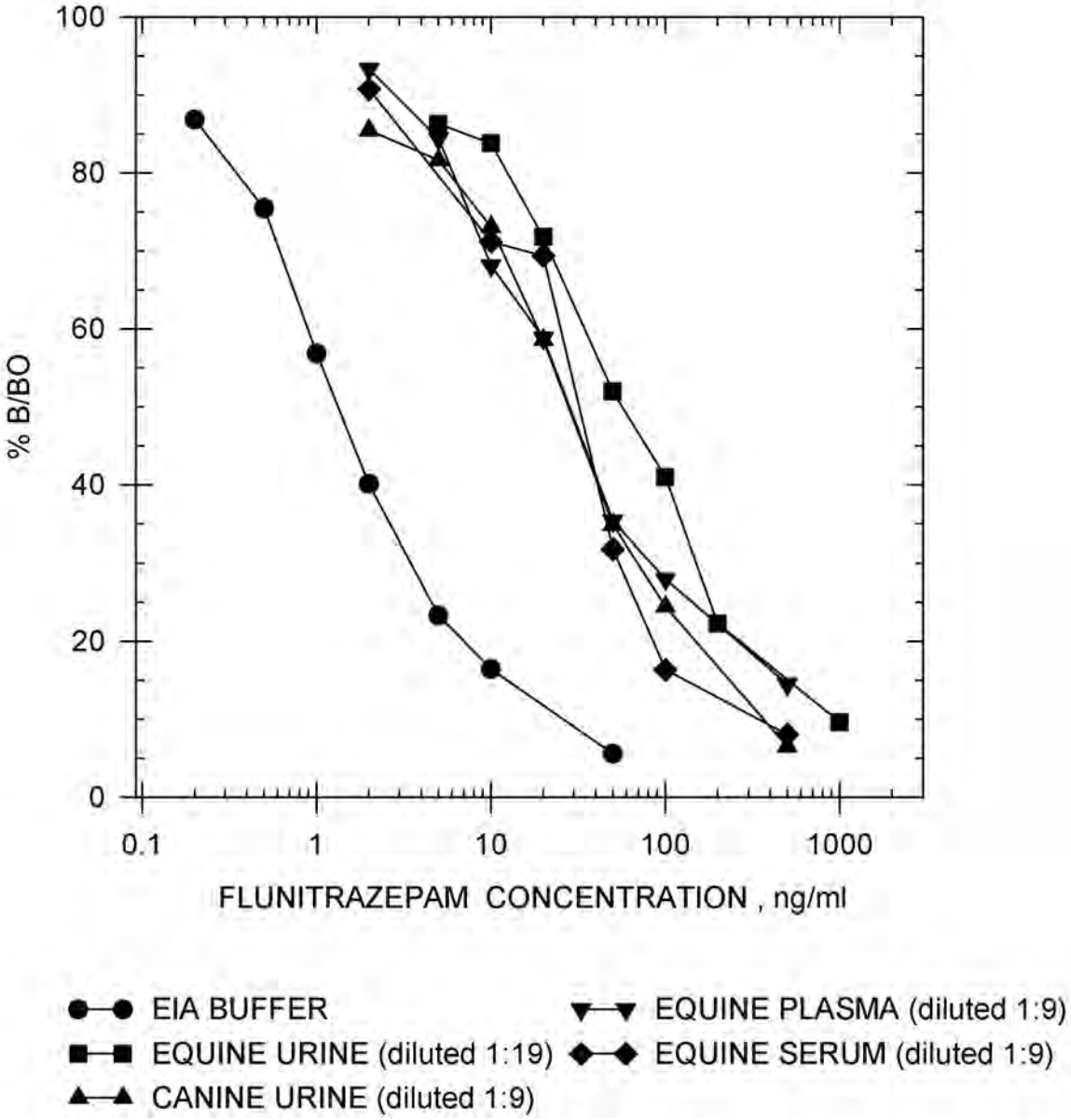
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Clobazam



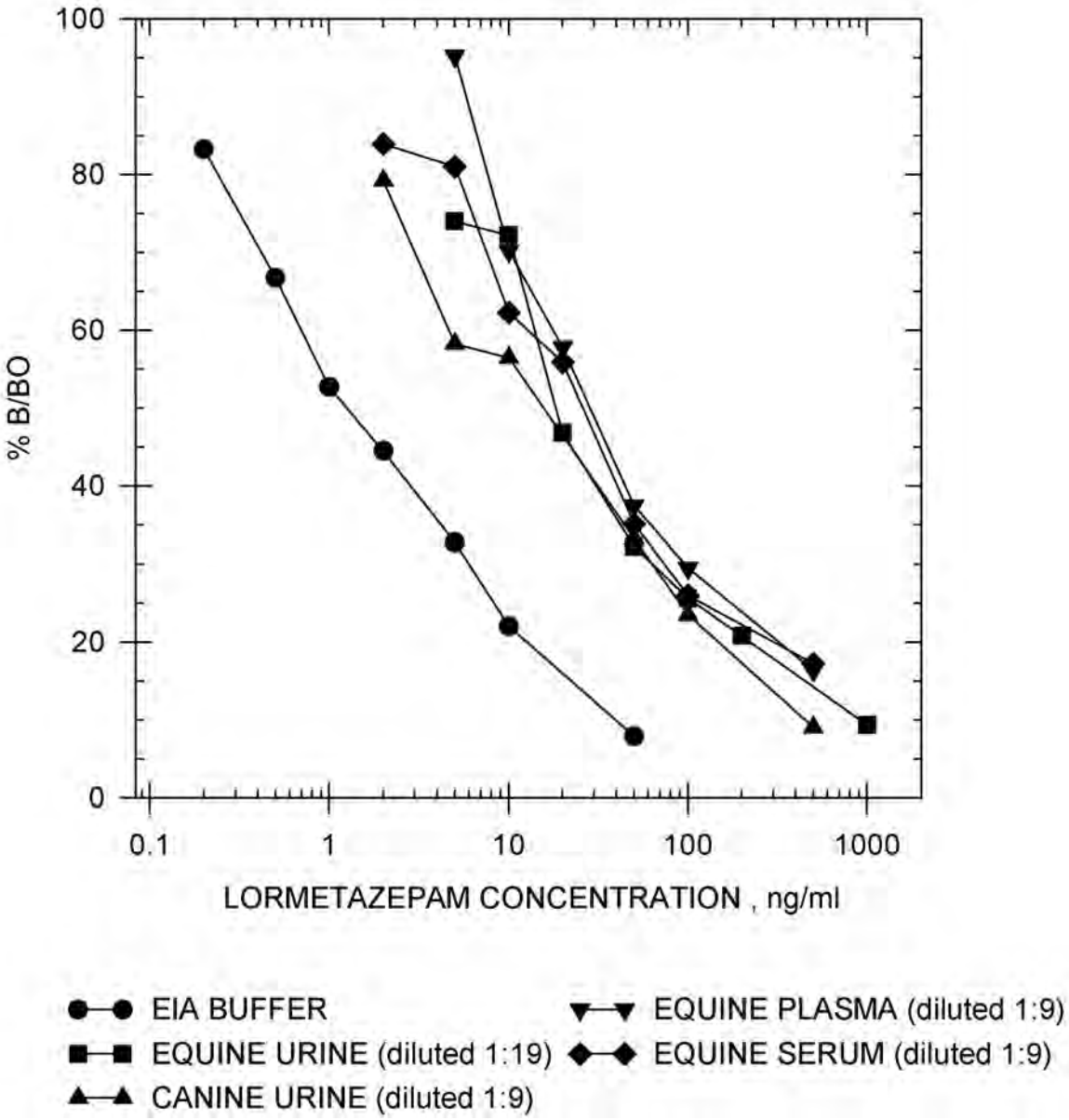
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Flunitrazepam



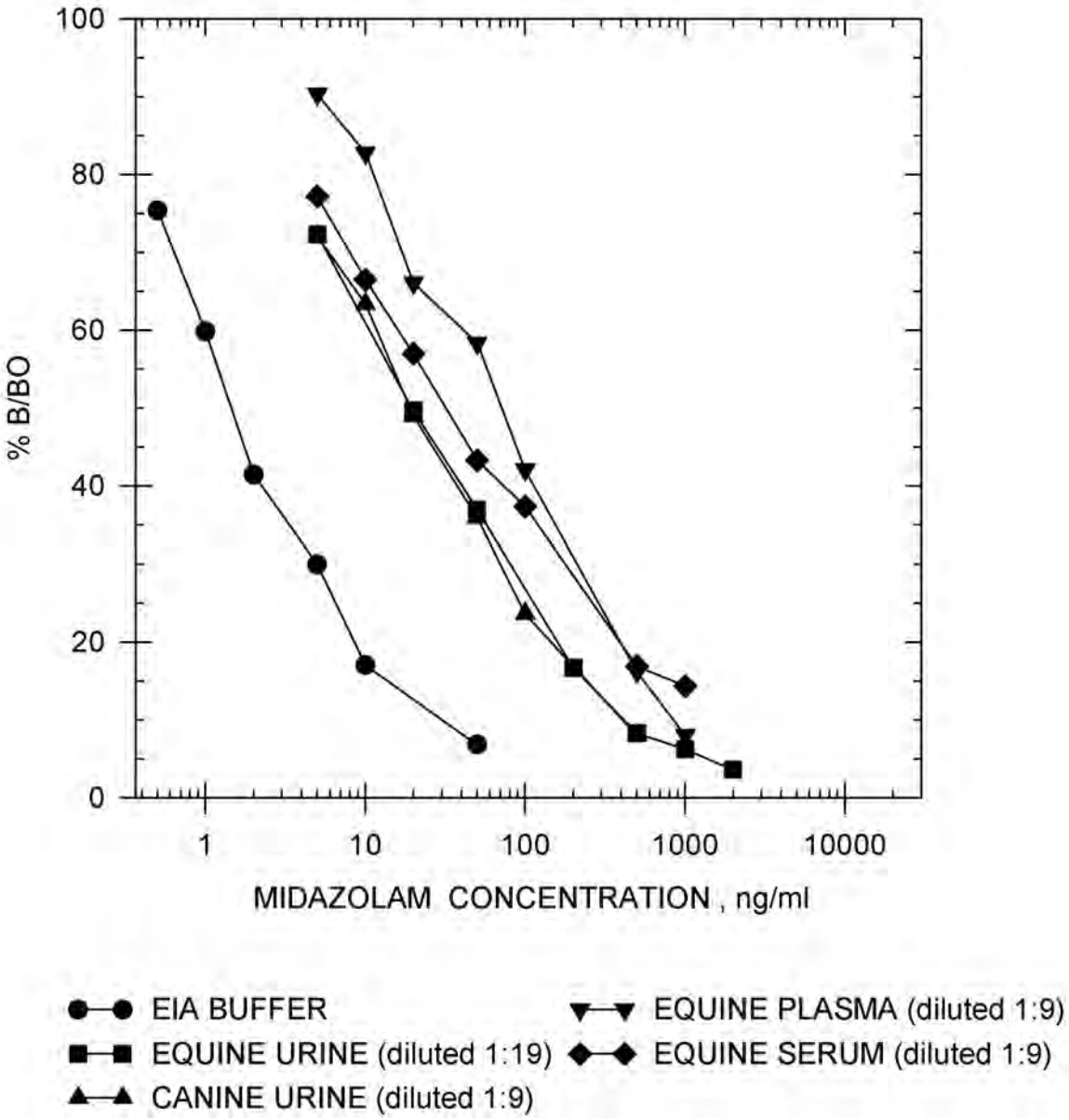
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Lormetazepam



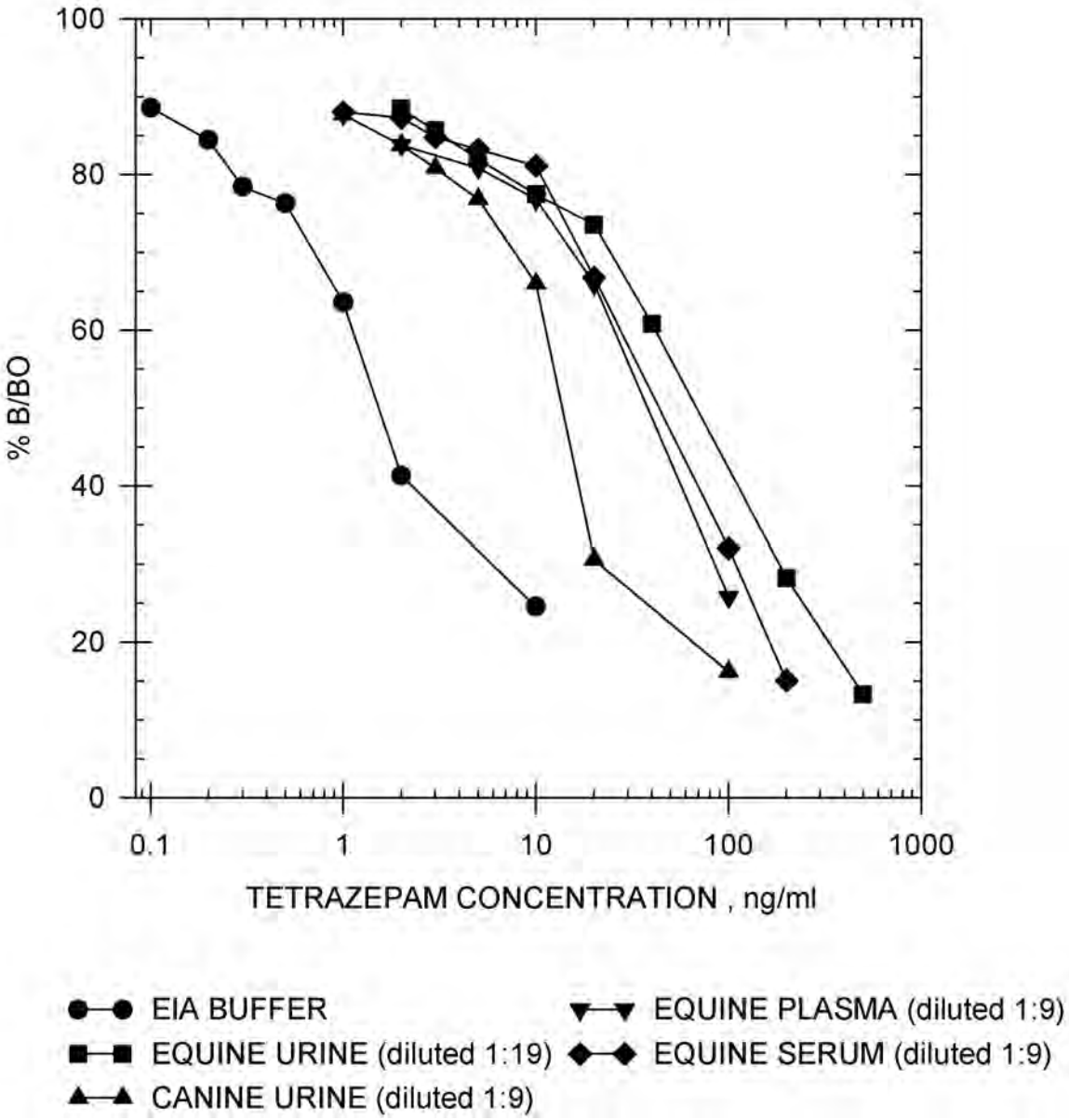
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Midazolam



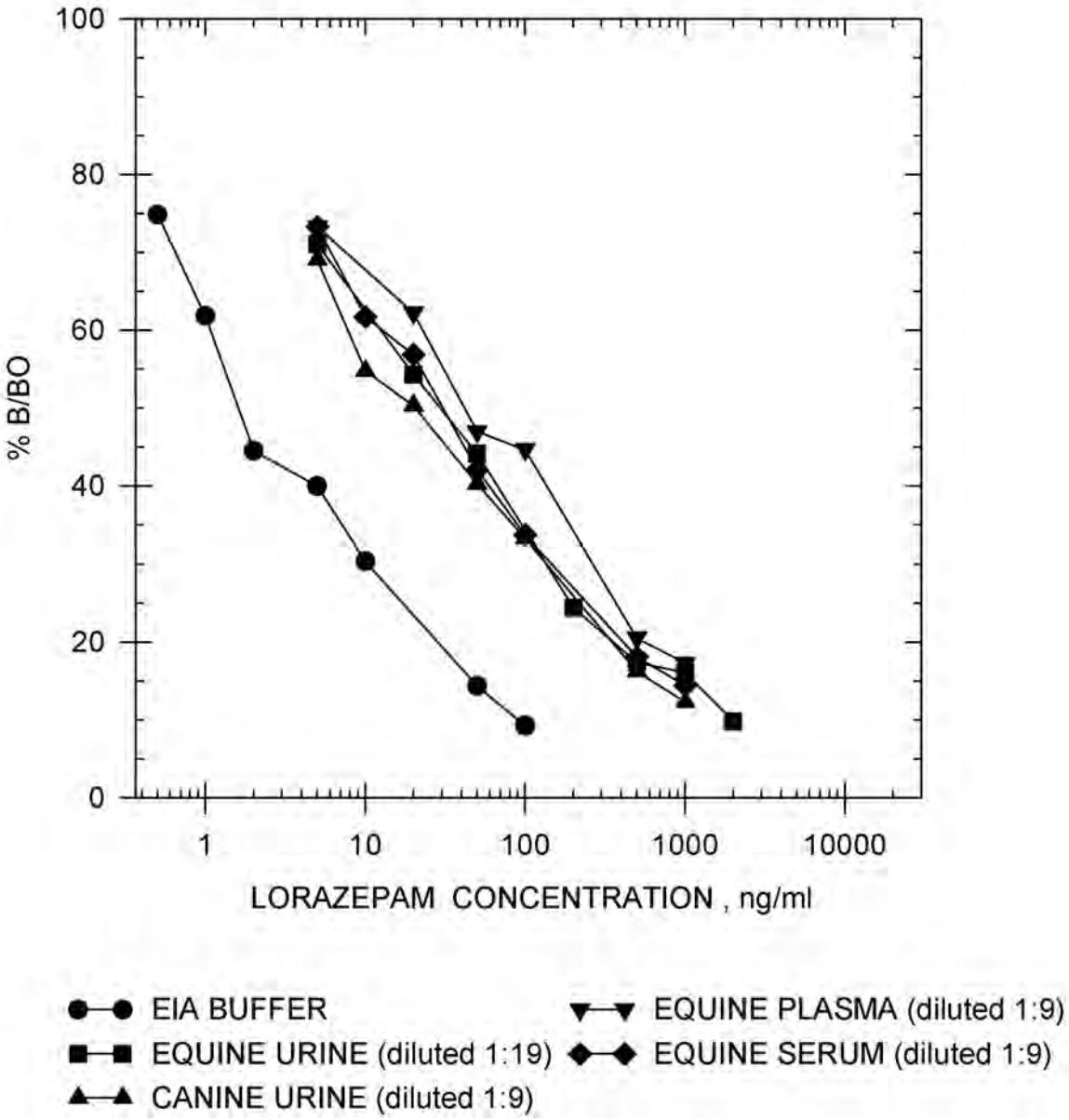
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Tetrazepam



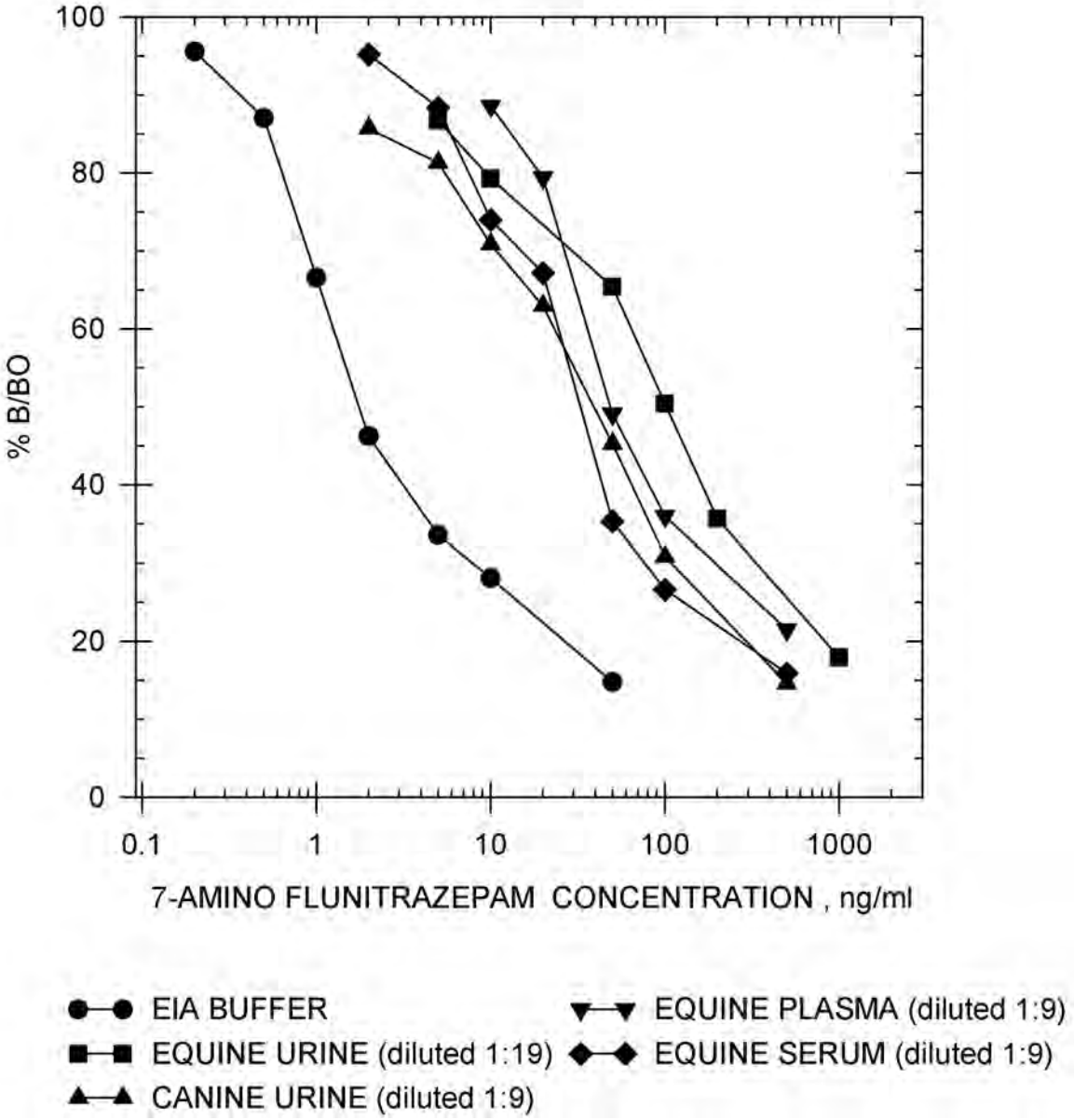
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Lorazepam



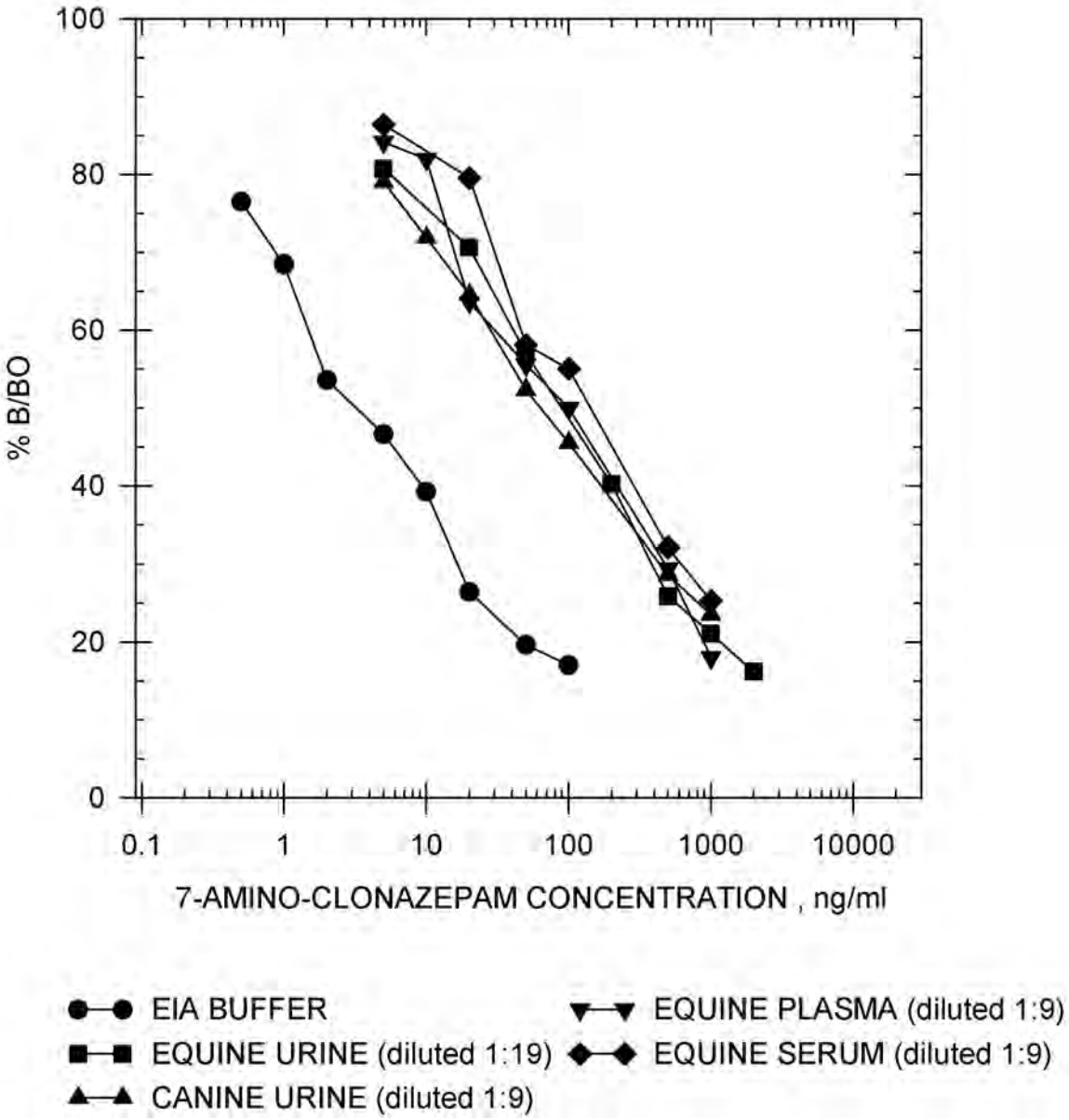
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: 7-amino Flunitrazepam



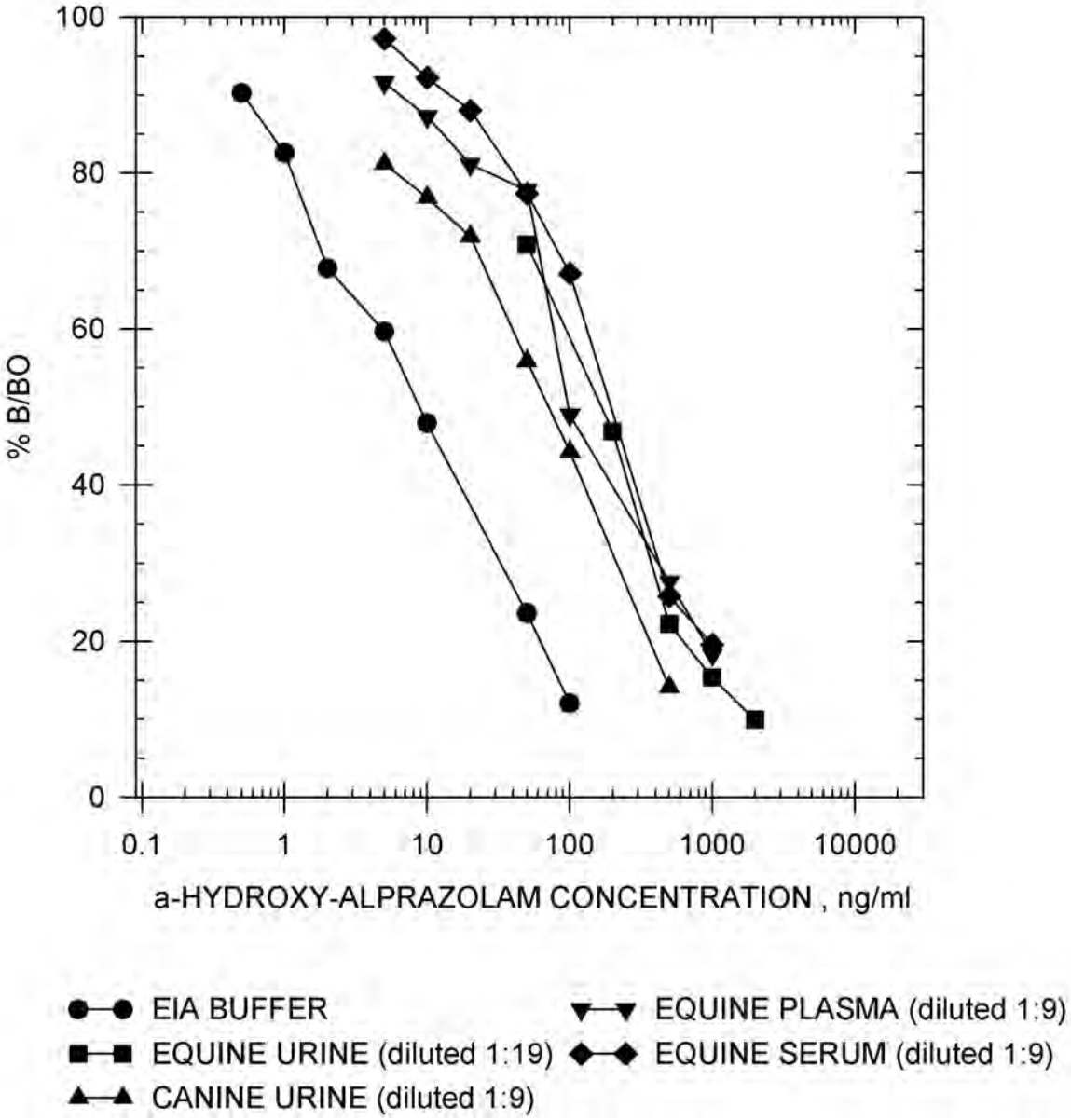
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: 7-amino Clonazepam



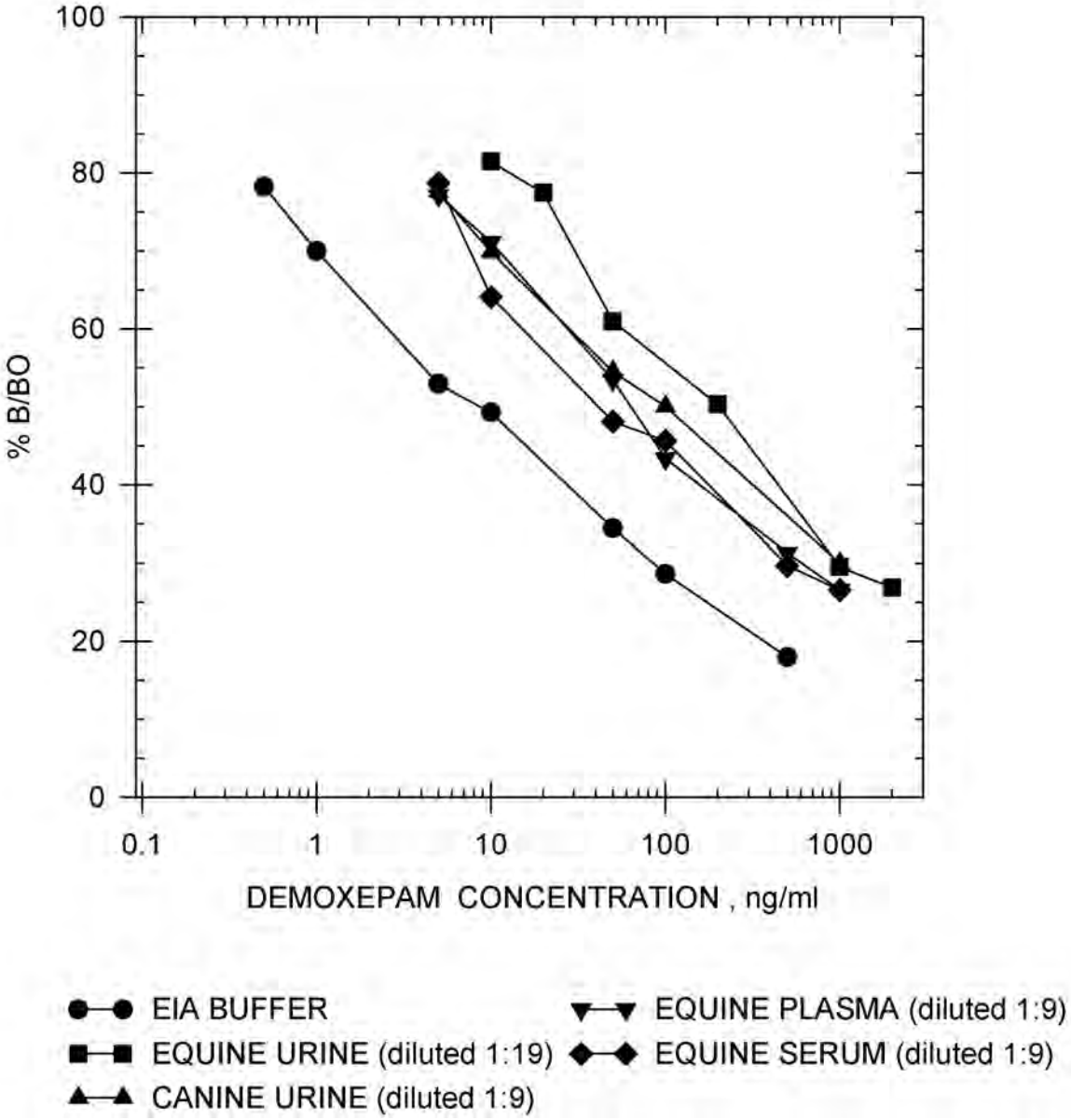
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: α-hydroxy Alprazolam



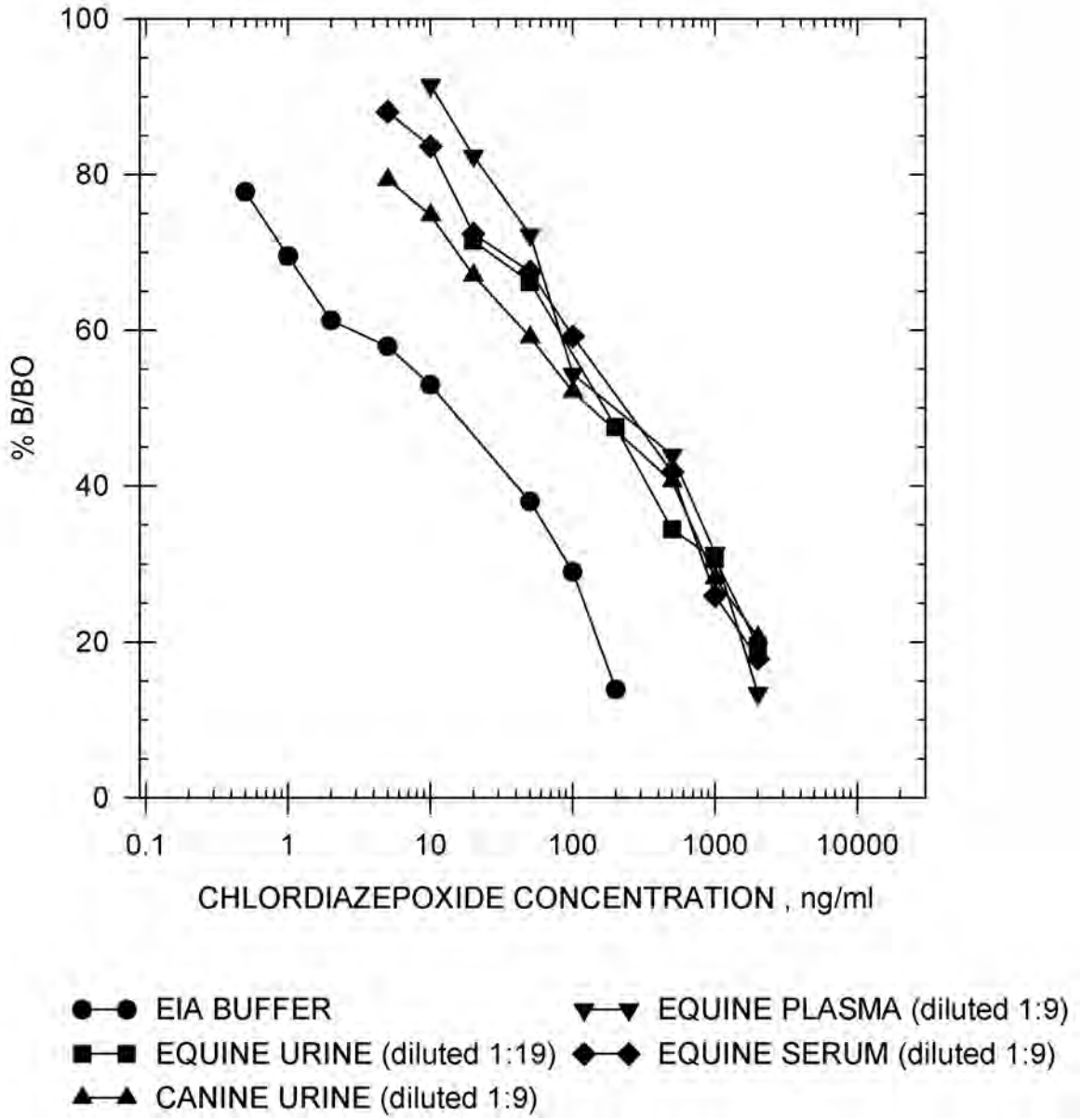
BENZODIAZEPINE STANDARD CURVES

Drug Standard Curve Comparison: Demoxepam



BENZODIAZEPINE STANDARD CURVES

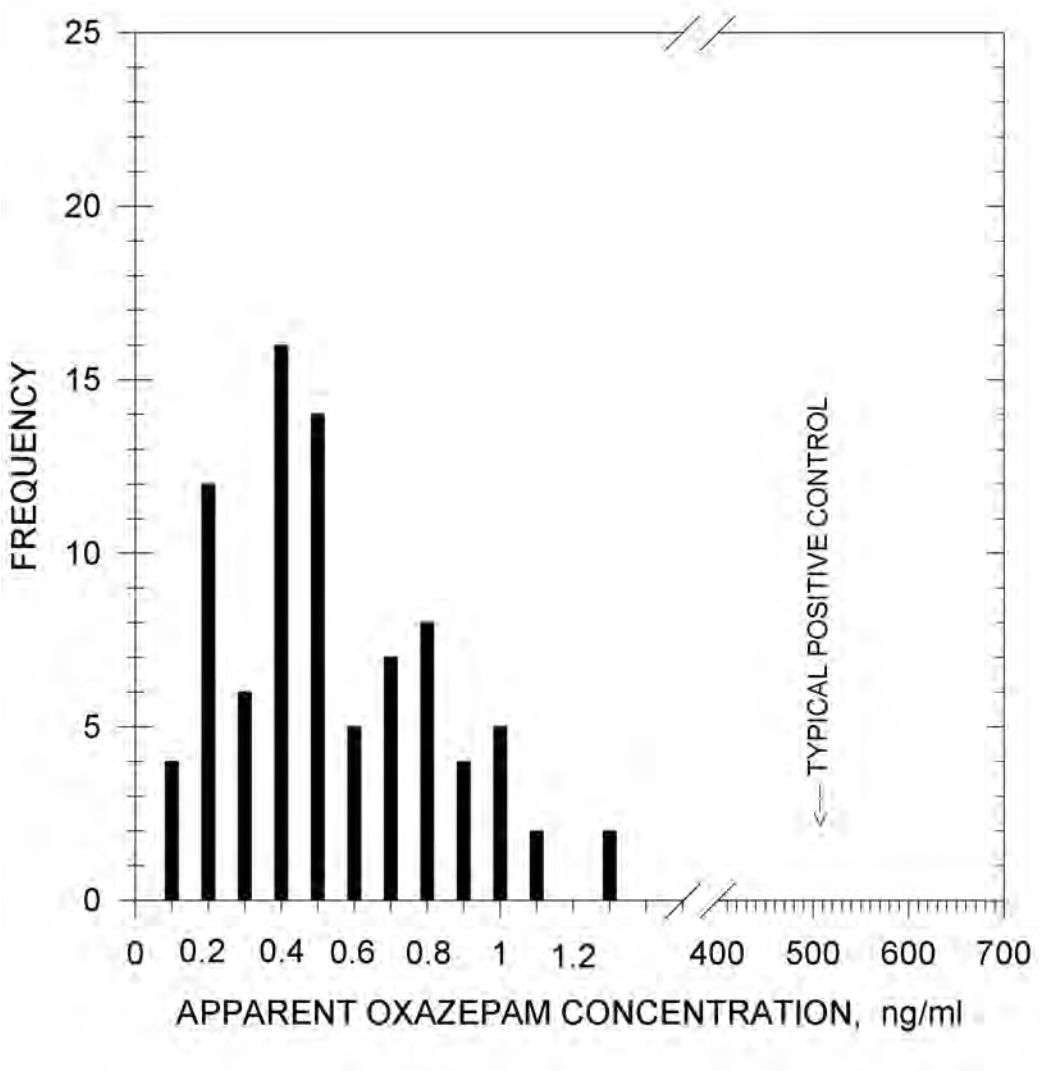
Drug Standard Curve Comparison: Chlordiazepoxide



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples diluted 1:19 has shown no background levels above 1.30 ng/ml.

Sample Treatment: A dilution of 1:19 (i.e. 1 part sample to 19 parts EIA buffer) is recommended to reduce natural backgrounds.

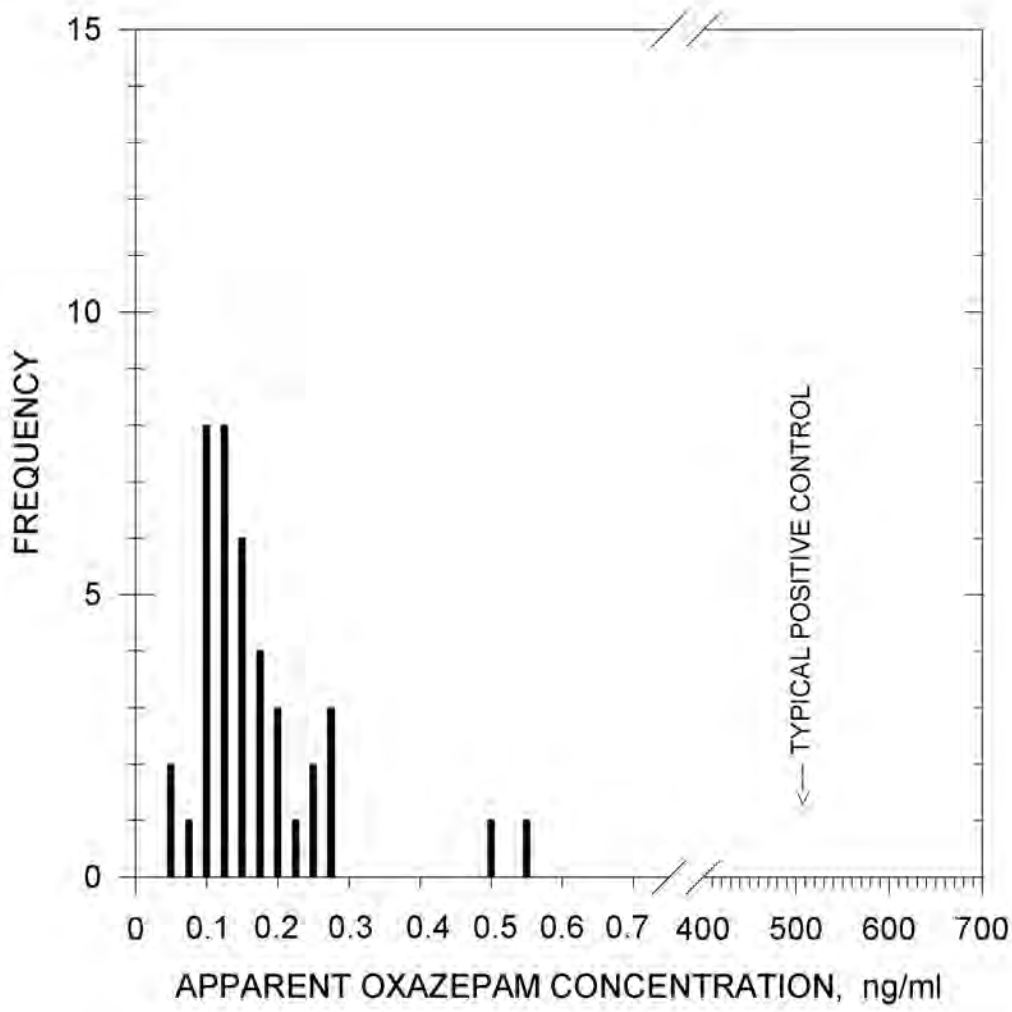


Additional Background Levels: Equine Serum and Plasma: A dilution (1:9) may be necessary.

TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples diluted 1:9 has shown no background levels above 0.56 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/mL.

Diazepam	863%
Nordiazepam	314%
Alprazolam	260%
Estazolam	234%
Halazepam	223%
Flurazepam	216%
Nimetazepam	176%
Bromazepam	168%
Triazolam	144%
Prazepam	138%
Adinazolam	133%
Clonazepam	133%
Nitrazepam	109%
N-Desmethyl Flunitrazepam	105%
Temazepam	105%
Oxazepam	100%
Flubromazepam	100%
Clobazam	97%
Flunitrazepam	90%
Lormetazepam	90%
3-hydroxyphenazepam	85%
Diclazepam	86%
Midazolam	84%
Tetrazepam	73%
Delorazepam	72%
8-aminoclonazolam	65%
Pyrazolam	65%
Lorazepam	60%
Etizolam	54%
Deschloroetizolam	44%
7-amino Flunitrazepam	40%
7-amino Clonazepam	31%
Nifoxipam	22%
α-Hydroxy Alprazolam	17%
Demoxepam	15%
Bentazepam	14%
Chlordiazepoxide	13%
Meclonazepam	8%
alpha-hydroxyetizolam	1%
Zolazepam	0.3%

CROSS-REACTIVITY DATA

Acepromazine	<0.01%	Metaproterenol	<0.01%
Acetaminophen	<0.01%	Methadone	<0.01%
Acetylsalicylic Acid	<0.01%	Methaqualone	<0.01%
Amitriptyline	<0.01%	Methocarbamol	<0.01%
Amoxapine	<0.01%	Methylene Blue	<0.01%
Ascorbic Acid	<0.01%	Methylprednisolone	<0.01%
Aspirin	<0.01%	Nalorphine	<0.01%
Benzoic Acid	<0.01%	Naproxen	<0.01%
Caffeine	<0.01%	Nefopam	<0.01%
E-amino-n-caproic Acid	<0.01%	Niacinamide	<0.01%
Chlorpromazine	<0.01%	Nicotine	<0.01%
Clenbuterol	<0.01%	Nortriptyline	<0.01%
Clozapine	<0.01%	Orphenadrine	<0.01%
Codeine	<0.01%	Oxyphenbutazone	<0.01%
Cotinine	<0.01%	Penicillin G-Potassium	<0.01%
Dexamethasone	<0.01%	Penicillin G-Procaine	<0.01%
Dextromethorphan	<0.01%	Pentoxifylline	<0.01%
Diclofenac	<0.01%	Phencyclidine	<0.01%
Dimethyl Sulfoxide	<0.01%	Phenothiazine	<0.01%
Dipyrone	<0.01%	Phenylbutazone	<0.01%
Doxepin	<0.01%	Polyethylene Glycol	<0.01%
Ephedrine	<0.01%	Prednisolone	<0.01%
Erythromycin	<0.01%	Primadone	<0.01%
Fenoprofen	<0.01%	Procainamide	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Folic Acid	<0.01%	Promazine	<0.01%
Folinic Acid	<0.01%	Pseudoephedrine	<0.01%
Furosemide	<0.01%	Pyrantel	<0.01%
Gemfibrozil	<0.01%	Pyrilamine	<0.01%
Gentisic Acid	<0.01%	Pyrimethamine	<0.01%
Glipizide	<0.01%	Quinidine	<0.01%
L-Glutamic Acid	<0.01%	Quinine	<0.01%
Glutethimide	<0.01%	Salbutamol	<0.01%
Glycopyrrolate	<0.01%	Salicylamide	<0.01%
Heparin	<0.01%	Salicylic Acid	<0.01%
Hippuric Acid	<0.01%	Theophylline	<0.01%
Hordenine	<0.01%	Thiamine	<0.01%
Hydrocortisone	<0.01%	Tofisopam	<0.01%
Ibuprofen	<0.01%	Trimethoprim	<0.01%
Imipramine	<0.01%	Trimipramine	<0.01%
Isoxsuprine	<0.01%	Uric Acid	<0.01%
Lidocaine	<0.01%	Zolpidem	<0.01%
Meperidine	<0.01%		

ENHANCED KIT
BENZYLPIPERAZINE

Product# 108310 &
108315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

0.74 ng/ml Benzylpiperazine

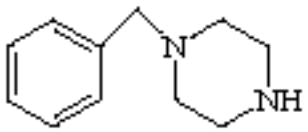
I-50 in Equine Urine (Diluted 1:19)	**I-50 in Canine Urine (Diluted 1:19)**
Benzylpiperazine 16 ng/ml	Benzylpiperazine 22 ng/ml
I-50 in Equine Plasma (Diluted 1:19)	**I-50 in Equine Serum (Diluted 1:1)**
Benzylpiperazine 2.6 ng/ml	Benzylpiperazine 1.5 ng/ml

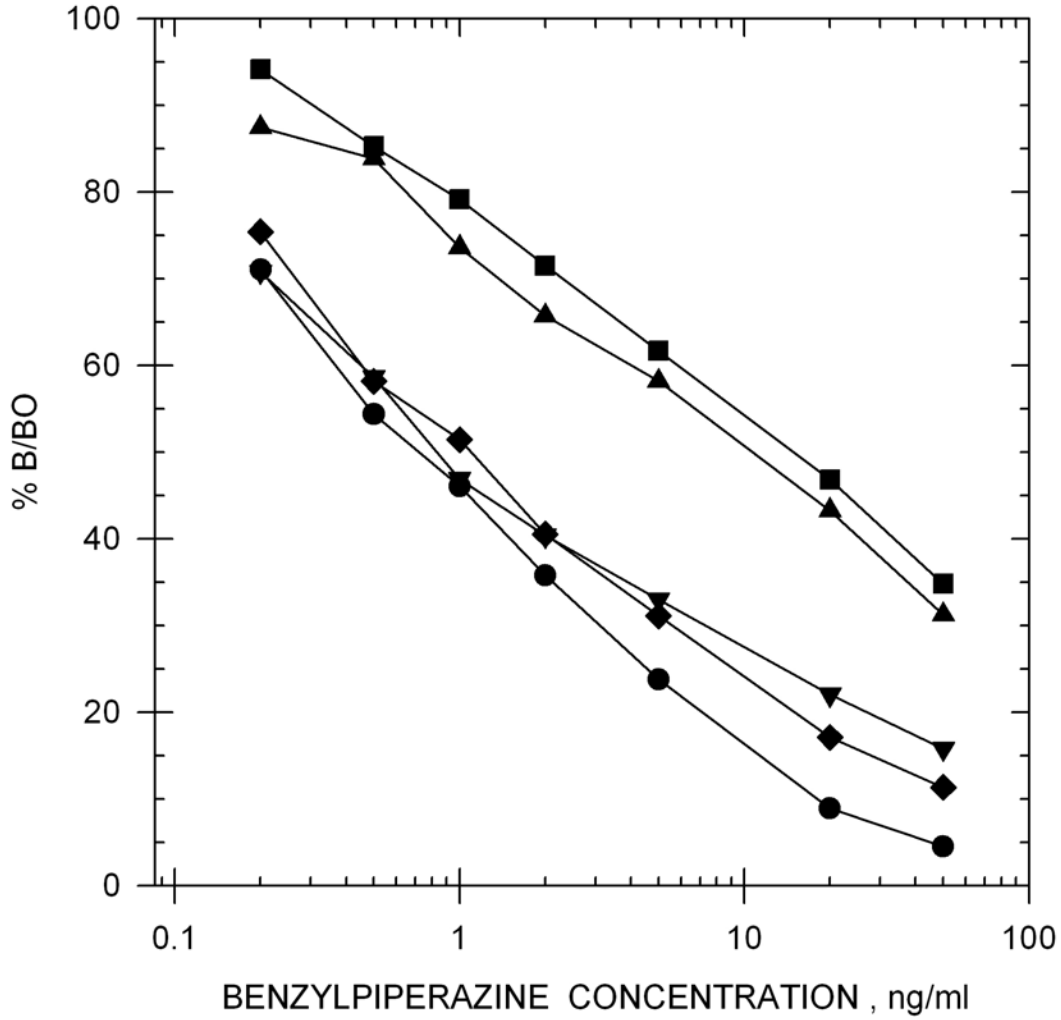
Note: Measuring wavelength was 650 nm**.**

Precision:	Intra-assay	5.73%
	Inter-assay	3.40%

BENZYLPIPERAZINE STANDARD CURVES

Benzylpiperazine

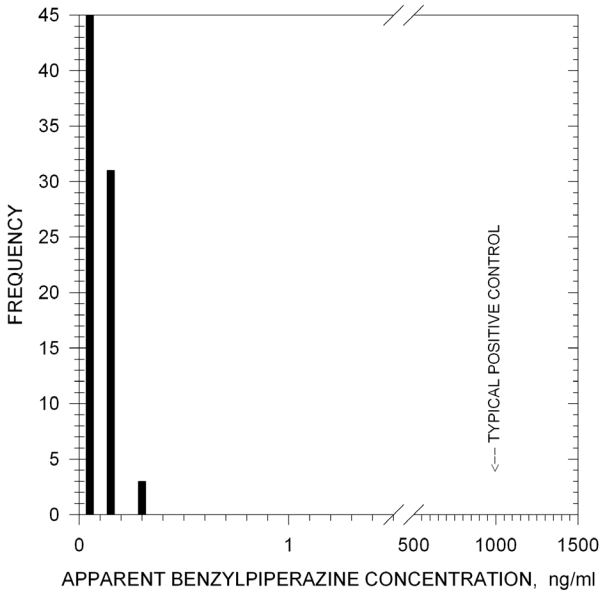




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 79 post-race equine urine samples, diluted 1:19, has shown no background levels above 0.2 ng/ml.

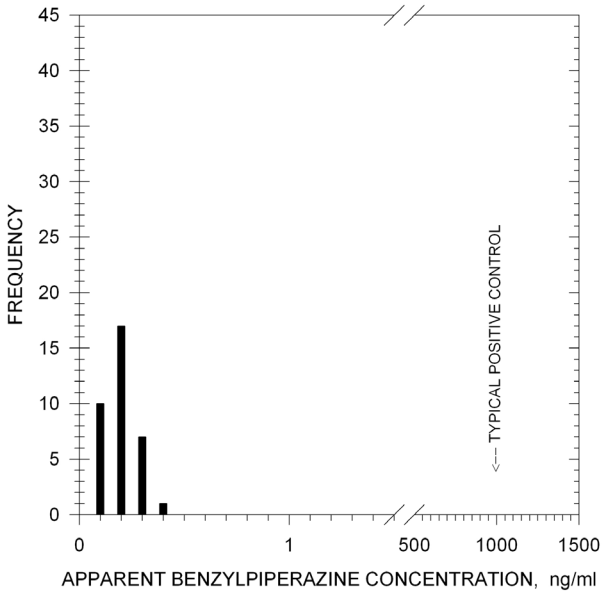
Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race canine urine samples, diluted 1:19, has shown no background levels above 0.3 ng/ml.

Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) is recommended to reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural background.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Benzylpiperazine	100%
1-(3-Trifluoromethyl)benzyl)piperazine	3.0%
(1-(4-(Trifluoromethyl)benzyl)piperazine	1.0%
Trazodone	1.0%
Nefazodone	0.2%
Doxepin	0.13%
Chlorpromazine	0.07%
m-CPP	0.07%
Isoxsuprine	0.05%
Pyrantel	0.03%
N-[3-Trifluoromethyl)phenyl]piperazine	0.03%
Imipramine	0.02%
Acepromazine	0.02%
Orphenadrine	0.01%
Amitryptyline	0.01%
Nicotine	0.01%

Acetaminophen	<0.01%	Methaqualone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Methocarbamol	<0.01%
Acetylsalicyclic Acid	<0.01%	Methylene Blue	<0.01%
Ascorbic Acid	<0.01%	6α-Methylprednisolone	<0.01%
Benzoic Acid	<0.01%	Nalorphine	<0.01%
Caffeine	<0.01%	Naproxen	<0.01%
Chlordiazepoxide	<0.01%	Niacinamide	<0.01%
Chlorpromazine	<0.01%	Nicotine	<0.01%
Clenbuterol	<0.01%	Nortriptyline	<0.01%
Codeine	<0.01%	Oxyphenbutazone	<0.01%
Cotinine	<0.01%	Penicillin G-Potassium	<0.01%
Dextromethorphan	<0.01%	Penicillin G-Procaine	<0.01%
Diclofenac	<0.01%	Pentoxifylline	<0.01%
Dimethyl Sulfoxide	<0.01%	Phencyclidine (PCP)	<0.01%
Dipyrone	<0.01%	Phenothiazine	<0.01%
Ephedrine	<0.01%	Phenylbutazone	<0.01%
Erythromycin	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-Amino-Benzoate	<0.01%	Prednisolone	<0.01%
Fenoprofen	<0.01%	Prilamine	<0.01%
Flunixin	<0.01%	Primidone	<0.01%
Folic Acid	<0.01%	Procaineamide	<0.01%
Folinic Acid	<0.01%	Procaine	<0.01%
Furosemide	<0.01%	Promazine	<0.01%
Gemifibrozil	<0.01%	Pseudoephedrine	<0.01%
Gentisic Acid	<0.01%	Pyrantel	<0.01%
Glipizide	<0.01%	Pyrimethamine	<0.01%
L-Glutamic Acid	<0.01%	Quinidine	<0.01%
Glutethimide Acid	<0.01%	Quinine	<0.01%
Glycopyrrolate	<0.01%	Salbutamol	<0.01%
Heparin	<0.01%	Salicylamide	<0.01%
Hippuric Acid	<0.01%	Salicylic Acid	<0.01%
Hordenine	<0.01%	Scopolamine N-oxide	<0.01%
Hydrocortisone	<0.01%	Theophylline	<0.01%
Ibuprofen	<0.01%	Thiamine	<0.01%
Isoxsuprine	<0.01%	Trimethopine	<0.01%
Lidocaine	<0.01%	Trimipramine	<0.01%
Meperidine	<0.01%	Tropane	<0.01%
Metaproterenol	<0.01%	Uric Acid	<0.01%
Methadone	<0.01%		

BOLDENONE

Product #101010 &
101015 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

Boldenone

I-50 in EIA buffer	0.15 ng/ml
I-50 in Equine Urine (Diluted 1:9)	0.40 ng/ml
I-50 in Equine Plasma	0.20 ng/ml
I-50 in Equine Serum	0.17 ng/ml

SENSITIVITY

Cross-Reactants
I-50 in EIA buffer

Testosterone	0.3 ng/ml
Nandrolone	0.4 ng/ml
Androstenedione	2.7 ng/ml
Bolandiol	11.98 ng/ml

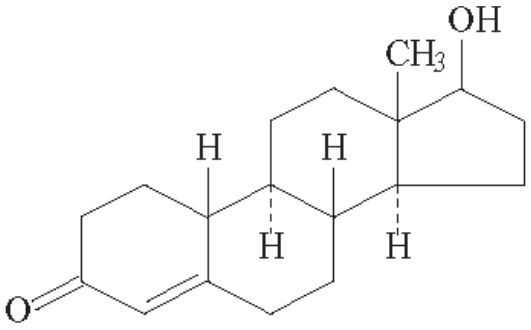
Precision:

Intra-assay	5.65 %
Inter-assay	5.22 %

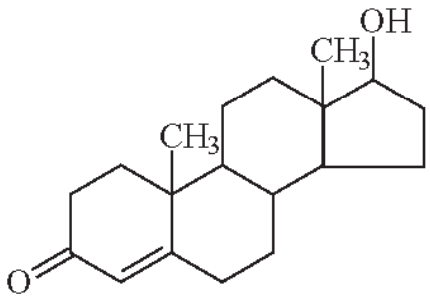
Note: Measuring wavelength was 650 nm**.**

BOLDENONE STANDARD CURVES

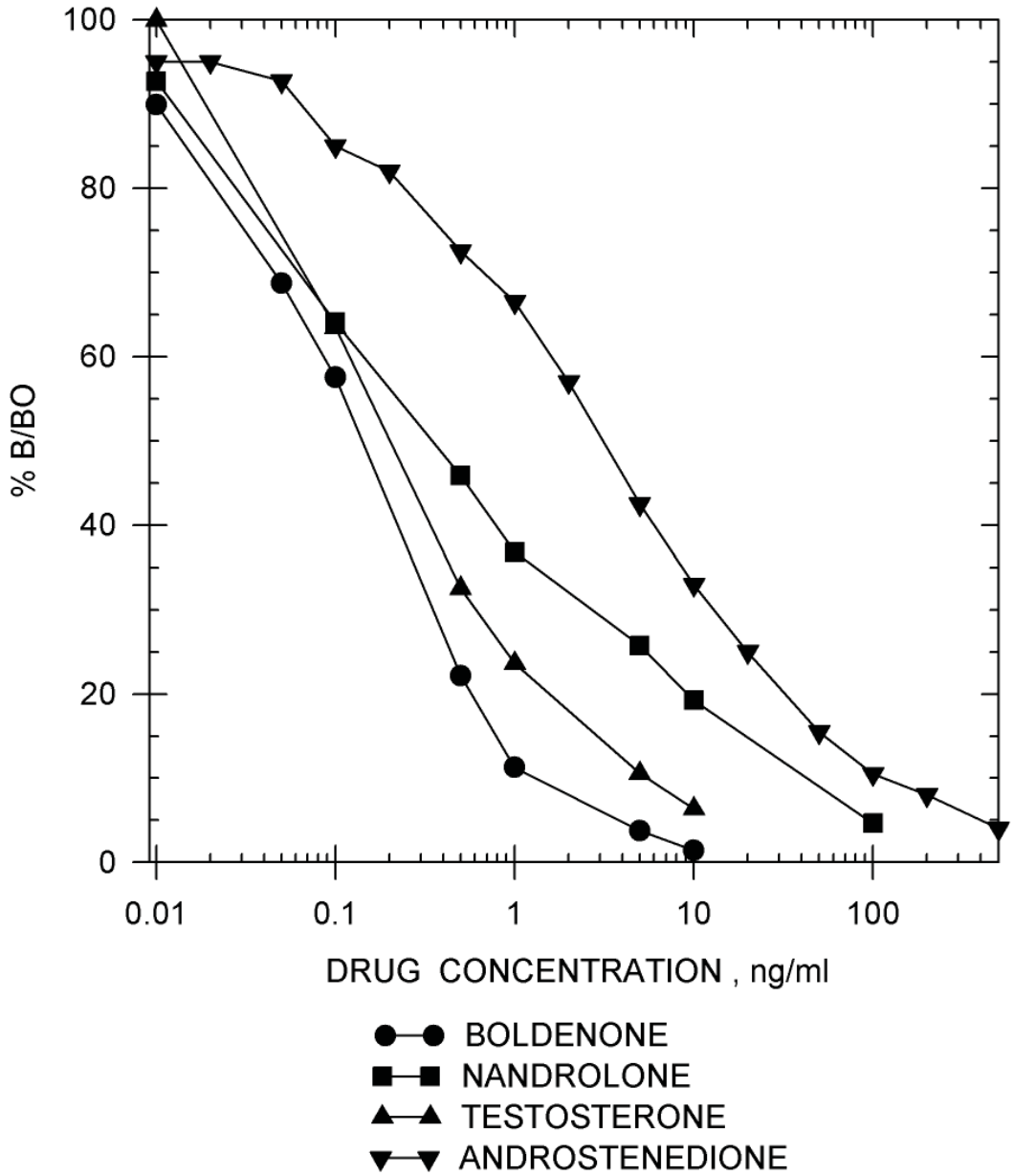
Nandrolone



Testosterone



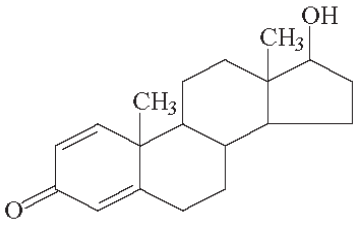
Drug Standard Curve Comparison in EIA Buffer

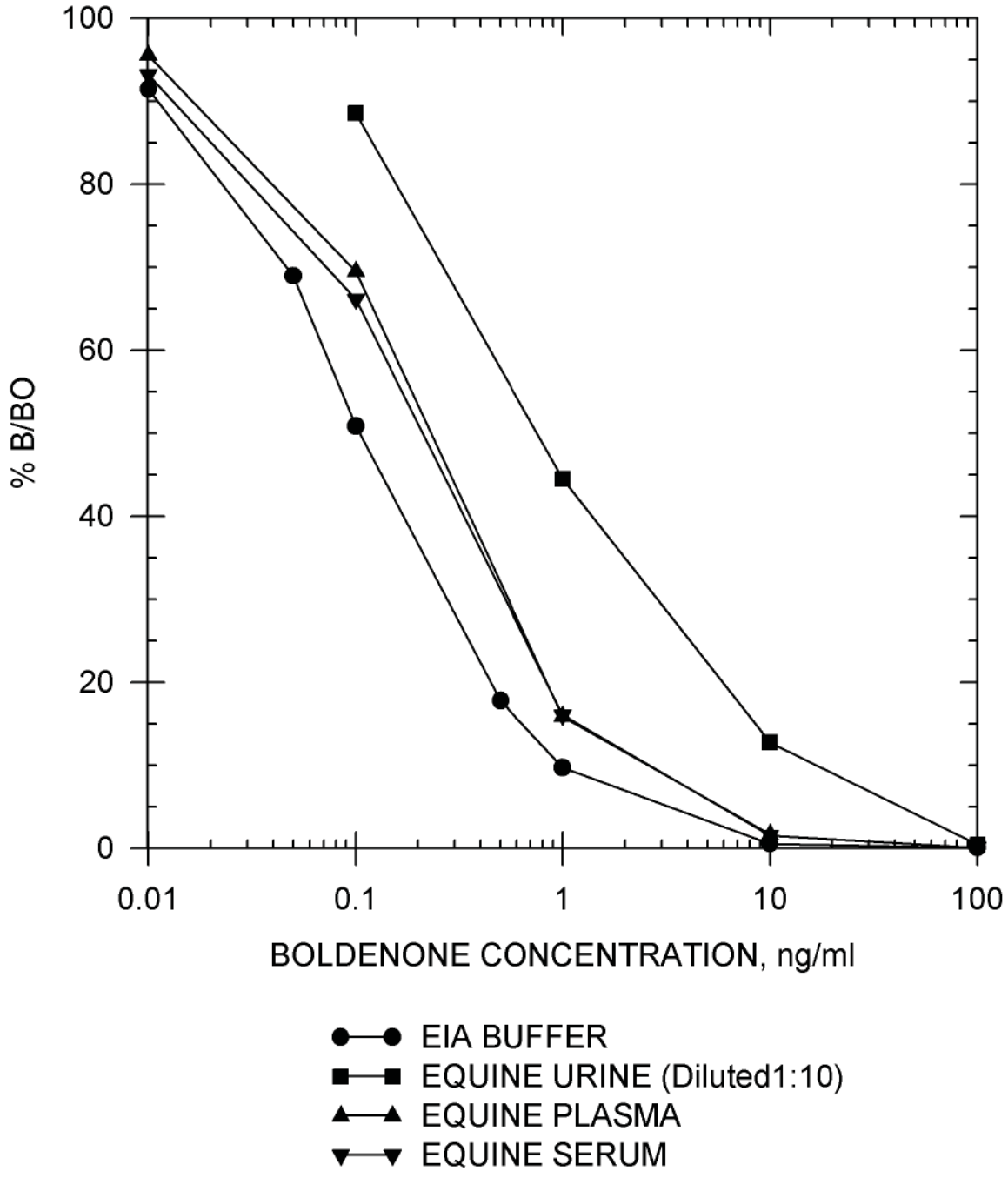


Rev 05/2011

BOLDENONE STANDARD CURVES

Boldenone

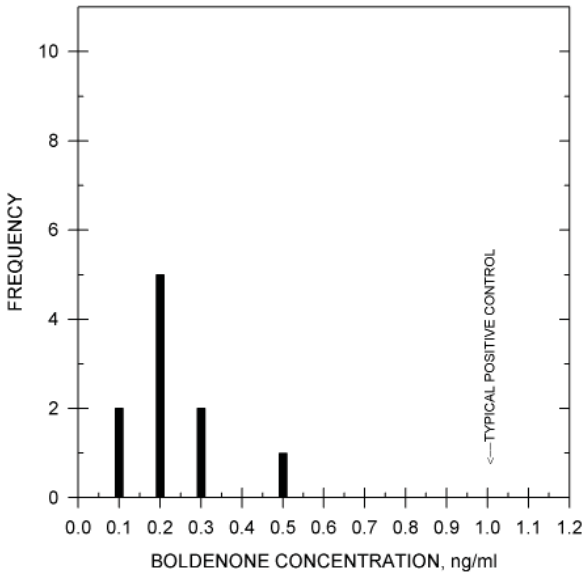




TYPICAL EQUINE URINE BACKGROUND LEVELS

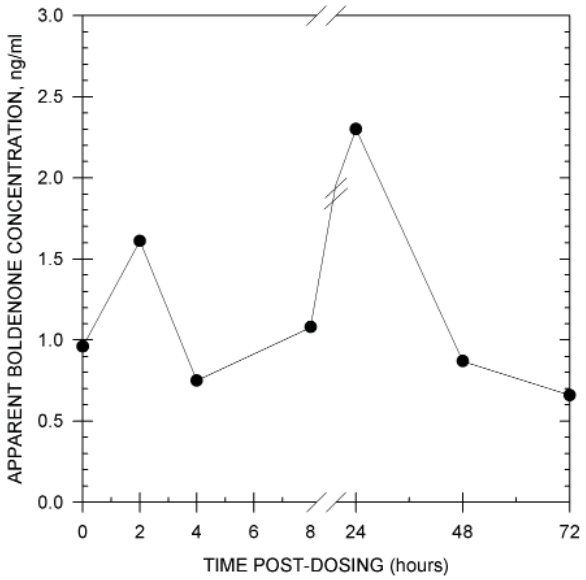
Backgrounds: Screening of 10 post-race equine urine samples showed apparent boldenone concentrations up to 1.8 ng/ml. Diluting the urine samples 1:9, or 1 part sample to 9 parts EIA buffer, reduced these backgrounds to levels not above 0.5 ng/ml.

Sample Treatment: A dilution of 1:9 or sample hydrolysis and sample extraction is required to reduce natural background.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 500 mg of boldenone undecylenate by intramuscular injection to one horse, results on unhydrolyzed urine showed little evidence for the presence of parent boldenone in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Boldenone	100%	Estradiol	0.04%
Testosterone	27%	Mestanolone	0.04%
Nandrolone	19%	11β-Hydroxyeticholanolone	0.04%
Mesterlone	12%	11β-Hydroxyandrosterone	0.03%
Androstenedione	2%	11-Ketoandrosterone	0.03%
Bolandiol	0.8%	11-Ketoeticholanone	0.02%
Eticholanone	0.6%	Equilenin	0.02%
Androsterone	0.4%	Equilin	0.02%
Methandrostenelone	0.3%	Epitestosterone	0.01%
Trenbolone	0.3%	Oxandrolone	0.01%
Methyltestosterone	0.3%	3' Hydroxystanozolol	0.01%
17-Methyltestosterone	0.3%	Progesterone	0.01%
Bolasterone	0.1%	Oxymetholone	0.01%
Testosterone Glucuronide	0.04%	Stanozolol	0.01%

Acepromazine	< 0.01%	Folinic Acid	< 0.01%	Oxphenbutazone	< 0.01%
Acetaminophen	< 0.01%	Fluoxymesterlone	< 0.01%	PCP	< 0.01%
Acetylsalicylic Acid	< 0.01%	Furosemide	< 0.01%	Penicillin G-Potassium	< 0.01%
Aldosterone	< 0.01%	Gemfibrozil	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	Gentisic Acid	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Glipizide	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Phenylbutazone	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glutethimide	< 0.01%	Polyethylene Glycol	< 0.01%
Chlordiazepoxide	< 0.01%	Glycopyrrolate	< 0.01%	Prednisolone	< 0.01%
Chlorpromazine	< 0.01%	Heparin	< 0.01%	Pregnanetriol	< 0.01%
Clenbuterol	< 0.01%	Hippuric Acid	< 0.01%	Pregnenolone	< 0.01%
Codeine	< 0.01%	Hordenine	< 0.01%	Primadone	< 0.01%
Cortisol	< 0.01%	Hydrocortisone	< 0.01%	Procainamide	< 0.01%
Cotinine	< 0.01%	Ibuprofen	< 0.01%	Procaine	< 0.01%
Dehydroepiandrosterone		Imipramine	< 0.01%	Promazine	< 0.01%
(DHEA)	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
Dextromethorphan	< 0.01%	Meperidine	< 0.01%	Pyrilamine	< 0.01%
Diclofenac	< 0.01%	Metaproterenol	< 0.01%	Pyrimethamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methadone	< 0.01%	Quinidine	< 0.01%
Dipyrone	< 0.01%	Methandriol	< 0.01%	Quinine	< 0.01%
Doxepin	< 0.01%	Methaqualone	< 0.01%	Salbutamol	< 0.01%
Ephedrine	< 0.01%	Methocarbamol	< 0.01%	Salicylamide	< 0.01%
5α-Estran-3β,17α-diol	< 0.01%	Methylene Blue	< 0.01%	Salicylic Acid	< 0.01%
Erythromycin	< 0.01%	Methylprednisolone	< 0.01%	16β-Hydroxystanozolol	< 0.01%
Estriol	< 0.01%	Nalorphine	< 0.01%	Theophylline	< 0.01%
Estrone	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Niacinamide	< 0.01%	Trimethoprim	< 0.01%
Fenoprofen	< 0.01%	Nicotine	< 0.01%	Trimipramine	< 0.01%
Flunixin	< 0.01%	Nortriptyline	< 0.01%	Uric Acid	< 0.01%
Folic Acid	< 0.01%	Orphenadrine	< 0.01%		

ENHANCED KIT

BRONCHODILATOR GROUP

Product# 100310 &
100315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

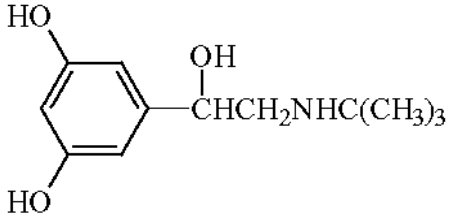
I-50 in EIA Buffer		I-50 in Porcine Urine	
Terbutaline	0.5 ng/ml	Terbutaline	0.8 ng/ml
Clenbuterol	1.2 ng/ml	Clenbuterol	1.3 ng/ml
Salbutamol/Albuterol	1.5 ng/ml	Salbutamol/Albuterol	2.4 ng/ml
Pirbuterol	1.5 ng/ml	Pirbuterol	5 ng/ml
Metaproterenol	2.7 ng/ml	Metaproterenol	7.5 ng/ml
Propranolol	15 ng/ml	Propranolol	40 ng/ml
Hydroxyclenbuterol	22 ng/ml		
I-50 in Canine Urine		**I-50 in Equine Urine**	
Terbutaline	1.0 ng/ml	Terbutaline	1.1 ng/ml
Clenbuterol	1.4 ng/ml	Clenbuterol	1.1 ng/ml
Salbutamol/Albuterol	2.2 ng/ml	Salbutamol/Albuterol	2.7 ng/ml
Pirbuterol	3.0 ng/ml	Pirbuterol	7.0 ng/ml
Metaproterenol	6.1 ng/ml	Metaproterenol	6.5 ng/ml
Propranolol	20 ng/ml	Propranolol	30 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Terbutaline	0.6 ng/ml	Terbutaline	0.9 ng/ml
Clenbuterol	2.6 ng/ml	Clenbuterol	1.2 ng/ml
Salbutamol/Albuterol	3.0 ng/ml	Salbutamol/Albuterol	1.1 ng/ml
Pirbuterol	3.0 ng/ml	Pirbuterol	4.0 ng/ml
Metaproterenol	9.0 ng/ml	Metaproterenol	5.0 ng/ml
Propranolol	45 ng/ml	Propranolol	80 ng/ml

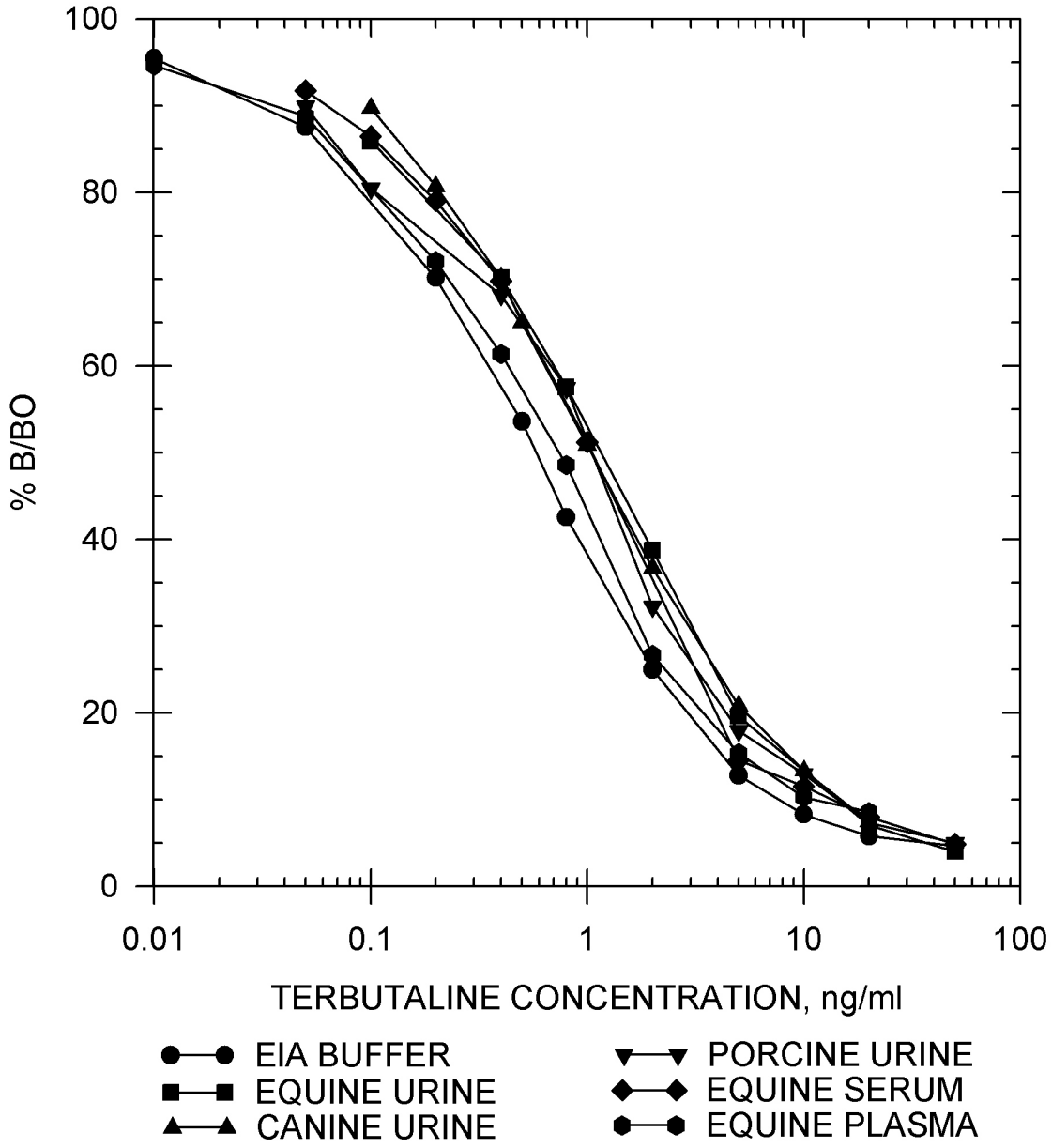
Precision:	Intra-assay	6.56%
	Inter-assay	4.66%

Note: Measuring wavelength was 650 nm.

BRONCHODILATOR STANDARD CURVES

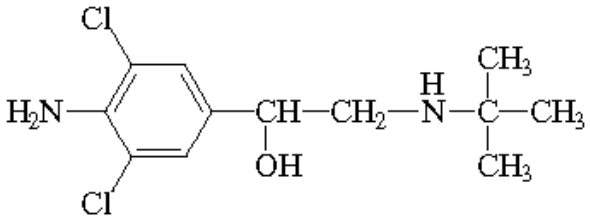
Terbutaline

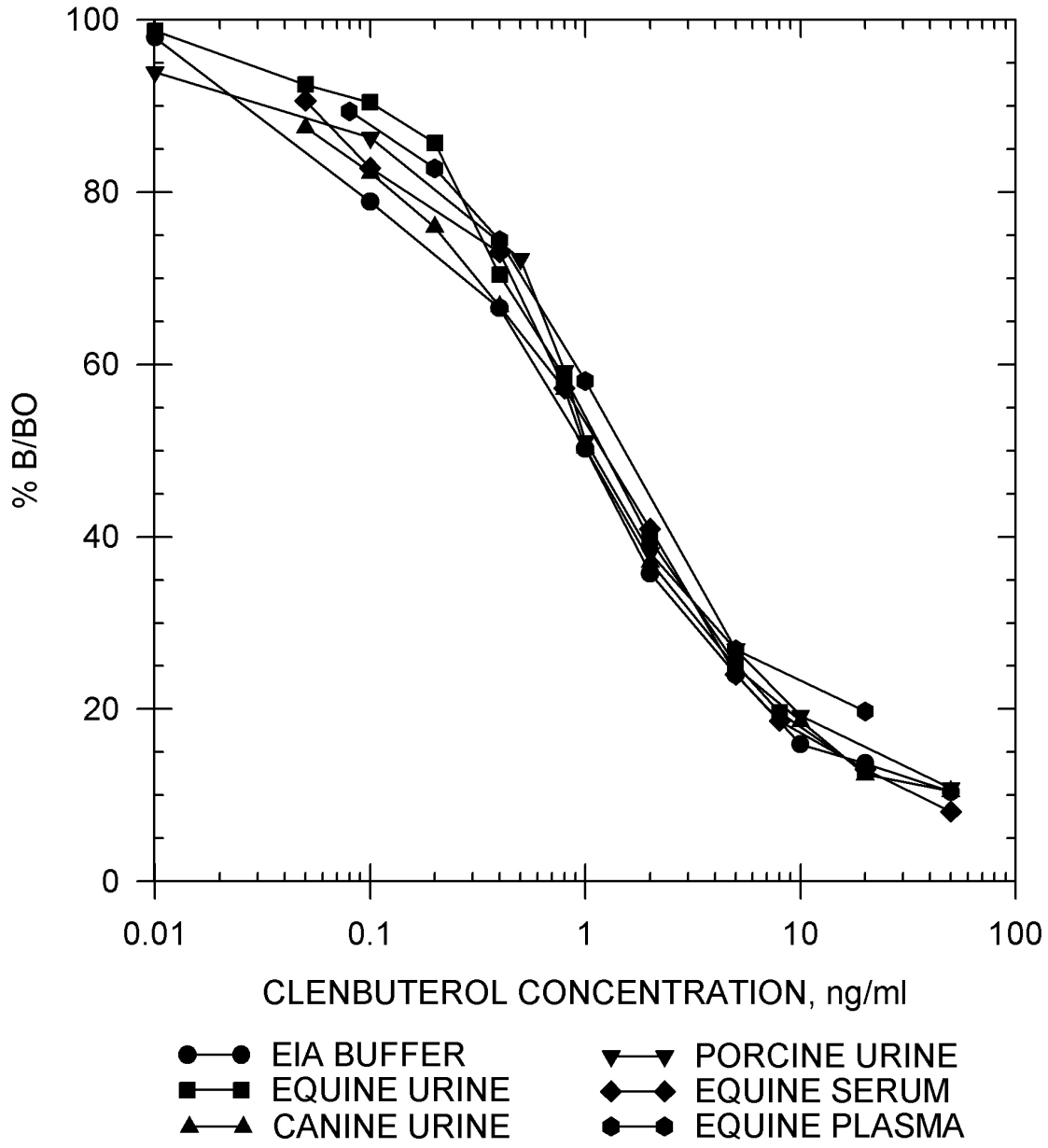




BRONCHODILATOR STANDARD CURVES

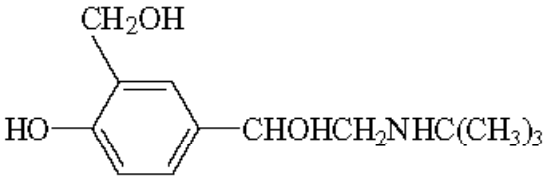
Clenbuterol

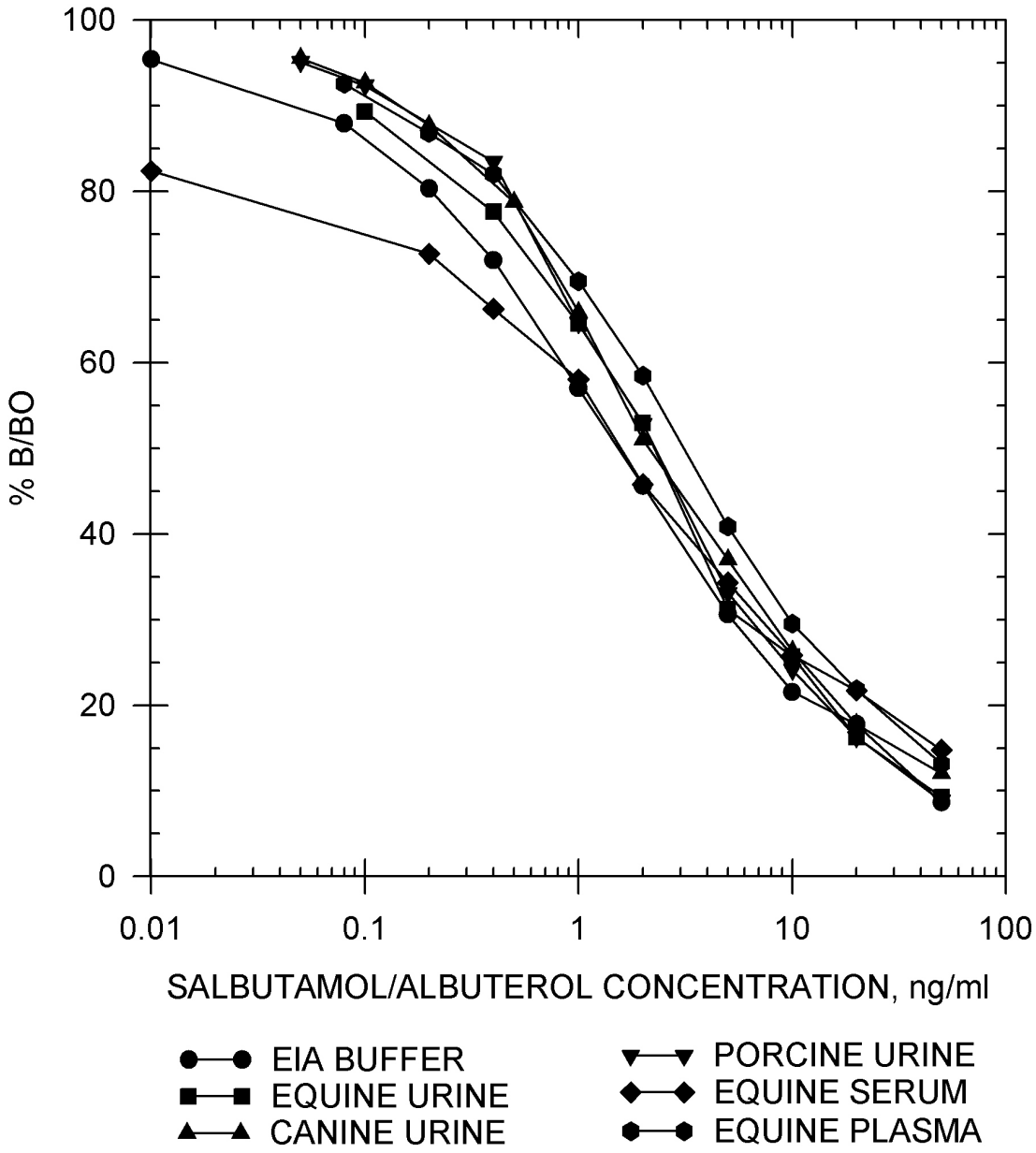




BRONCHODILATOR STANDARD CURVES

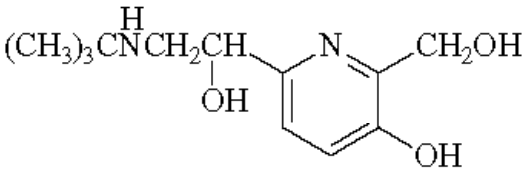
Salbutamol/Albuterol

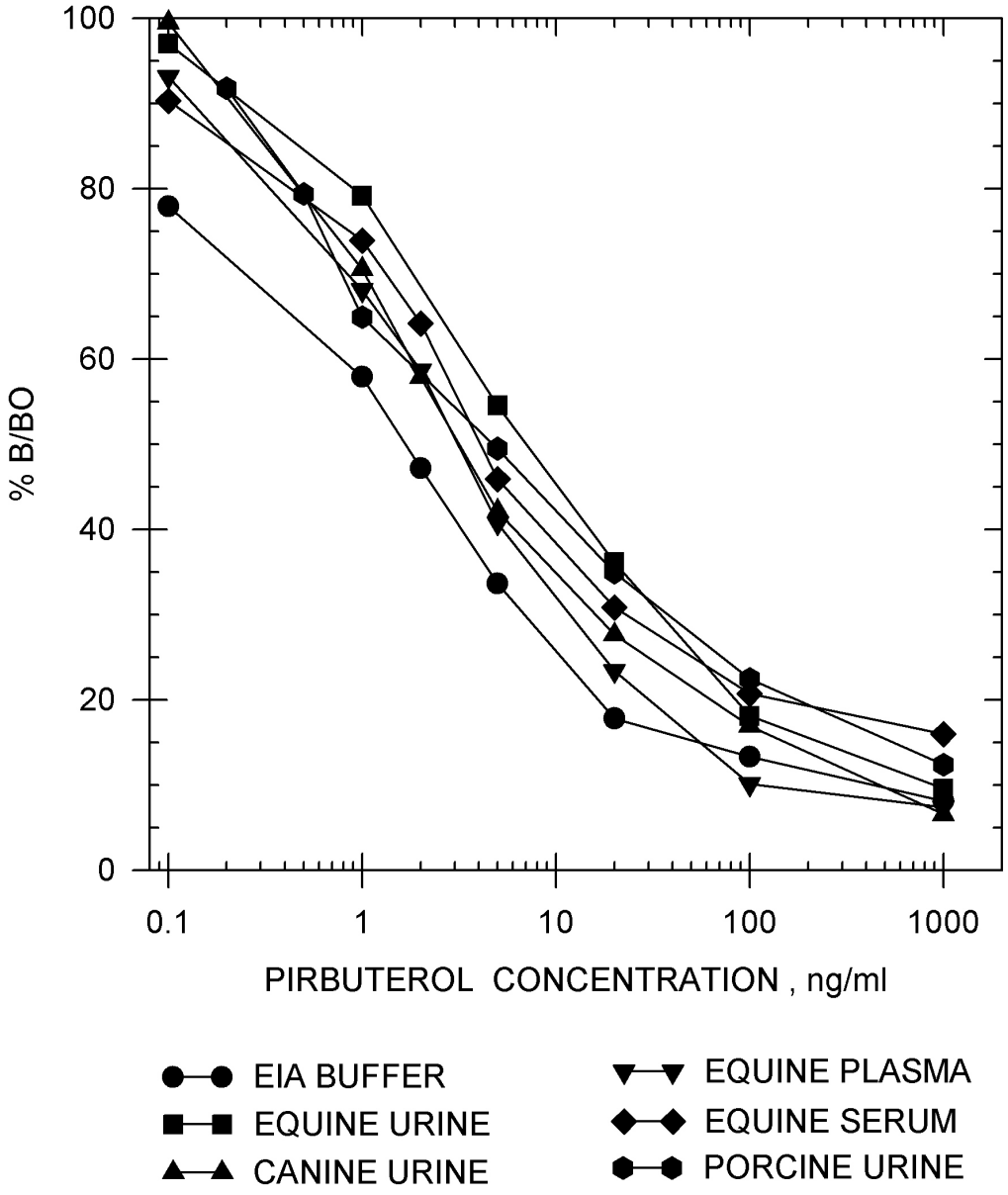




BRONCHODILATOR STANDARD CURVES

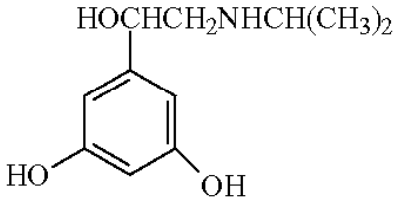
Pirbuterol

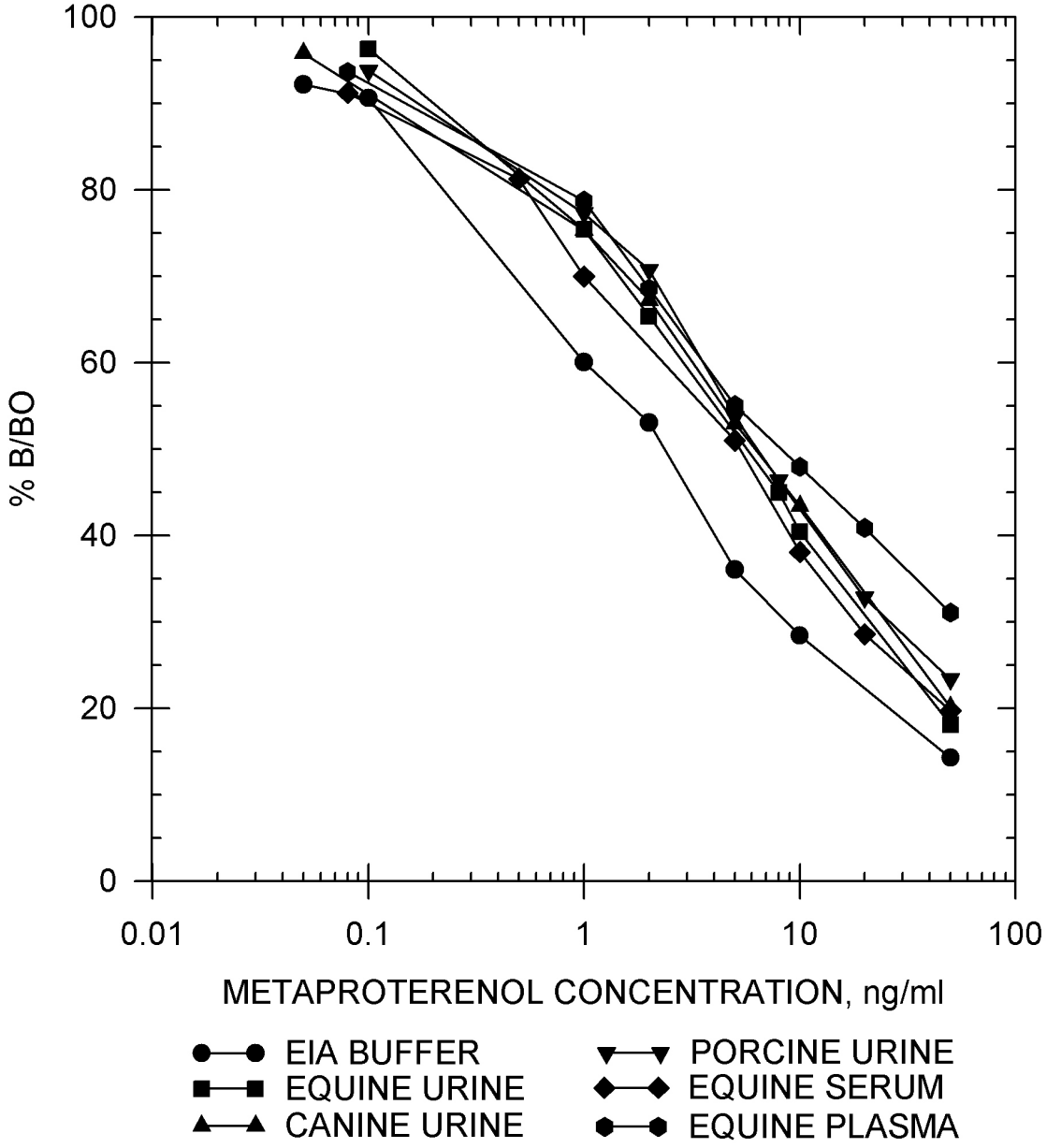




BRONCHODILATOR STANDARD CURVES

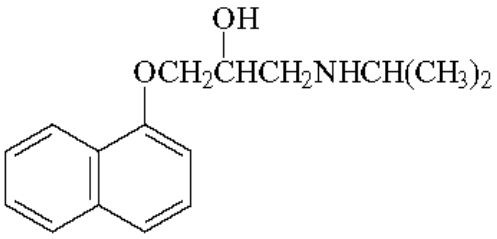
Metaproterenol

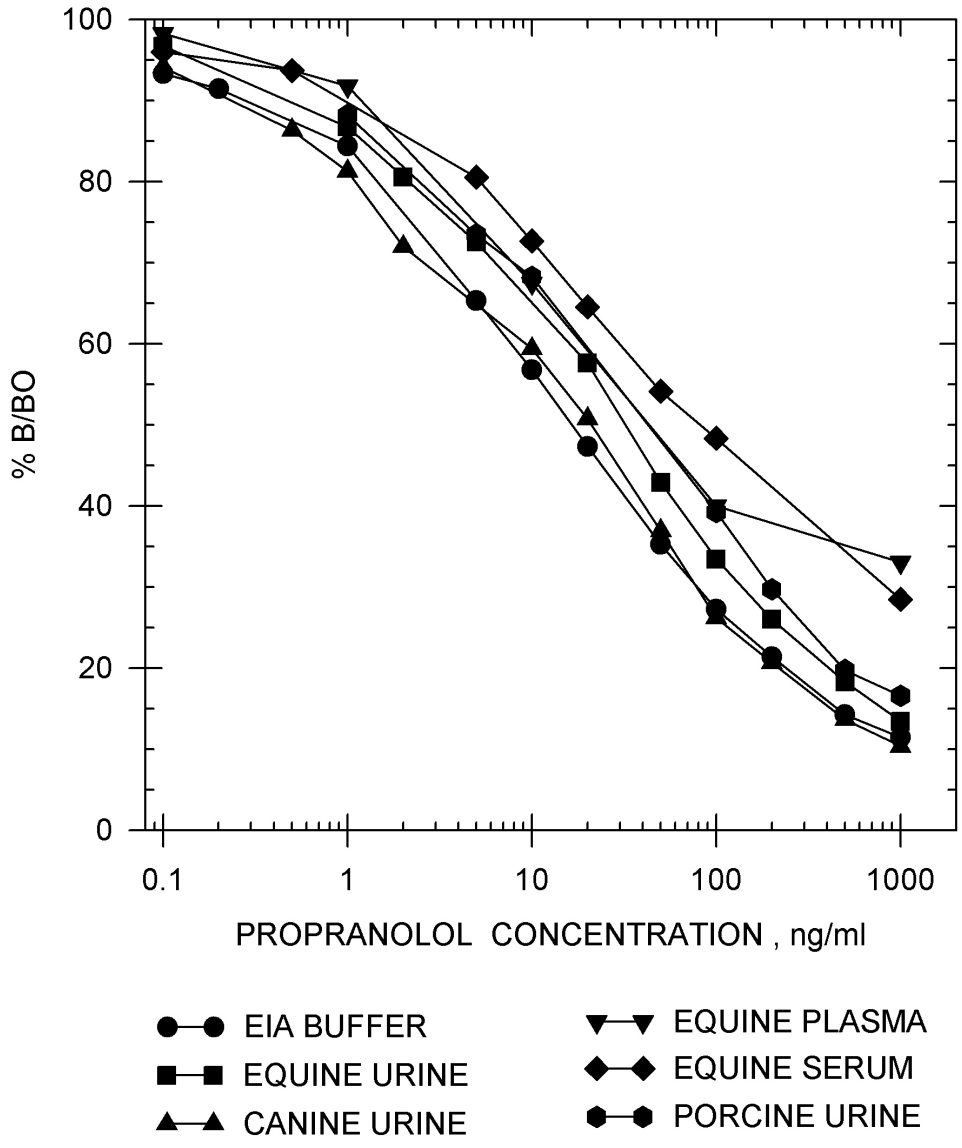




BRONCHODILATOR STANDARD CURVES

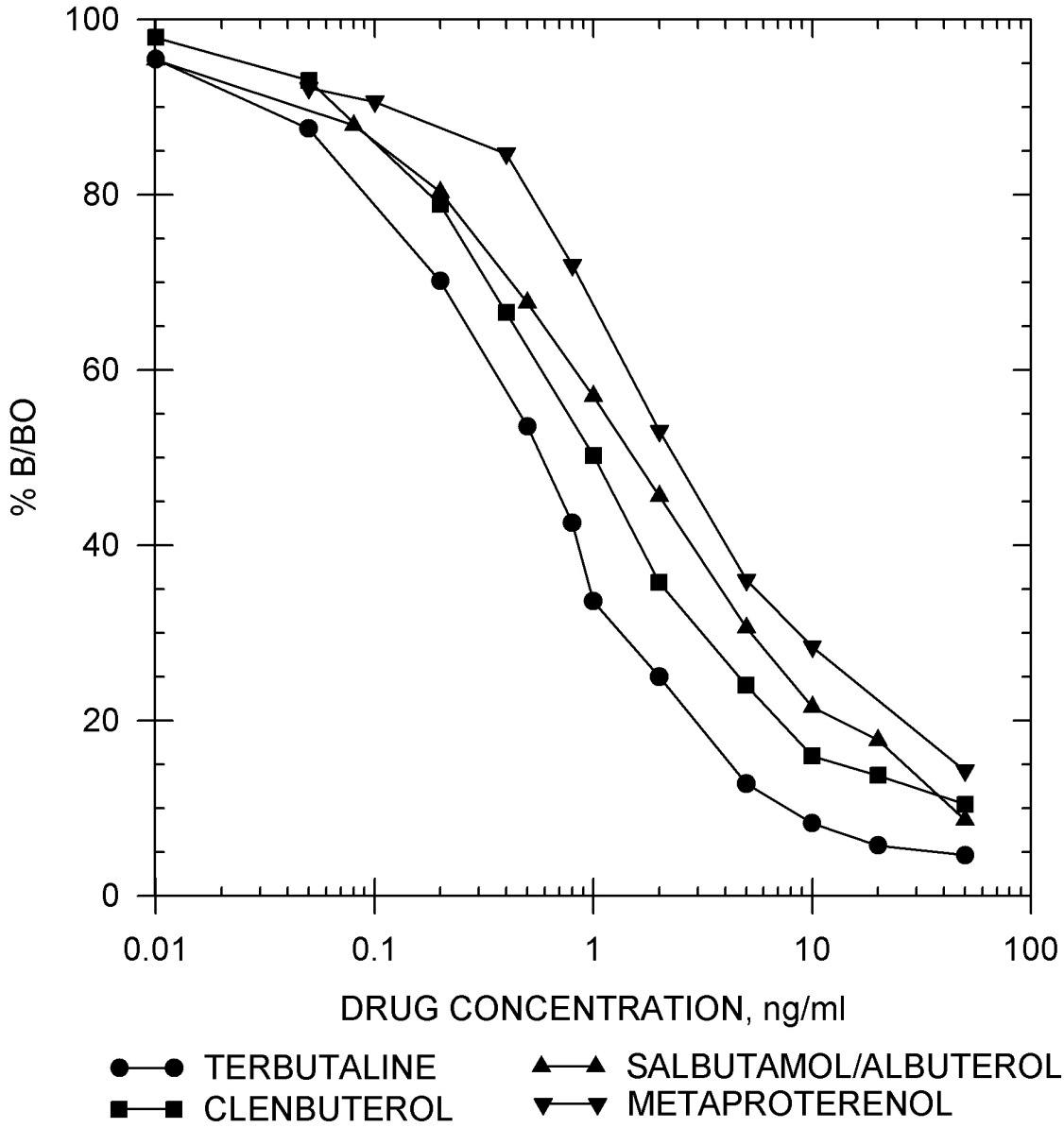
Propranolol





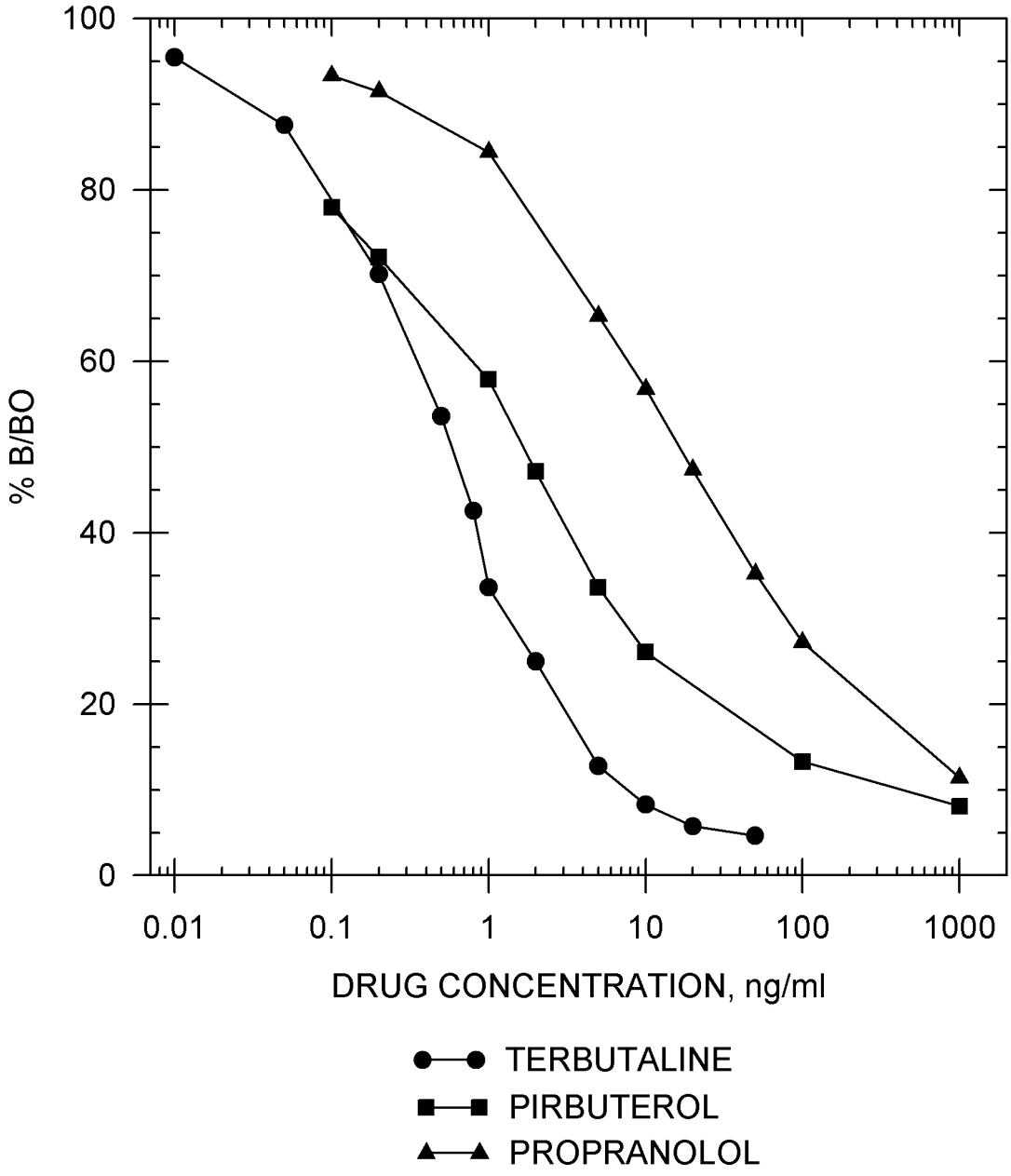
BRONCHODILATOR STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



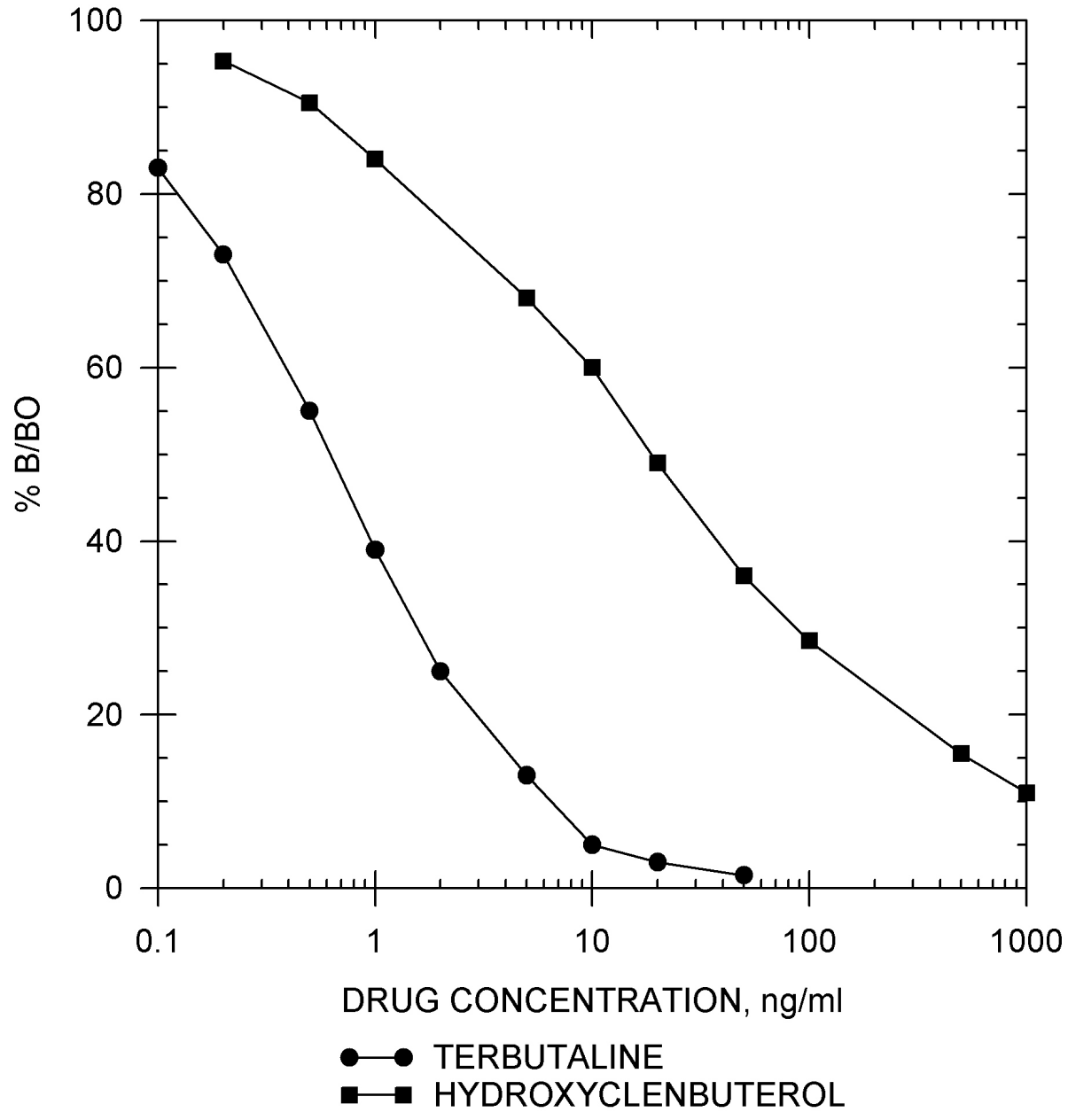
BRONCHODILATOR STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



BRONCHODILATOR STANDARD CURVES

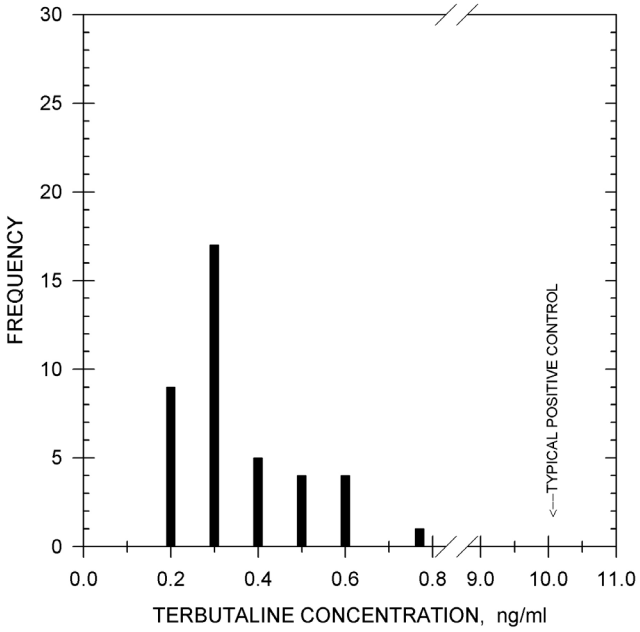
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.7 ng/ml.

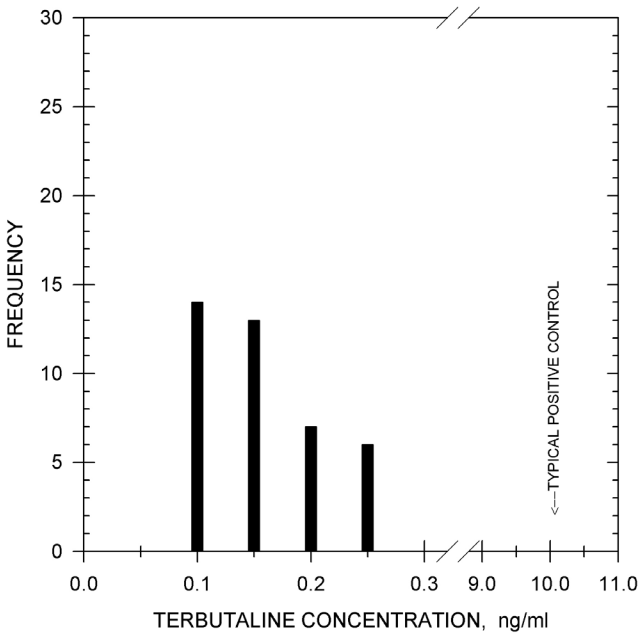
Sample Treatment: No sample treatment, or a dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.25 ng/ml

Sample Treatment: No sample dilution is necessary.



ADDITIONAL BACKGROUND LEVELS

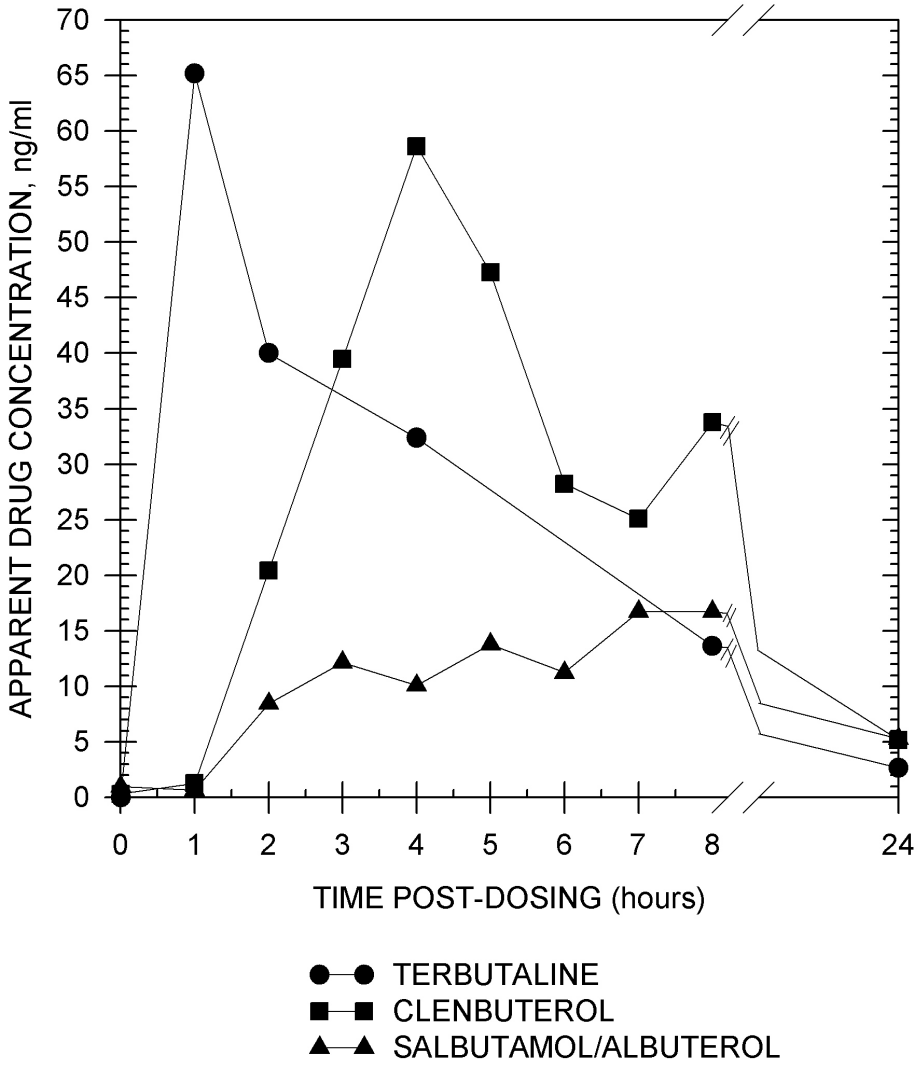
Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

Porcine Urine: No sample treatment, or a 1:1 dilution is recommended.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 1.5 mg of terbutaline by subcutaneous injection to one horse, the presence of this drug was detected for 8 hours in equine urine with slight detection at 48 hours.

Salbutamol/albuterol and clenbuterol administrations were detectable for 24 hours. (Dosage not available)



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Terbutaline	100%
Clenbuterol	45%
Salbutamol/Albuterol	35%
Pirbuterol	33%
Cimaterol	30%
Metaproterenol	20%
Hydroxymethylclenbuterol	16%
Propranolol	3.3%
Hydroxyclenbuterol	2.5%
Isoproterenol	0.98%
Colterol	0.45%
Metoprolol	0.10%
Procaterol	0.08%
Amphetamine	<0.1%
Ascorbic Acid (Vitamin C)	<0.1%
Atenolol	<0.1%
Dobutamine	<0.1%
Dopamine (3-Hydroxytyramine)	<0.1%
Fenfluramine	<0.1%
Hydrocortisone	<0.1%
4-Hydroxyamphetamine	<0.1%
Labetalol	<0.1%
Methylene Blue	<0.1%
6α-Methylprednisolone	<0.1%
Oxyprenolol	<0.1%
Phendimetrazine	<0.1%
Phenylephrine	<0.1%
Ritodrine	<0.1%

Acepromazine	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Arterenol	<0.01%
Benzphetamine	<0.01%
Diclofenac	<0.01%
Diethylpropion	<0.01%
Dihydroergotamine	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Ephedrine	<0.01%
Epinephrine	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%
Ethylnorepinephrine	<0.01%
Fenoterol	<0.01%
Fenspiride	<0.01%
Flunixin	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Hordenine	<0.01%
Ibuprofen	<0.01%
Ipratropium Bromide	<0.01%
Mephentermine	<0.01%
Metaraminol	<0.01%
Methamphetamine	<0.01%
Methocarbamol	<0.01%
Methoxamine	<0.01%
Methoxyamphetamine	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Norepinephrine	<0.01%
Olanzapine	<0.01%
Orphenadrine	<0.01%
Oxymetazoline	<0.01%
Oxyphenbutazone	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Phenylethylamine (Phenethylamine)	<0.01%
Phenylpropanolamine	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Procaine	<0.01%
Pyrantel	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Thiamine	<0.01%
Tyramine	<0.01%

BUMETANIDE

Product# 103710-1 & 103715-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

Bumetanide	
I-50 in EIA Buffer	0.35 ng/ml
I-50 in Equine Urine (Diluted 1:1)	1.60 ng/ml
I-50 in Canine Urine	0.60 ng/ml
I-50 in Equine Plasma	0.25 ng/ml
I-50 in Equine Serum	0.30 ng/ml

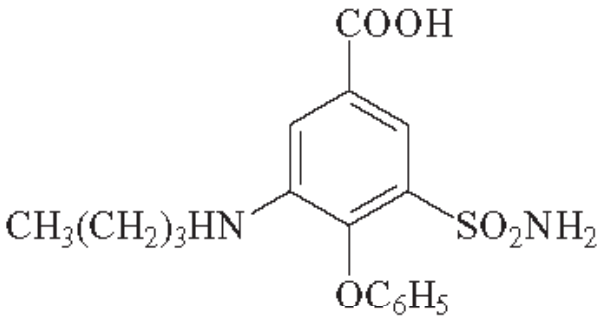
Precision:

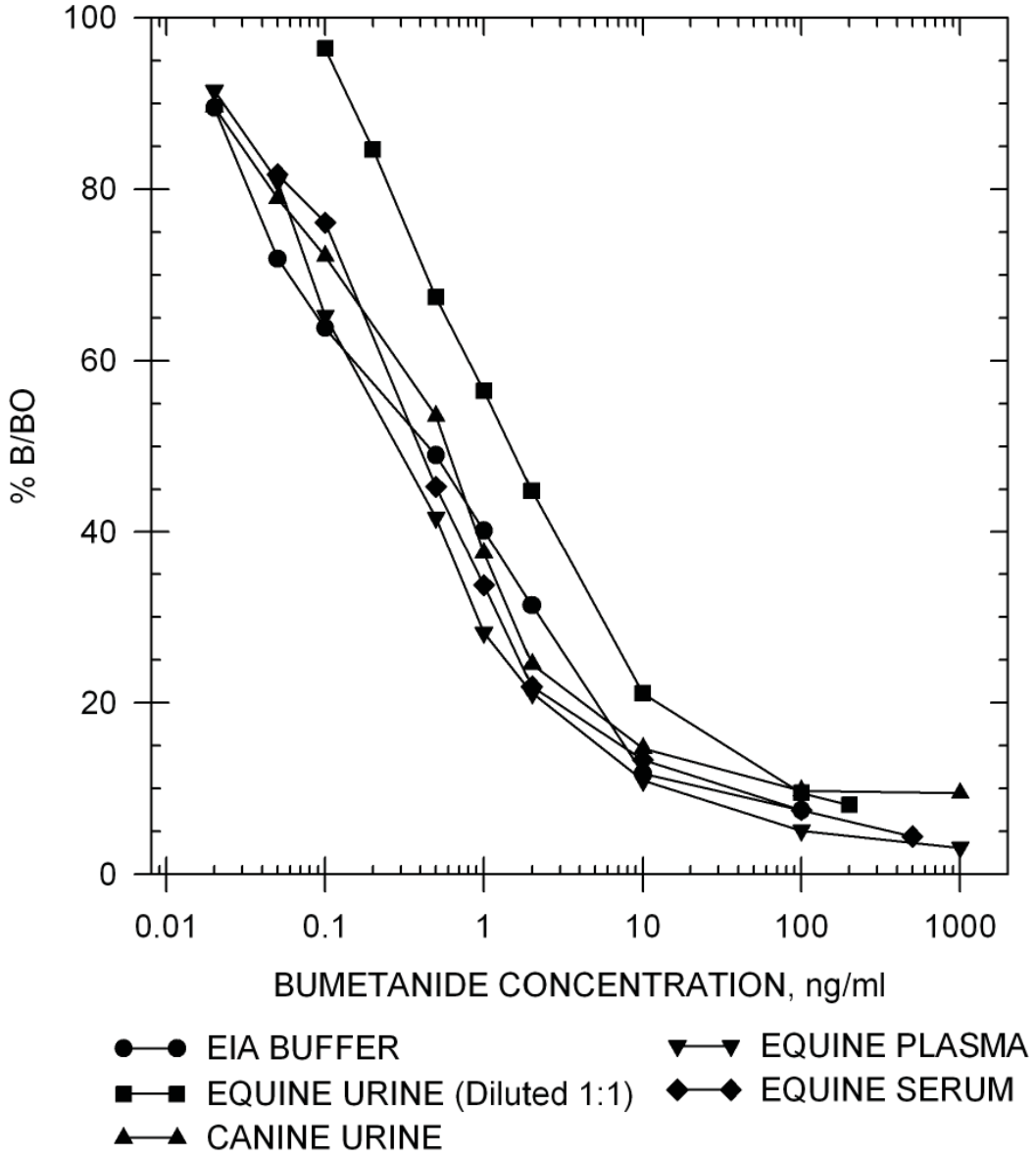
Intra-assay	6.24 %
Inter-assay	6.48 %

Note: Measuring wavelength was 650 nm**.**

BUMETANIDE STANDARD CURVE

Bumetanide

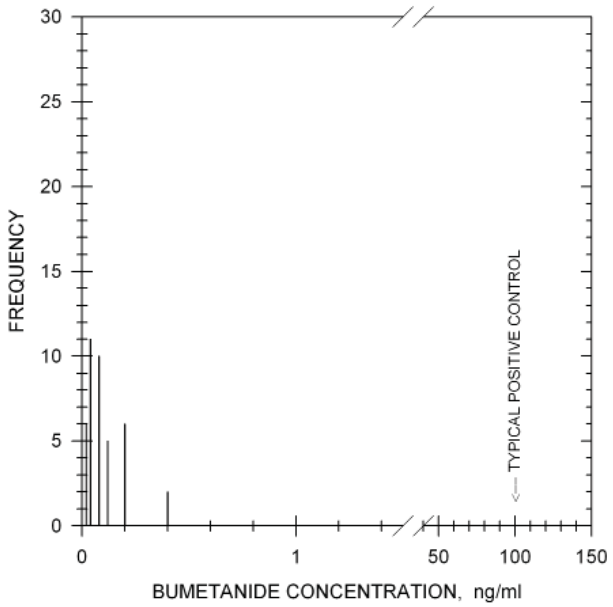




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.4 ng/ml.

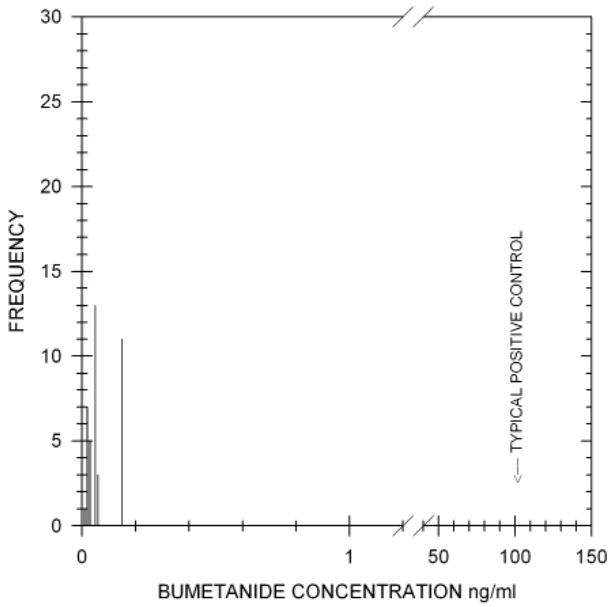
Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.15 ng/ml.

Sample Treatment: No sample dilution is necessary.

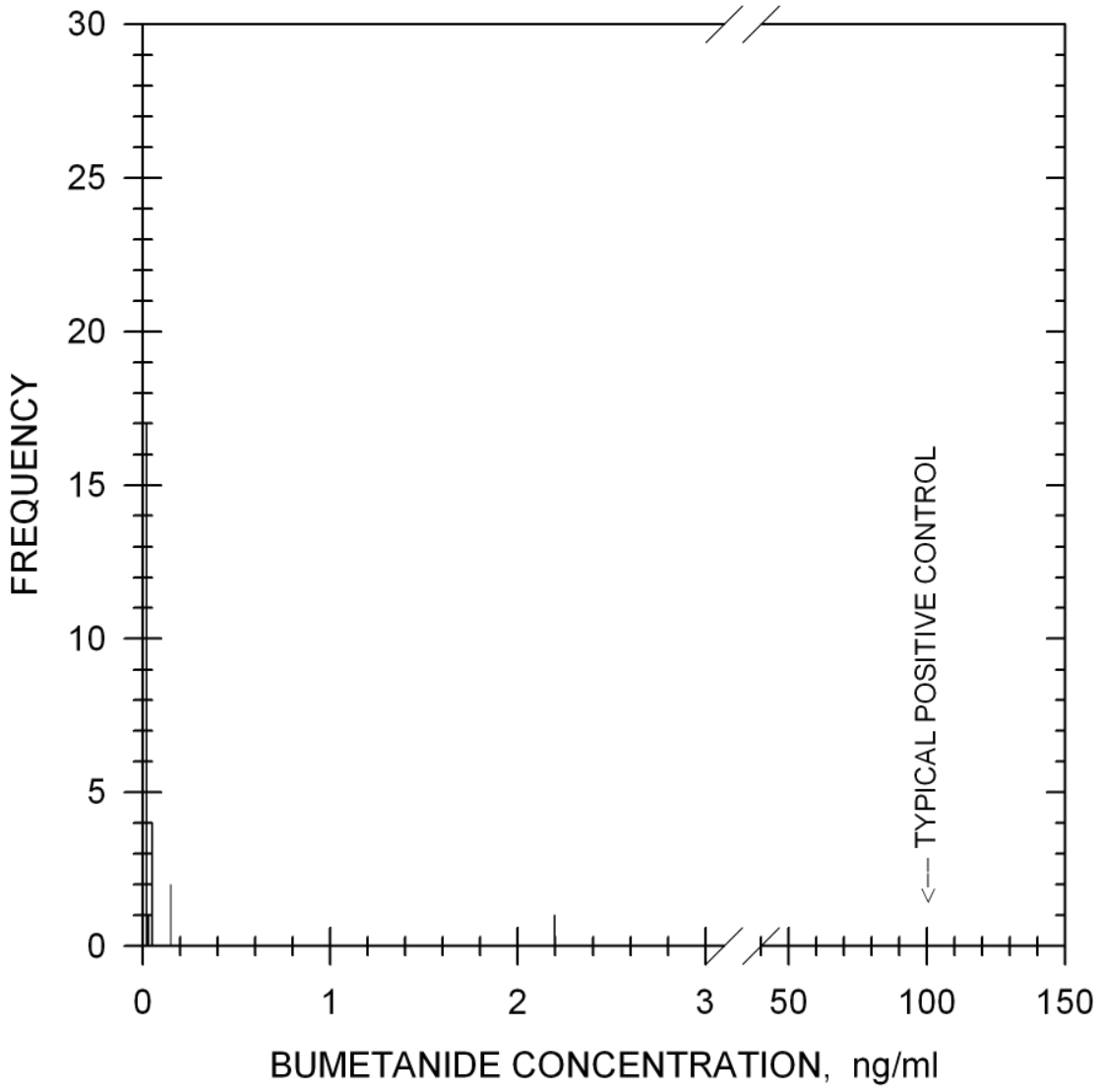


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 34 post-race equine plasma samples has shown no background levels above 2.2 ng/ml.

Sample Treatment: No sample dilution is necessary. In some cases, a small dilution (1:1) or sample extraction may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection: Data not currently available.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Bumetanide	100%

Acepromazine	<0.01%	Meclofenamic Acid	<0.01%
Acetazolamide	<0.01%	Metaproterenol	<0.01%
m-Aminobenzoic Acid	<0.01%	Methocarbamol	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Methylene Blue	<0.01%
Ascorbic Acid	<0.01%	6α-Methylprednisolone	<0.01%
Caffeine	<0.01%	Naproxen	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Dexamethasone	<0.01%	Orphenadrine	<0.01%
Diclofenac	<0.01%	Oxyphenbutazone	<0.01%
Dimethyl Sulfoxide	<0.01%	Pentoxifylline	<0.01%
Dipyrone	<0.01%	Phenothiazine	<0.01%
Droperidol	<0.01%	Phenylbutazone	<0.01%
Ethacrynic Acid	<0.01%	Polyethylene Glycol	<0.01%
Ethyl -p-Amino-Benzoate	<0.01%	Prednisolone	<0.01%
Fenoprofen	<0.01%	Procaine	<0.01%
Flunixin	<0.01%	Promazine	<0.01%
Furosemide	<0.01%	Pyrantel	<0.01%
Glycopyrrolate	<0.01%	Pyrilamine	<0.01%
Haloperidol	<0.01%	Salbutamol	<0.01%
Hordenine	<0.01%	Salicylamide	<0.01%
Hydrocortisone	<0.01%	Salicylic Acid	<0.01%
Hydrochlorothiazide	<0.01%	Theobromine	<0.01%
Ibuprofen	<0.01%	Theophylline	<0.01%
Isoxsuprine	<0.01%	Thiamine	<0.01%
Lidocaine	<0.01%	Trichlormethiazide	<0.01%

ENHANCED KIT

BUPRENORPHINE

Product# 103810 & 103815 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Buprenorphine	1.0 ng/ml
Diprenorphine	2.0 ng/ml
Cyprenorphine	8 ng/ml
Norbuprenorphine	56 ng/ml

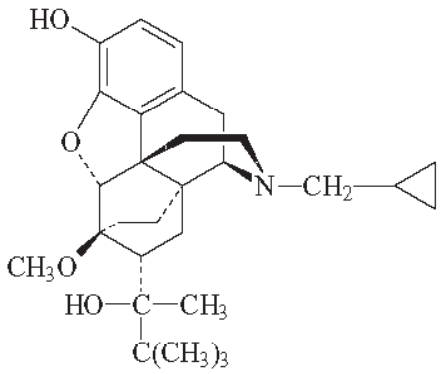
I-50 in Equine Urine		**I-50 in Canine Urine**	
Buprenorphine	3.2 ng/ml	Buprenorphine	1.2 ng/ml
Diprenorphine	3.1 ng/ml	Diprenorphine	2.6 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Buprenorphine	1.0 ng/ml	Buprenorphine	1.1 ng/ml
Diprenorphine	5.5 ng/ml	Diprenorphine	4.0 ng/ml

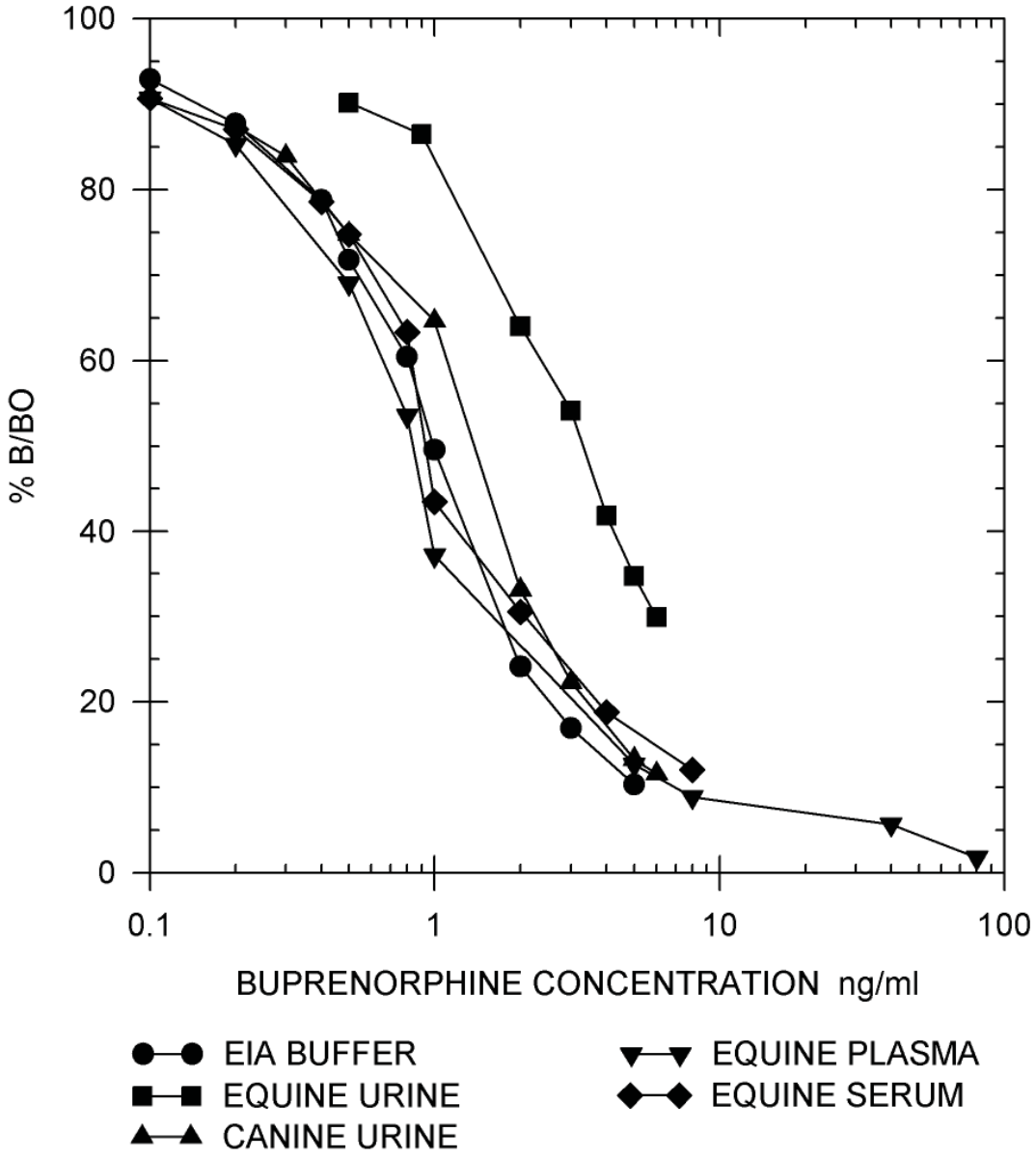
Precision:	Intra-assay	5.91 %
	Inter-assay	3.39 %

Note: Measuring wavelength was 650 nm**.**

BUPRENORPHINE STANDARD CURVES

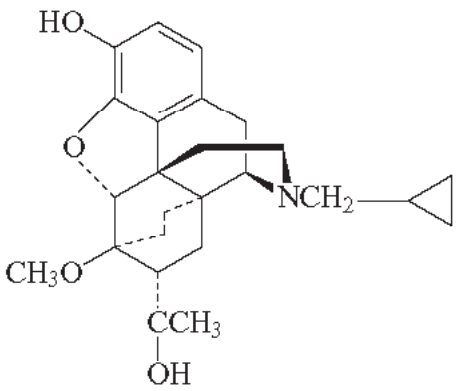
Buprenorphine

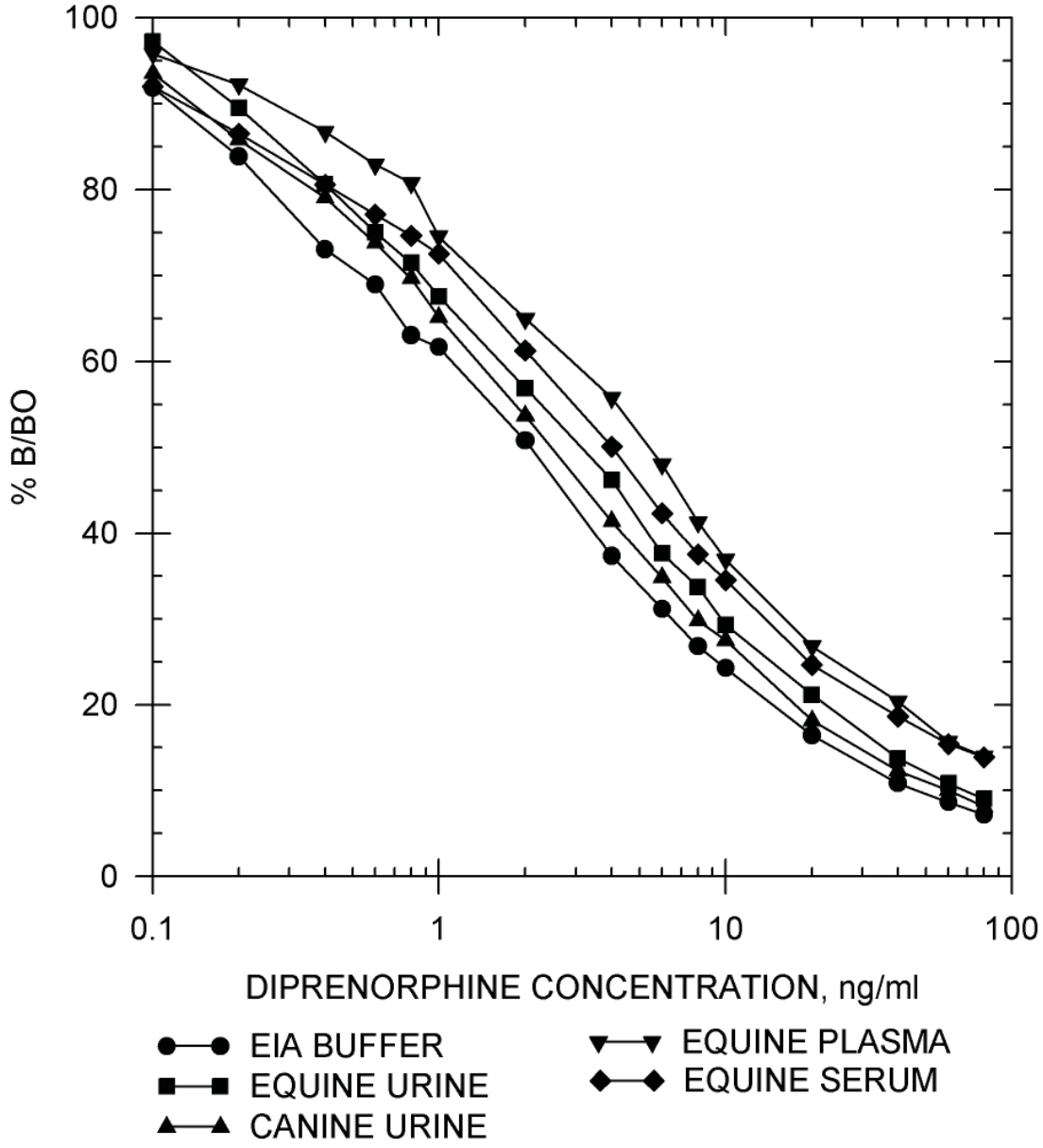




BUPRENORPHINE STANDARD CURVES

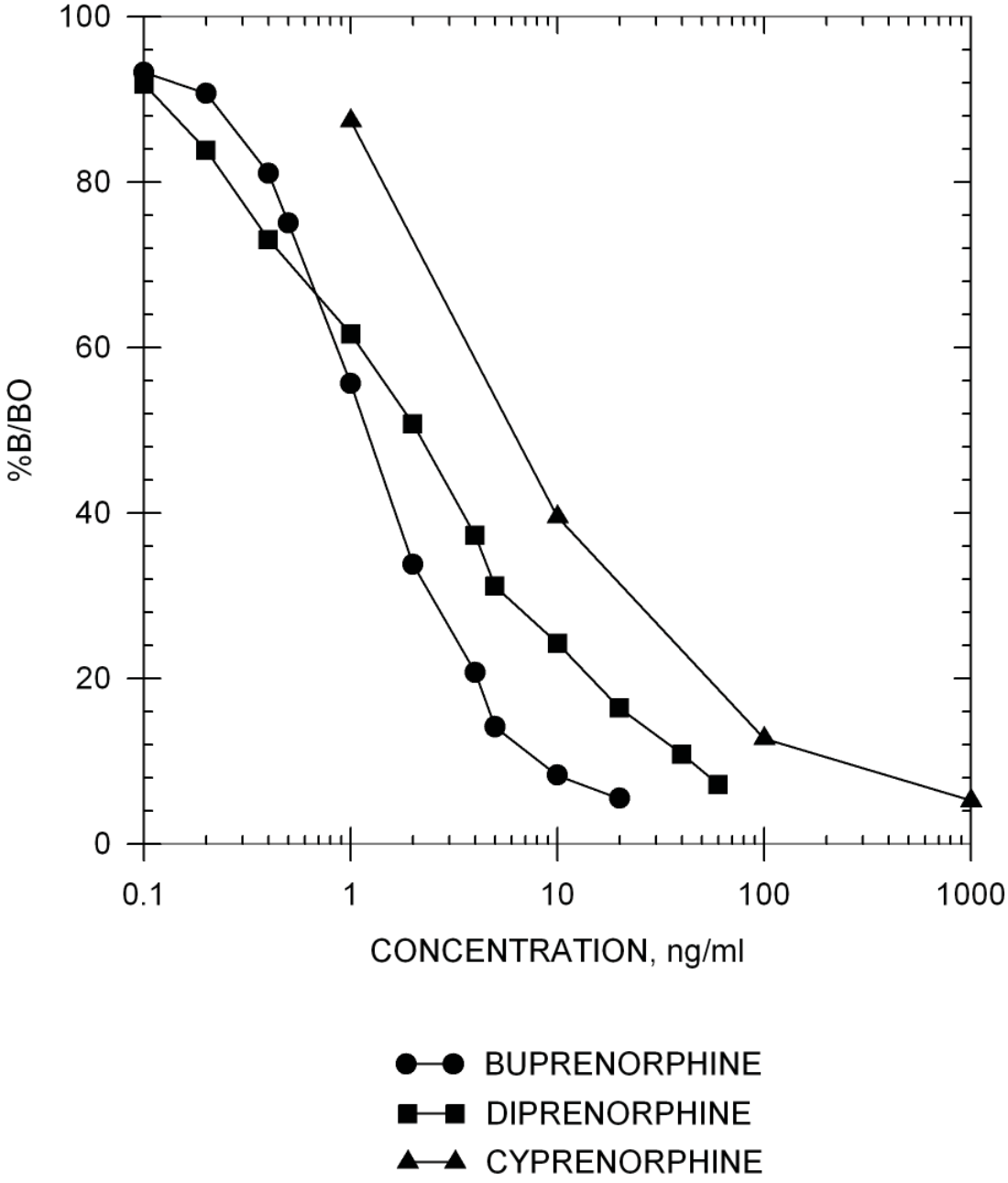
Diprenorphine





BUPRENORPHINE STANDARD CURVES

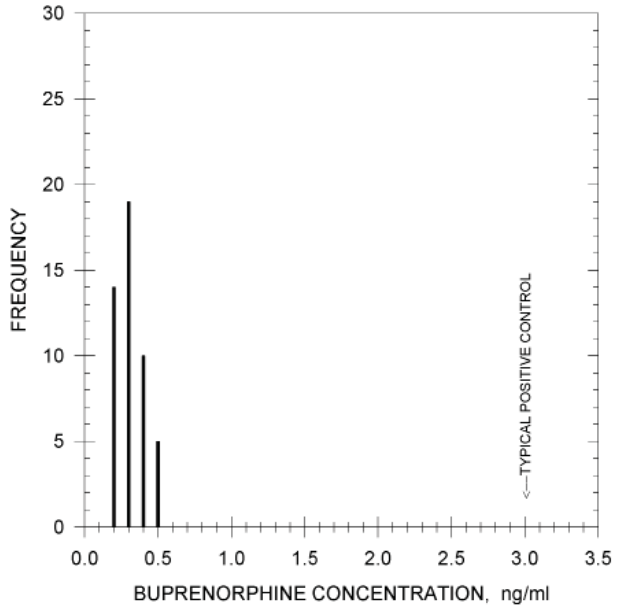
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race equine urine samples has shown no background levels above 0.53 ng/ml.

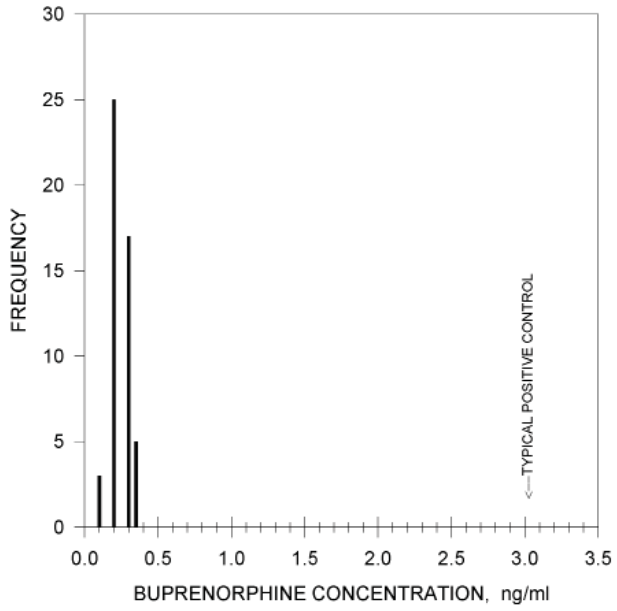
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples has shown no background levels above 0.34 ng/ml.

Sample Treatment: No sample dilution is necessary.

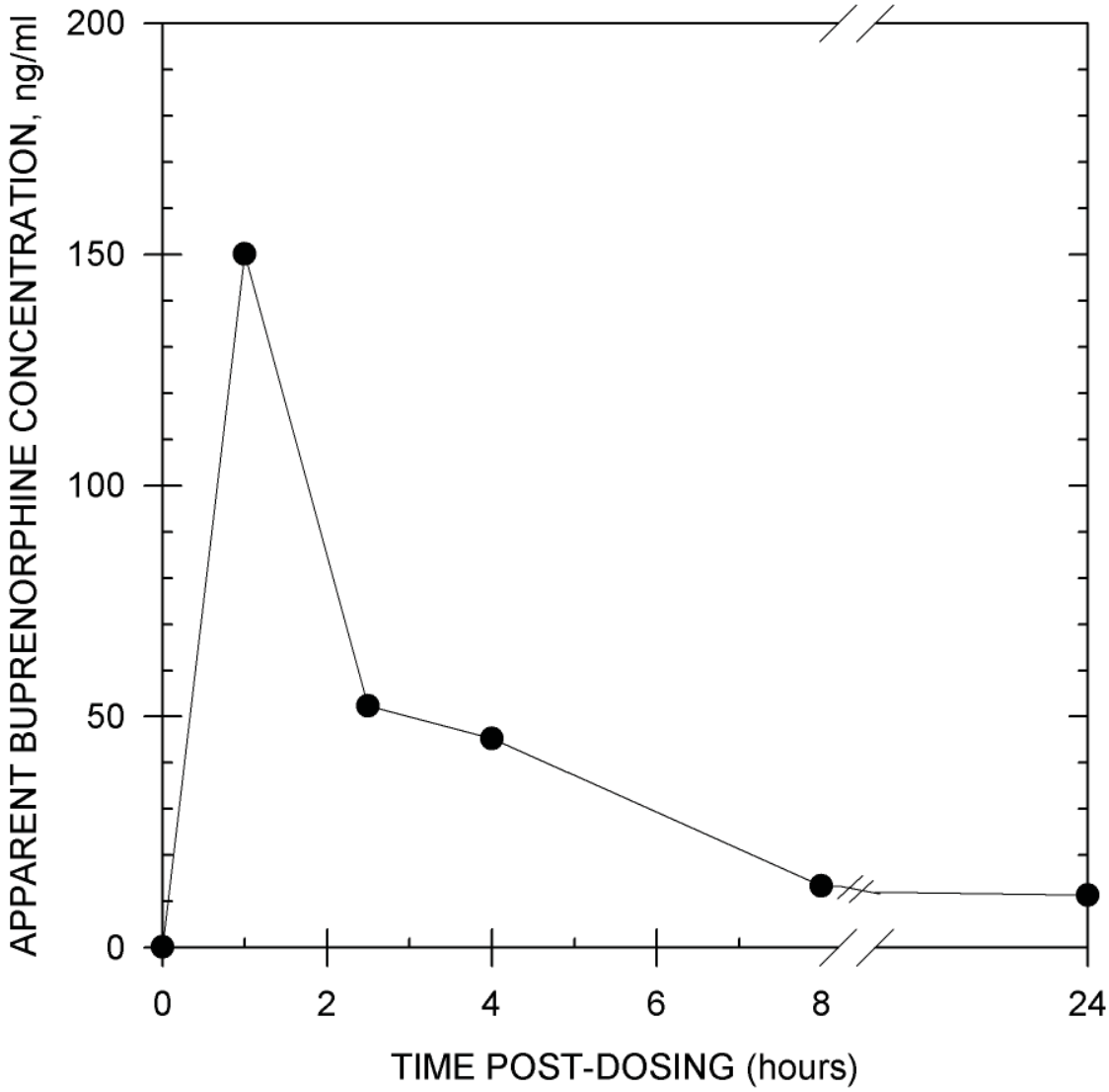


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After an administration of 1.5 mg of buprenorphine by intravenous injection to one horse, the presence of this drug was detected for 24 hours in equine urine. Because all post-dose samples exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Buprenorphine	100%
Diprenorphine	50%
Cyprenorphine	12.5%
Norbuprenorphine	0.82%
Butorphanol	0.05%
Carfentanil	0.03%
Fentanyl	0.03%
Etorphine	0.01%
Naltrexone	0.01%
Sufentanil	0.01%

Acetaminophen	<0.01%
Alfentanil	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Amitriptyline	<0.01%
Anileridine	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%
Aspirin	<0.01%
Chlordiazepoxide	<0.01%
Chlorpromazine	<0.01%
Clenbuterol	<0.01%
Cotinine	<0.01%
Codeine	<0.01%
Dextromethorphan	<0.01%
Dextromoramide	<0.01%
Dezocine	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Doxepin	<0.01%
Erythromycin	<0.01%
Ethylmorphine	<0.01%
Ethyl -p-Amino-Benzoate (Benzocaine)	<0.01%
Fenoprofen	<0.01%
Flunixin	<0.01%
Furosemide	<0.01%
Gemfibrozil	<0.01%
Gentisic Acid	<0.01%
Glipizide	<0.01%
Glutethimide	<0.01%
Glycopyrrolate	<0.01%
Heparin	<0.01%
Hordenine	<0.01%
Hydrocodone	<0.01%
Hydrocortisone	<0.01%
Hydromorphone	<0.01%
Ibuprofen	<0.01%
Imipramine	<0.01%
Levorphanol	<0.01%
Lidocaine	<0.01%
Lofentanil	<0.01%
Meperidine	<0.01%
Metaproterenol	<0.01%
Methadone	<0.01%
Methaqualone	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
6α-Methylprednisolone	<0.01%
Morphine	<0.01%
Nalbuphine	<0.01%
Nalorphine	<0.01%
Naloxone	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Norcodeine	<0.01%
Normorphine	<0.01%
Noroxymorphone	<0.01%
Nortriptyline	<0.01%
Orphenadrine	<0.01%
Oxycodone	<0.01%
Oxymorphone	<0.01%
Oxyphenbutazone	<0.01%
Penicillin G-Potassium	<0.01%
Penicillin G-Procaine	<0.01%
Pentazocine	<0.01%
Pentoxifylline	<0.01%
Phenazocine	<0.01%
Phencyclidine	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Primadone	<0.01%
Procaine	<0.01%
Procainamide	<0.01%
Pyrantel	<0.01%
Quinidine	<0.01%
Quinine	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Theophylline	<0.01%
Thiamine	<0.01%
Trimipramine	<0.01%

ENHANCED KIT

BUSPIRONE

Product # 108710
& 108715 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Buspirone	3.8 ng/ml
Azaperone	1.0 ng/ml
Piribedil	7.1 ng/ml

I-50 in Equine Urine (Diluted 1:1)		**I-50 in Canine Urine (Diluted 1:9)**	
Buspirone	8.8 ng/ml	Buspirone	33 ng/ml
Azaperone	0.9 ng/ml	Azaperone	1.2 ng/ml
Piribedil	10 ng/ml	Piribedil	56 ng/ml
I-50 in Equine Plasma (Diluted 1:1)		**I-50 in Equine Serum (Diluted 1:1)**	
Buspirone	7.7 ng/ml	Buspirone	10.2 ng/ml
Azaperone	2.5 ng/ml	Azaperone	2.5 ng/ml
Piribedil	19 ng/ml	Piribedil	14 ng/ml

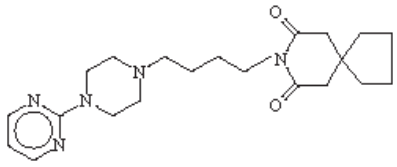
Precision:

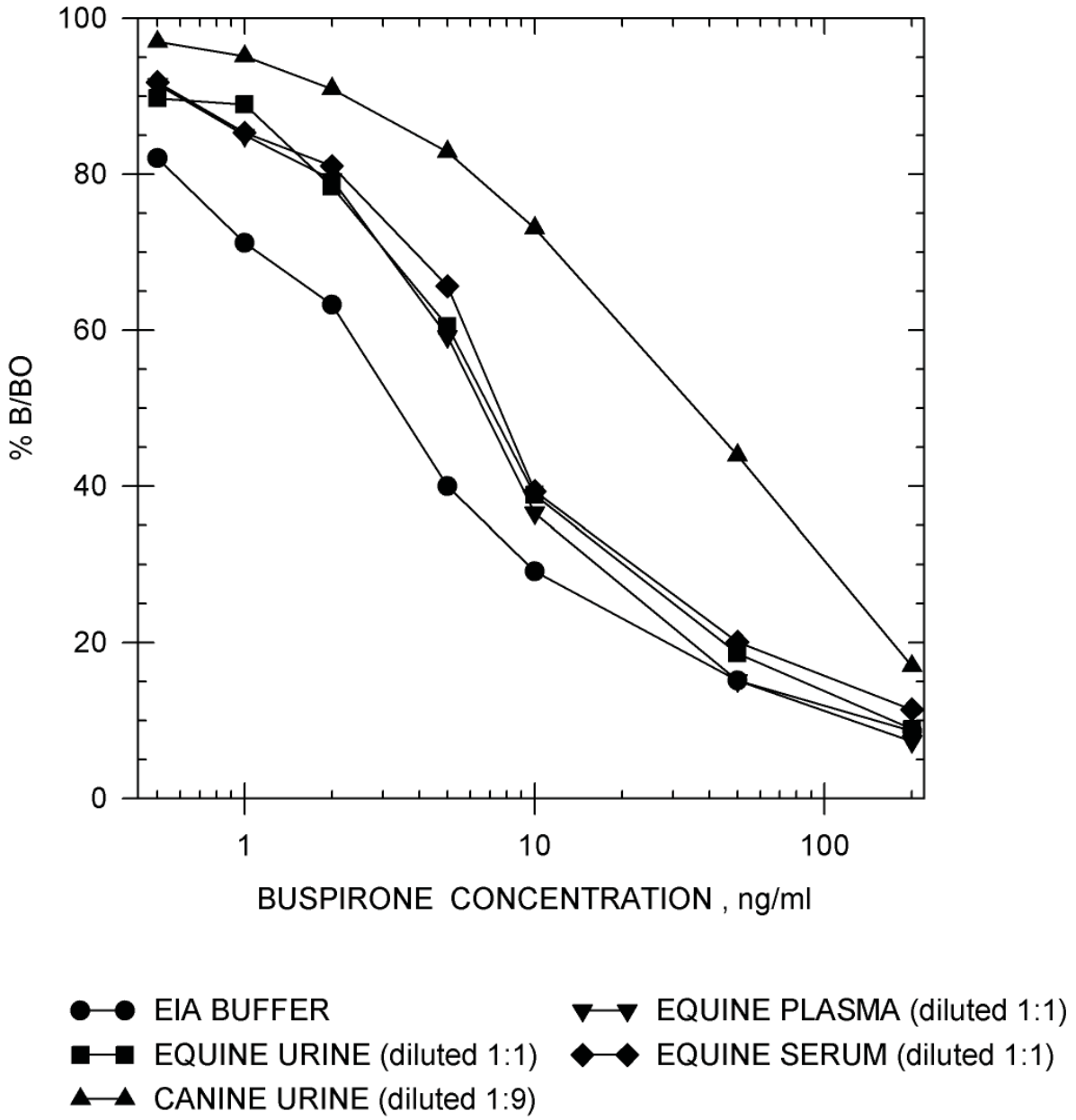
Intra-Assay	3.09%
Inter-Assay	2.20%

Note: Measuring wavelength was 650 nm.

BUSPIRONE STANDARD CURVES

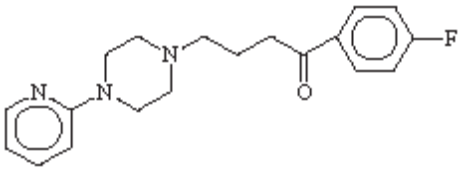
Buspirone

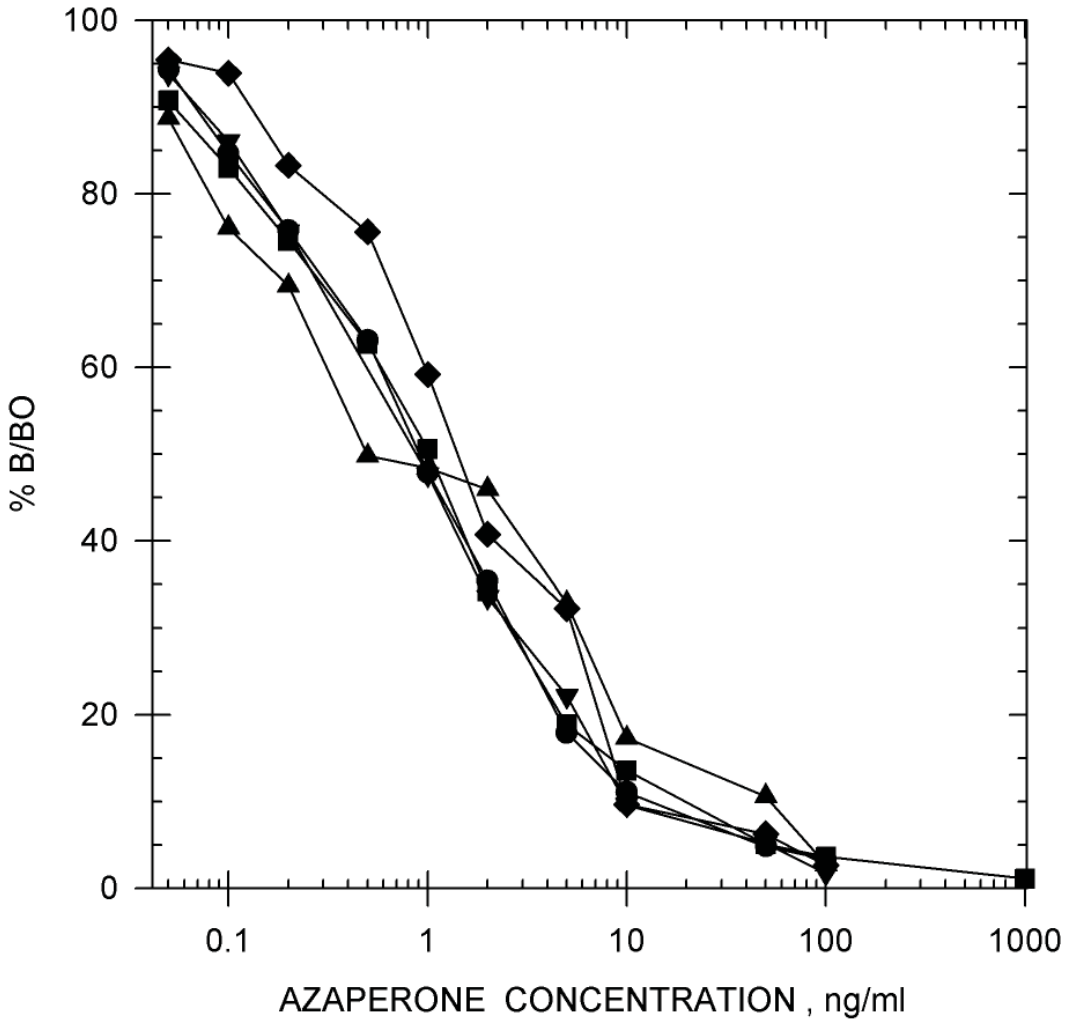




BUSPIRONE STANDARD CURVES

Azaperone

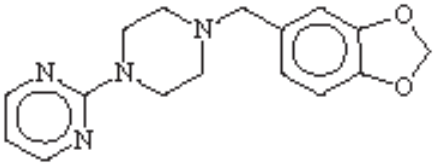


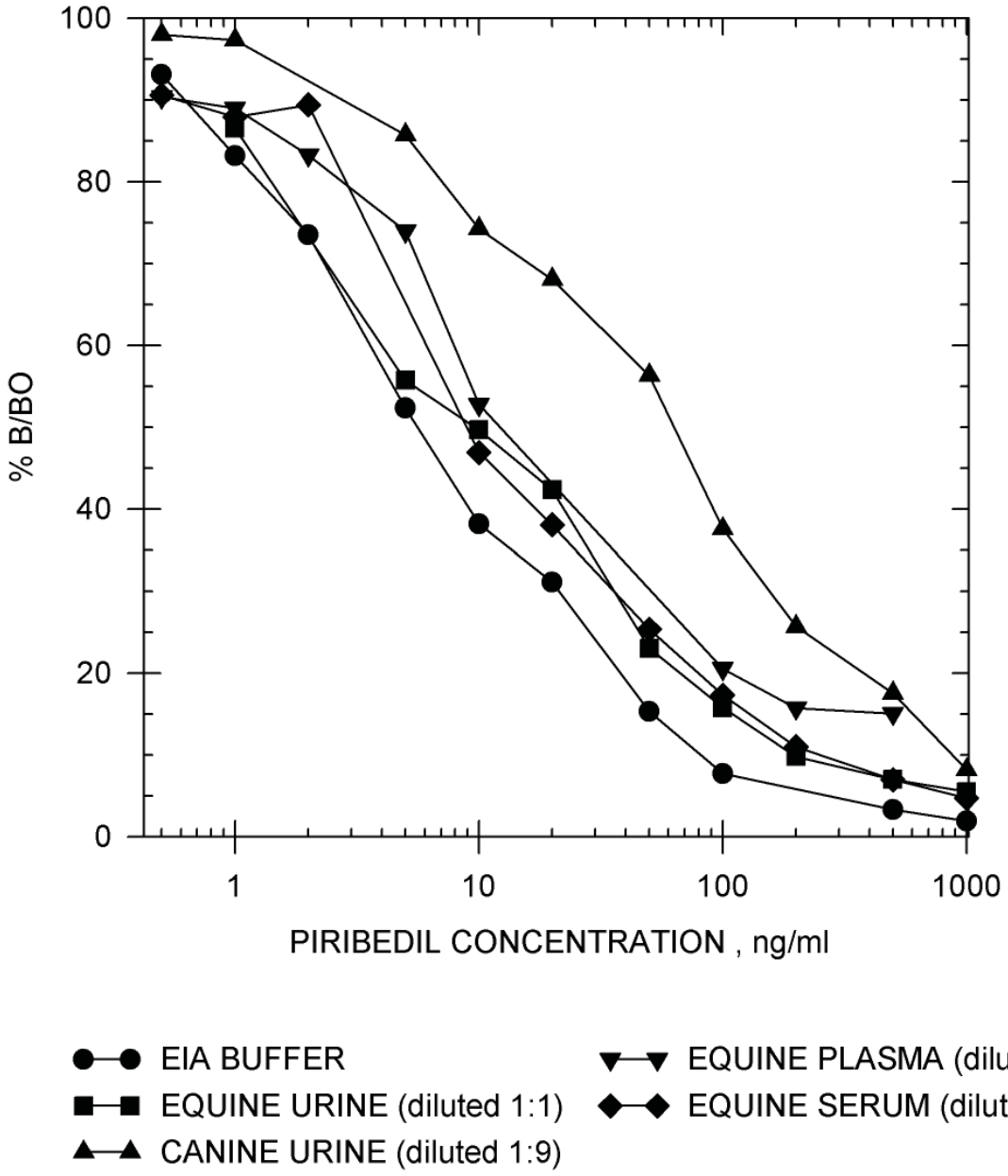


EIA BUFFER
EQUINE PLASMA (diluted 1:1)
EQUINE URINE (diluted 1:1)
EQUINE SERUM (diluted 1:1)
CANINE URINE (diluted 1:9)

BUSPIRONE STANDARD CURVES

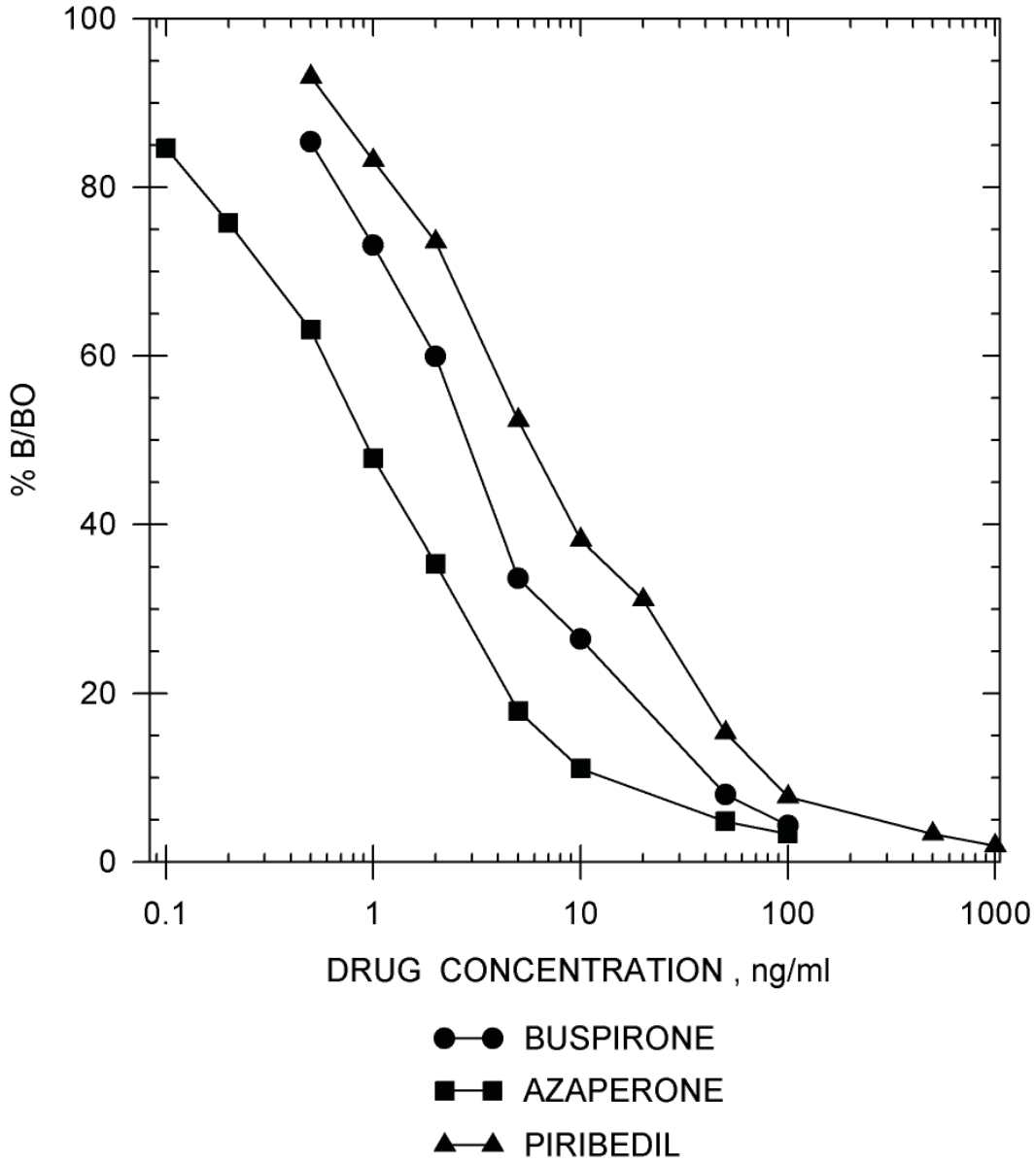
Piribedil





BUSPIRONE STANDARD CURVES

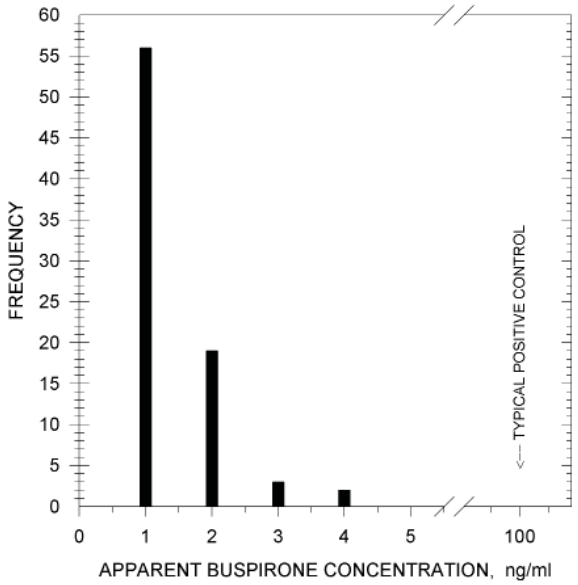
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:1, has shown no background levels above 3.4 ng/ml.

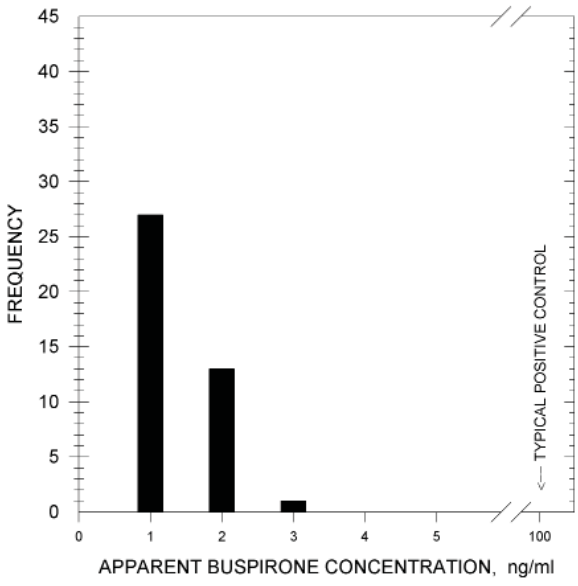
Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 41 post-race canine urine samples, diluted 1:9, has shown no background levels above 2.6 ng/ml.

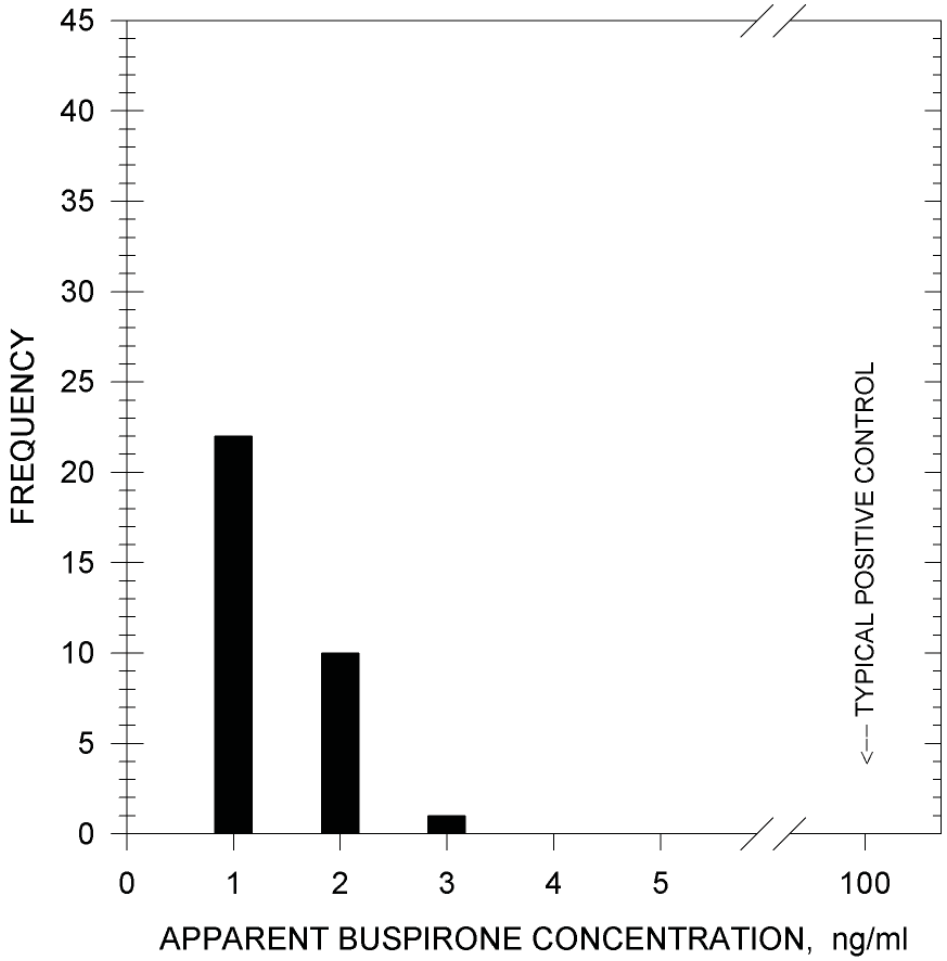
Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

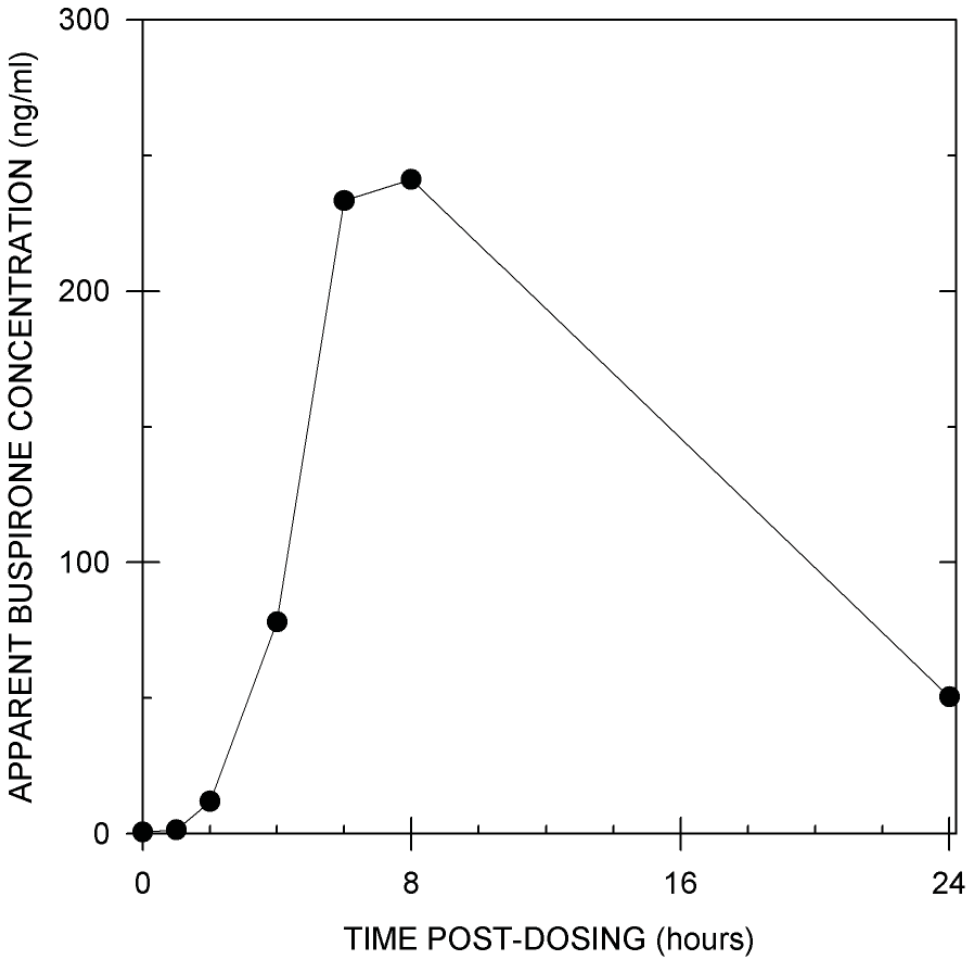
Backgrounds: Analysis of 33 post-race equine plasma samples, diluted 1:1, has shown no background levels above 2.2 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) will reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection: After oral administration of 50 mg of Buspirone to one horse, the presence of this drug was detected up to 24 hours post-administration. Samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Azaperone	270%
Buspirone	100%
Piribedil	61%
5'-Hydroxyazaperone	0.8%
5'-Hydroxyazaperol	0.4%
Haloperidol	0.4%
Metaproterenol	0.3%
Fluanisone	0.2%
Isoxsuprine	0.2%
Pyrantel	0.08%
Trazadone	0.06%
1-Benzylpiperazine	0.02%

Acepromazine	<0.01%	Gemfibrozil	<0.01%	Oxyphenbutazone	<0.01%
Acetaminophen	<0.01%	Gentisic Acid	<0.01%	Penicillin G-Potassium	<0.01%
Acetylsalicylic Acid	<0.01%	Glipizide	<0.01%	Penicillin G-Procaine	<0.01%
ε-amino-n-caproic Acid	<0.01%	L-Glutamic Acid	<0.01%	Pentoxifylline	<0.01%
Amitriptyline	<0.01%	Glutethimide	<0.01%	Phencyclidine (PCP)	<0.01%
Amphetamine	<0.01%	Glycopyrrolate	<0.01%	Phenothiazine	<0.01%
Ascorbic Acid	<0.01%	Heparin	<0.01%	Phenylbutazone	<0.01%
Caffeine	<0.01%	Hippuric Acid	<0.01%	Polyethylene Glycol	<0.01%
Chlordiazepoxide	<0.01%	Hordenine	<0.01%	Prednisolone	<0.01%
Chlorpromazine	<0.01%	Hydrocortisone	<0.01%	Primidone	<0.01%
Clenbuterol	<0.01%	Hydromorphone	<0.01%	Procainamide	<0.01%
Codeine	<0.01%	Ibuprofen	<0.01%	Procaine	<0.01%
Cortisol	<0.01%	Imipramine	<0.01%	Promazine	<0.01%
Cotinine	<0.01%	Lidocaine	<0.01%	Pseudoephedrine	<0.01%
Dexamethasone	<0.01%	Meperidine	<0.01%	Pyrilamine	<0.01%
Dextromethorphan	<0.01%	Methadone	<0.01%	Pyrimethamine	<0.01%
Diclofenac	<0.01%	Methamphetamine	<0.01%	Quinidine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methaqualone	<0.01%	Quinine	<0.01%
Dipyrone	<0.01%	Methocarbamol	<0.01%	Salbutamol	<0.01%
Doxepin	<0.01%	Methylene Blue	<0.01%	Salicylamide	<0.01%
Ephedrine	<0.01%	Methylprednisolone	<0.01%	Salicylic Acid	<0.01%
Erythromycin	<0.01%	Nalorphine	<0.01%	Theophylline	<0.01%
Ethyl p-aminobenzoate	<0.01%	Naproxen	<0.01%	Thiamine	<0.01%
Fenoprofen	<0.01%	Niacinamide	<0.01%	Trimethoprim	<0.01%
Flunixin	<0.01%	Nicotine	<0.01%	Trimipramine	<0.01%
Folic Acid	<0.01%	Nortriptyline	<0.01%	Uric Acid	
Folinic Acid	<0.01%	Orphenadrine	<0.01%	<0.01%	
Furosemide	<0.01%	Oxycodone	<0.01%		

ENHANCED KIT

BUTORPHANOL

Product# 101110 &

101115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Butorphanol	0.27 ng/ml
Nalbuphine	0.72 ng/ml

I-50 in Equine Urine

Butorphanol	0.33 ng/ml
Nalbuphine	0.90 ng/ml

I-50 in Canine Urine

Butorphanol	0.27 ng/ml
Nalbuphine	0.66 ng/ml

I-50 in Equine Plasma

Butorphanol	0.42 ng/ml
Nalbuphine	0.56 ng/ml

I-50 in Equine Serum

Butorphanol	0.53 ng/ml
Nalbuphine	0.74 ng/ml

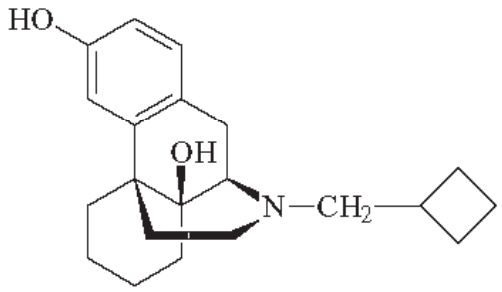
Note: Measuring wavelength was 650 nm**.**

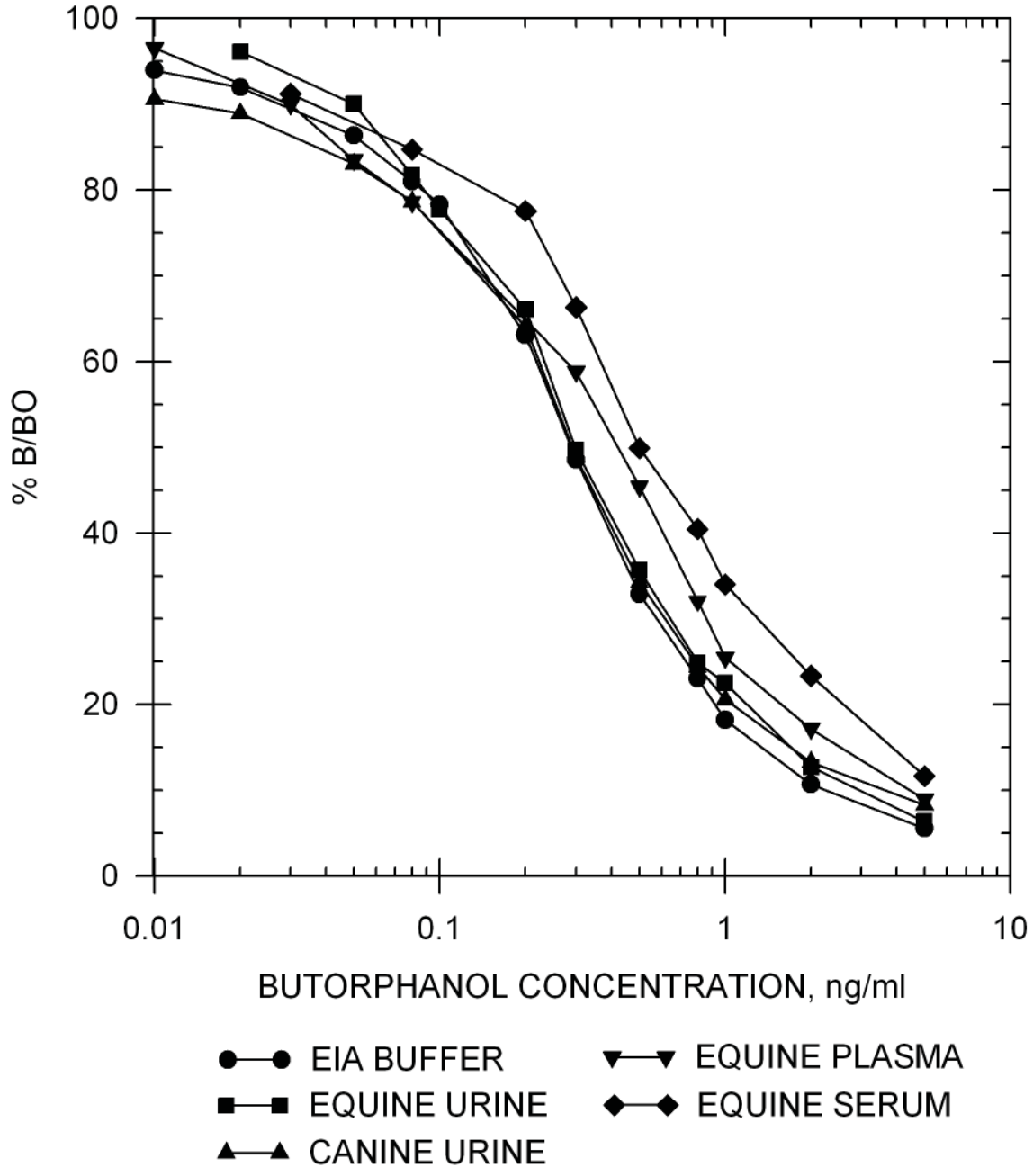
Precision:

Intra-assay	6.52%
Inter-assay	4.81%

BUTORPHANOL STANDARD CURVES

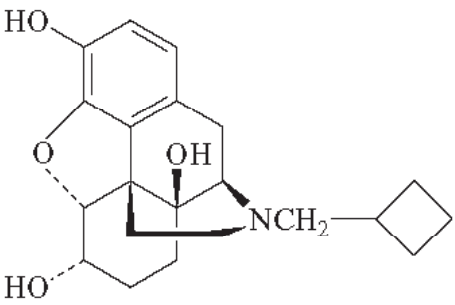
Butorphanol

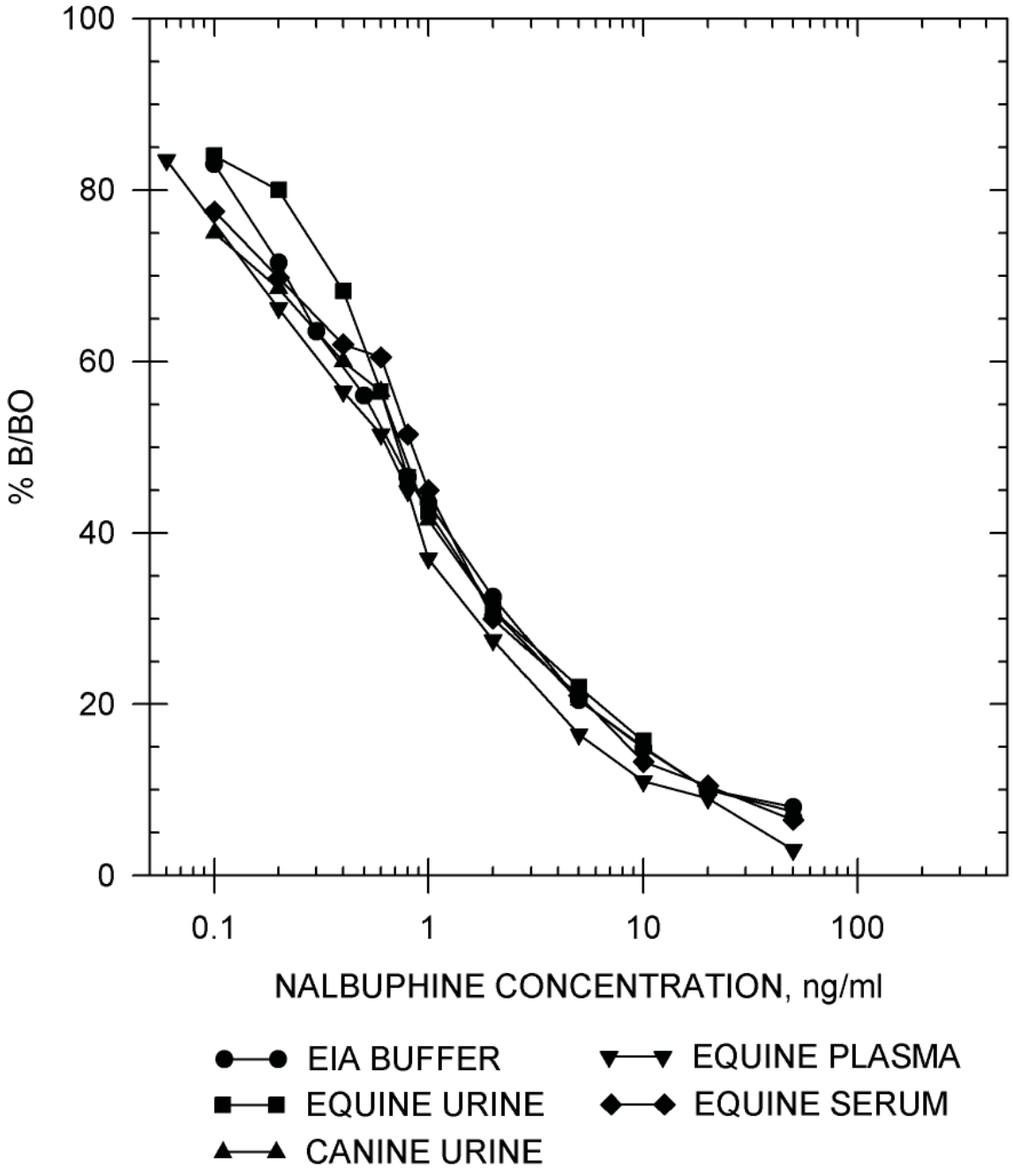




BUTORPHANOL STANDARD CURVES

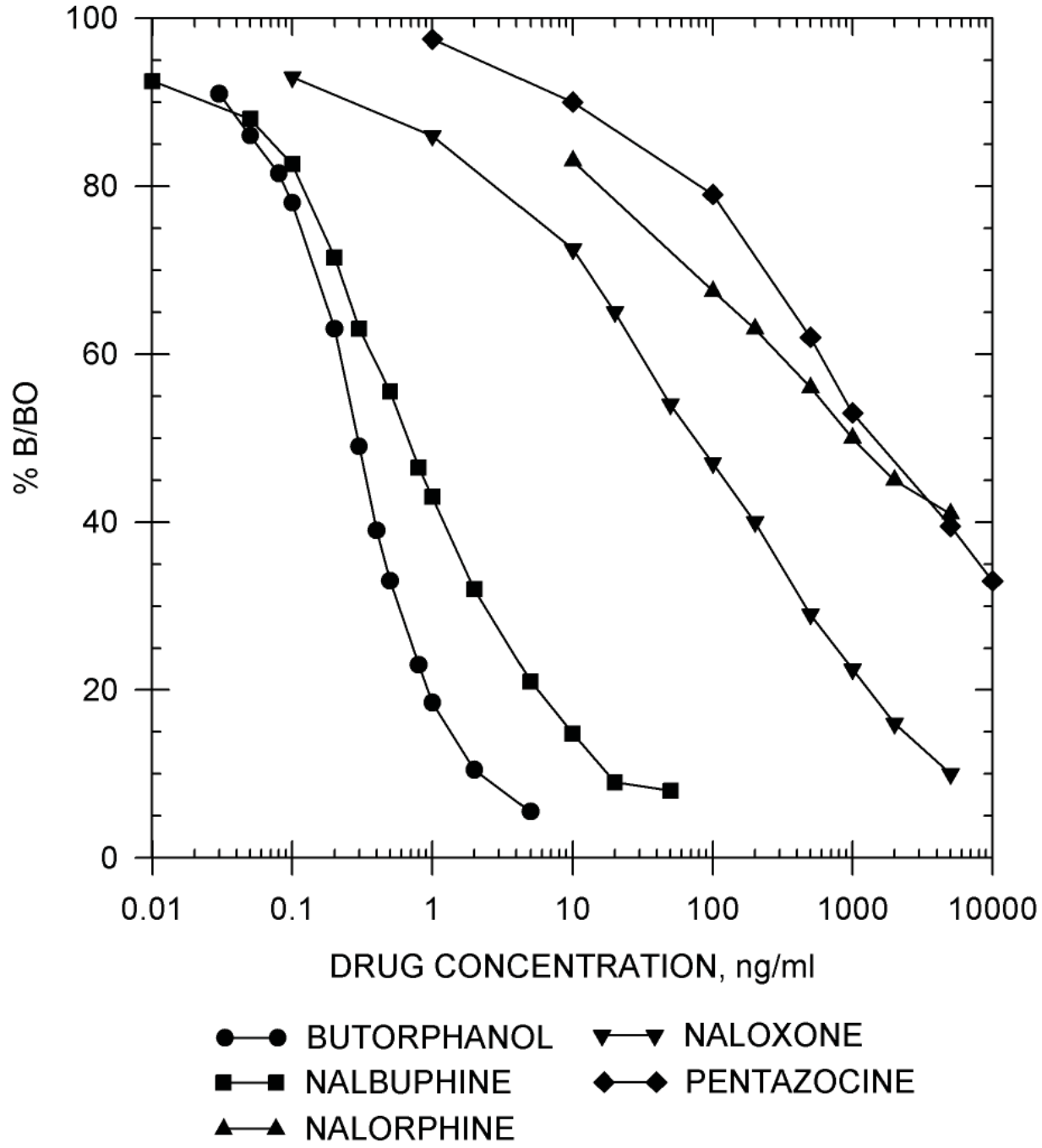
Nalbuphine





BUTORPHANOL STANDARD CURVES

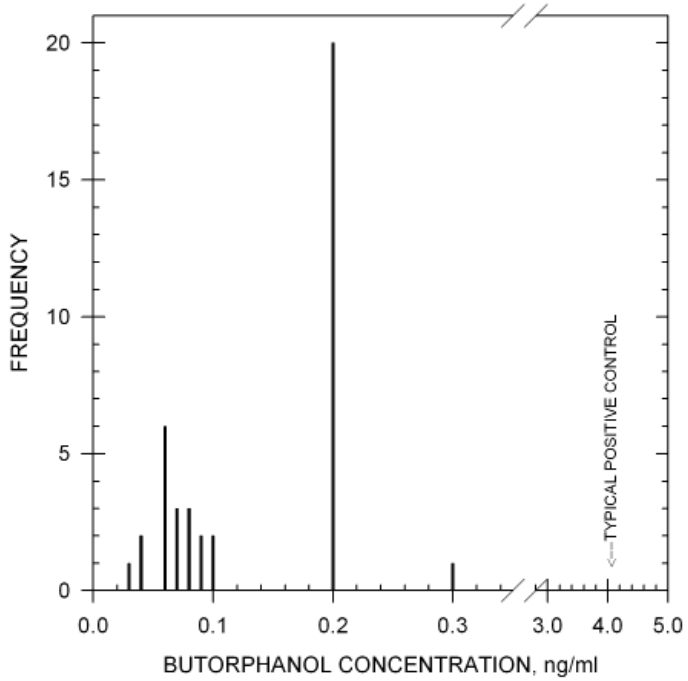
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.21 ng/ml.

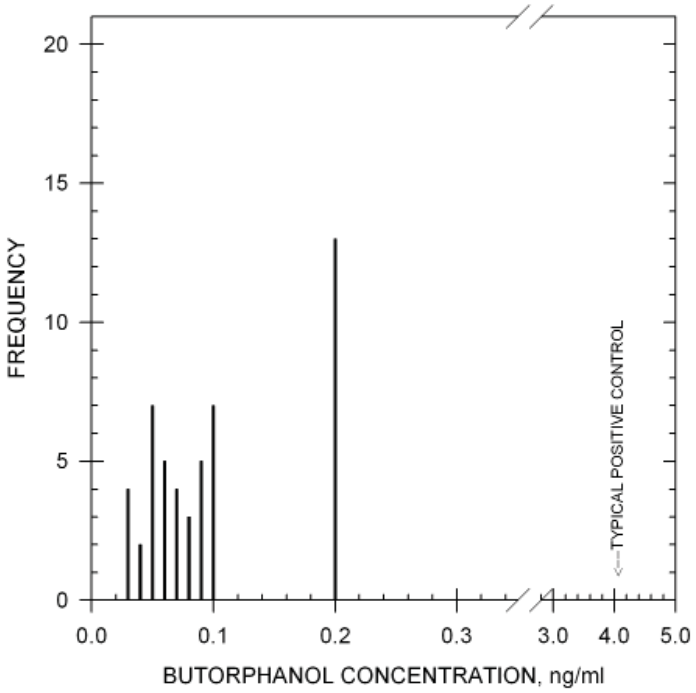
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples has shown no background levels above 0.16 ng/ml.

Sample Treatment: No sample dilution is necessary.



ADDITIONAL BACKGROUND LEVELS

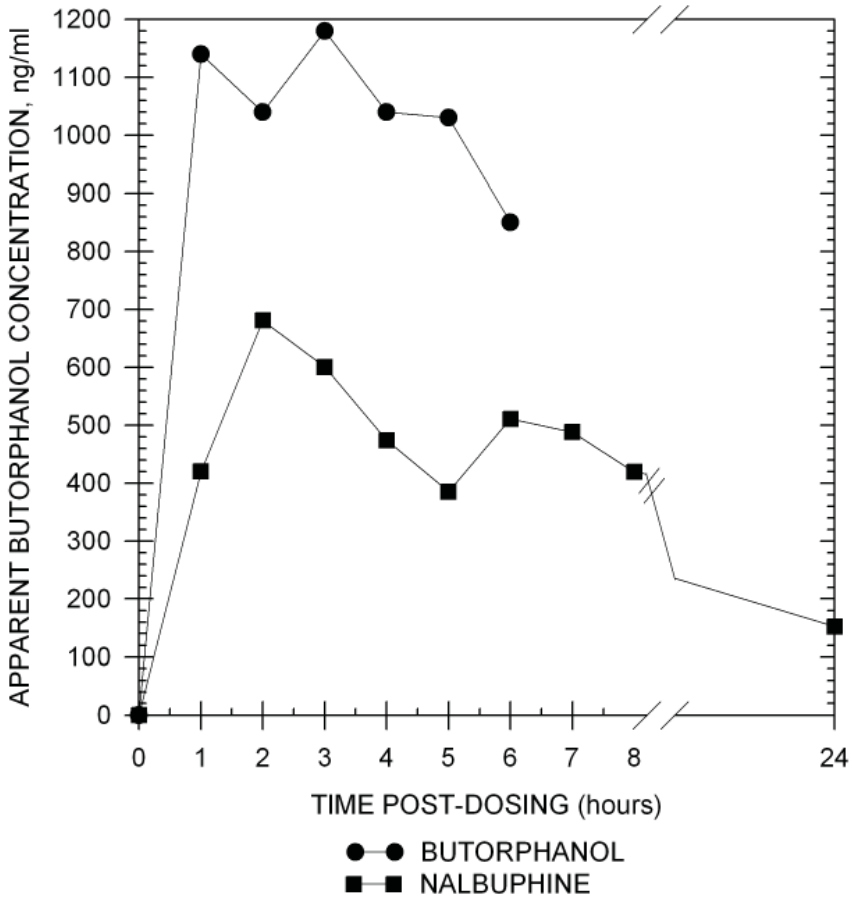
Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 50 mg of butorphanol by intramuscular injection to one horse, the presence of this drug was detected for 6 hours in equine urine with indication of detectability for longer periods of time.

After administration of 50 mg of nalbuphine by intramuscular injection to one horse, the presence of this drug was detected for 24 hours in equine urine with indications of detectability for longer periods of time.

Note: Because all post-dose samples exceeded the range of the assay, all samples were diluted 1:1000 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Butorphanol	100%
Nalbuphine	38%
Naloxone	0.44%
Nalorphine	0.02%
Pentazocine	0.02%

Acetaminophen	<0.01%	Levorphanol	<0.01%
Alfentanil	<0.01%	Lidocaine	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Lofentanil	<0.01%
Amitriptyline	<0.01%	Meperidine	<0.01%
Anileridine	<0.01%	Metaproterenol	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methadone	<0.01%
Aspirin	<0.01%	Methaqualone	<0.01%
Buprenorphine	<0.01%	Methocarbamol	<0.01%
Carfentanil	<0.01%	Methylene Blue	<0.01%
Chlordiazepoxide	<0.01%	6α-Methylprednisolone	<0.01%
Chlorpromazine	<0.01%	Morphine	<0.01%
Clenbuterol	<0.01%	Naproxen	<0.01%
Codeine	<0.01%	Niacinamide	<0.01%
Cotinine	<0.01%	Norcodeine 0.1 mg/ml	<0.01%
Dextromethorphan	<0.01%	Normorphine	<0.01%
Dextromoramide	<0.01%	Noroxymorphone	<0.01%
Dezocine	<0.01%	Nortriptyline	<0.01%
Diclofenac	<0.01%	Orphenadrine	<0.01%
Dimethyl Sulfoxide	<0.01%	Oxycodone	<0.01%
Diprenorphine	<0.01%	Oxymorphone	<0.01%
Dipyrone	<0.01%	Oxyphenbutazone	<0.01%
Doxepin	<0.01%	Penicillin G-Potassium	<0.01%
Erythromycin	<0.01%	Penicillin G-Procaine	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Pentoxifylline	<0.01%
		Phenazine	<0.01%
Ethylmorphine 0.1 mg/ml	<0.01%	Phencyclidine	<0.01%
Etorphine	<0.01%	Phenothiazine	<0.01%
Fenoprofen	<0.01%	Phenylbutazone	<0.01%
Fentanyl	<0.01%	Polyethylene Glycol	<0.01%
Flunixin	<0.01%	Prednisolone	<0.01%
Furosemide	<0.01%	Primadone	<0.01%
Gemfibrozil	<0.01%	Procainamide	<0.01%
Gentisic Acid	<0.01%	Procaine	<0.01%
Glipizide	<0.01%	Pyrantel	<0.01%
Glutethimide	<0.01%	Quinidine	<0.01%
Glycopyrrolate	<0.01%	Quinine	<0.01%
Hordenine	<0.01%	Salbutamol	<0.01%
Hydrocodone	<0.01%	Salicylamide	<0.01%
Hydrocortisone	<0.01%	Salicylic Acid	<0.01%
Hydromorphone	<0.01%	Sufentanil	<0.01%
Ibuprofen	<0.01%	Theophylline	<0.01%
Imipramine	<0.01%	Thiamine	<0.01%
Levallorphan	<0.01%	Trimipramine	<0.01%

ENHANCED KIT

CAFFEINE/PENTOXIFYLLINE

Product# 106410 &
106415 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Caffeine	6.0 ng/ml
Pentoxifylline	1.3 ng/ml
Theobromine	11 ng/ml

I-50 in Equine Urine (Diluted 1:5)

Caffeine	21 ng/ml
Pentoxifylline	10 ng/ml
Theobromine	55 ng/ml

I-50 in Canine Urine (Diluted 1:5)

Caffeine	35 ng/ml
Pentoxifylline	10 ng/ml
Theobromine	95 ng/ml

I-50 in Equine Plasma

Caffeine	6.4 ng/ml
Pentoxifylline	1.9 ng/ml
Theobromine	14 ng/ml

I-50 in Equine Serum

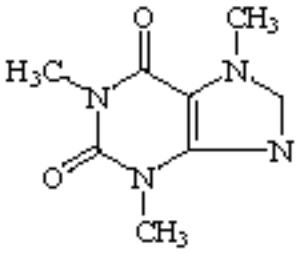
Caffeine	7.2 ng/ml
Pentoxifylline	1.5 ng/ml
Theobromine	16 ng/ml

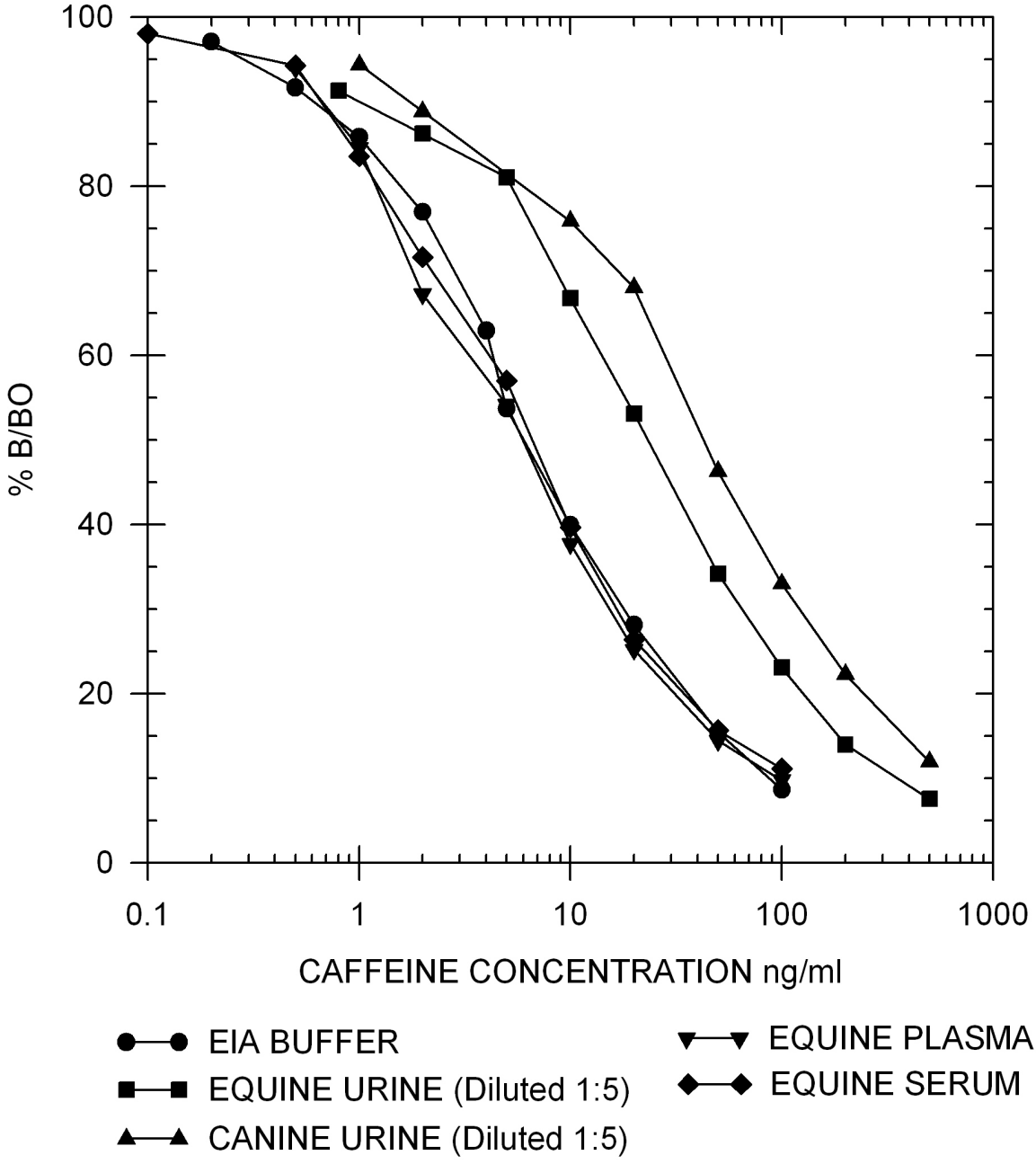
Precision:	Intra-assay	2.81%
	Inter-assay	2.56%

Note: Measuring wavelength was 650 nm.

CAFFEINE/PENTOXIFYLLINE STANDARD CURVES

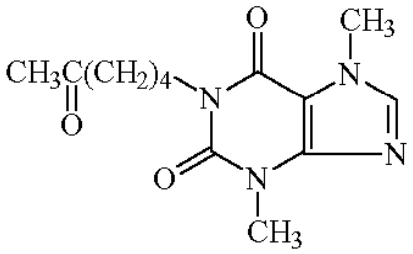
Caffeine

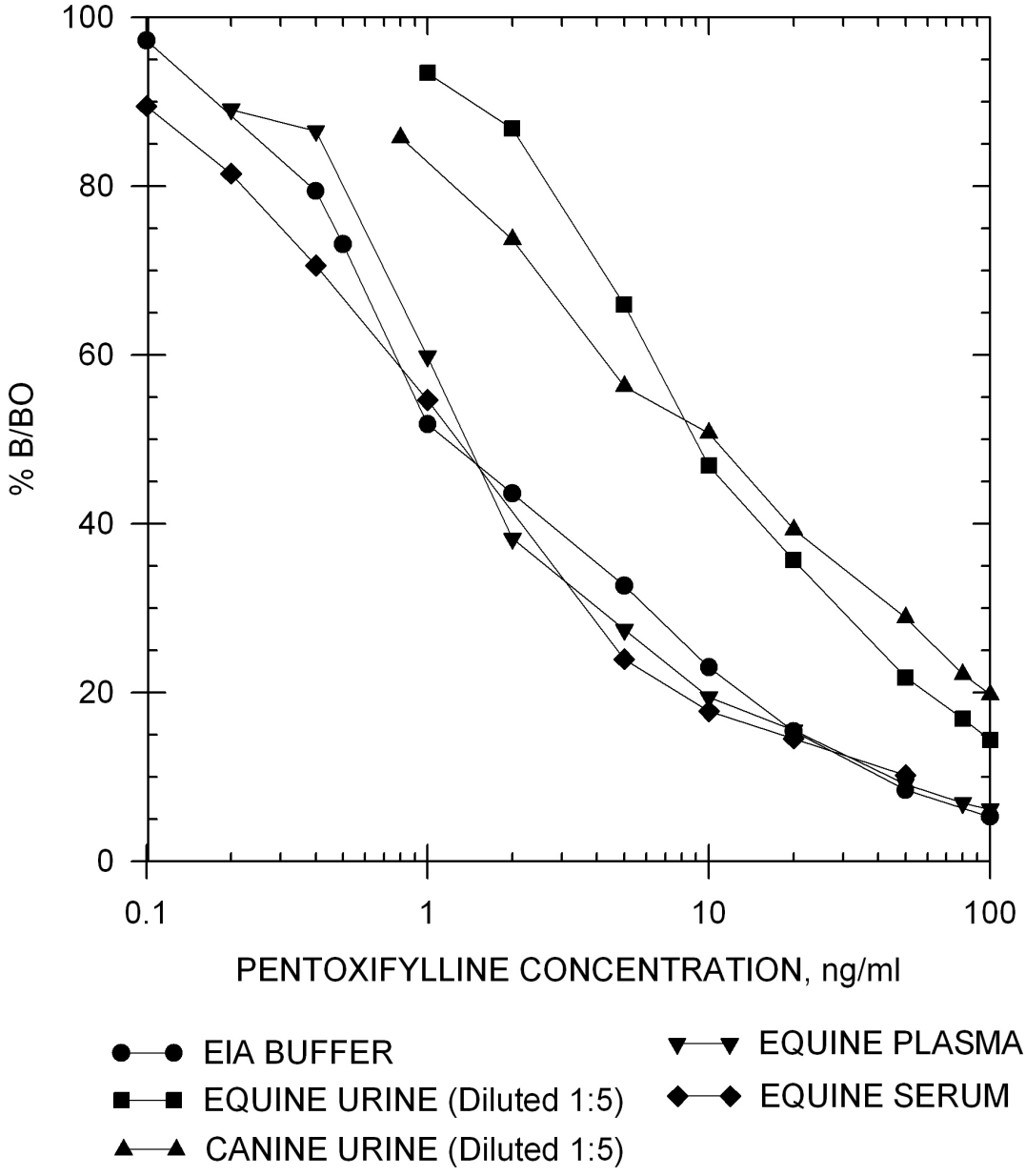




CAFFEINE/PENTOXIFYLLINE STANDARD CURVES

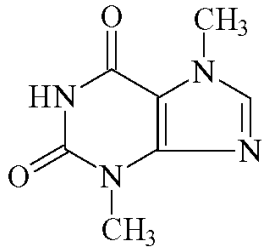
Pentoxifylline

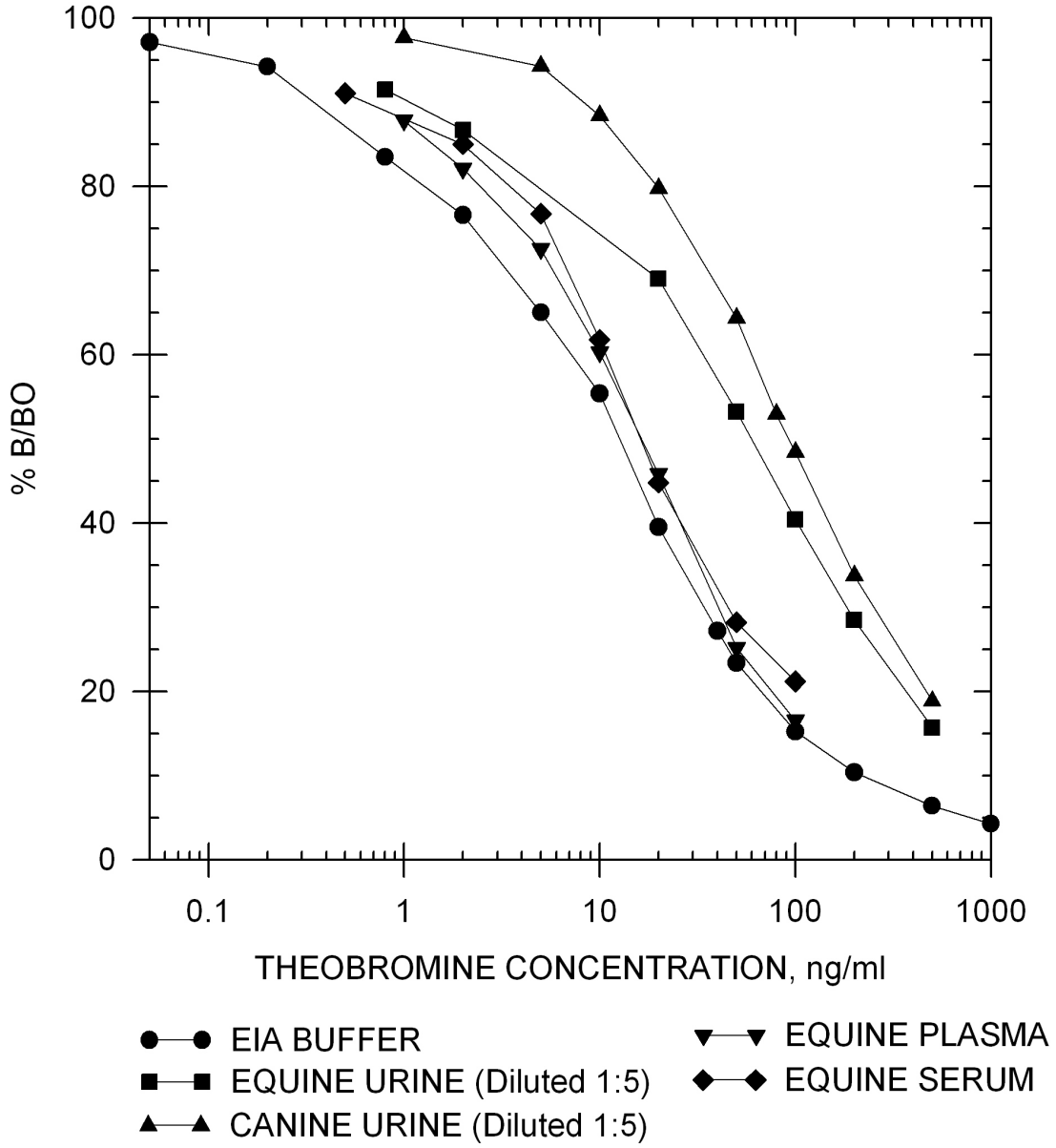




CAFFEINE/PENTOXIFYLLINE STANDARD CURVES

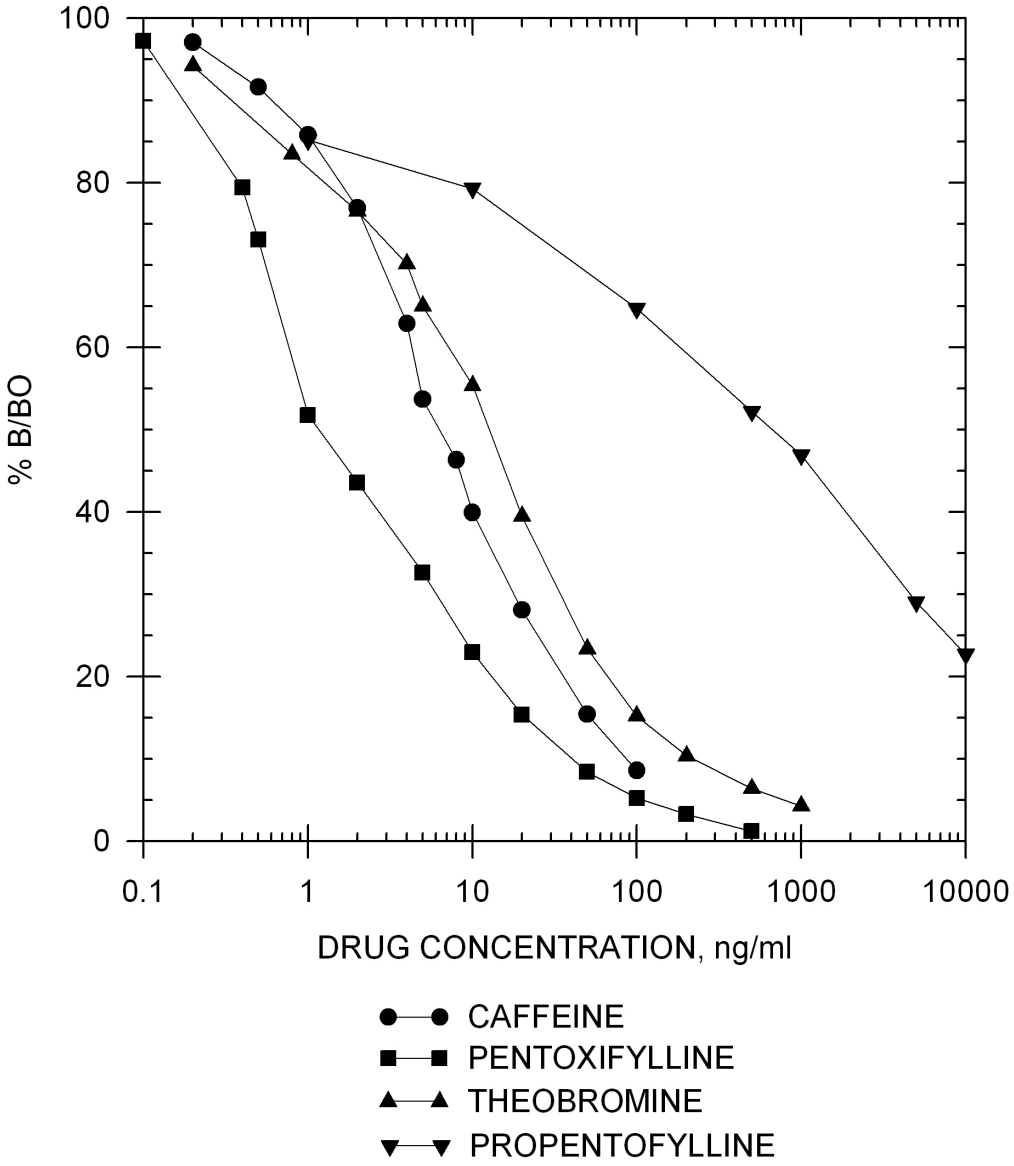
Theobromine





CAFFEINE/PENTOXIFYLLINE STANDARD CURVES

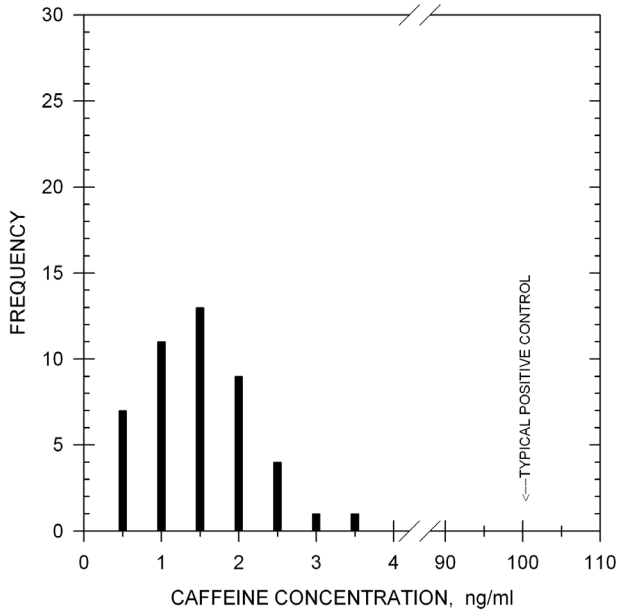
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 46 post-race equine urine samples, diluted 1:5, has shown no background levels above 3.5 ng/ml.

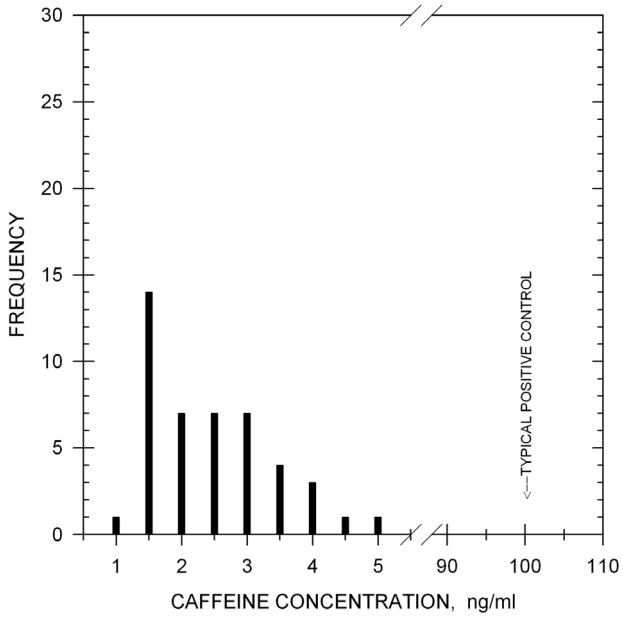
Sample Treatment: A dilution of 1:5 (i.e. 1 part urine to 5 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 45 post-race canine urine samples, diluted 1:5, has shown no background levels above 4.0 ng/ml.

Sample Treatment: A dilution of 1:5 (i.e. 1 part urine to 5 parts EIA buffer) is recommended to reduce natural backgrounds.

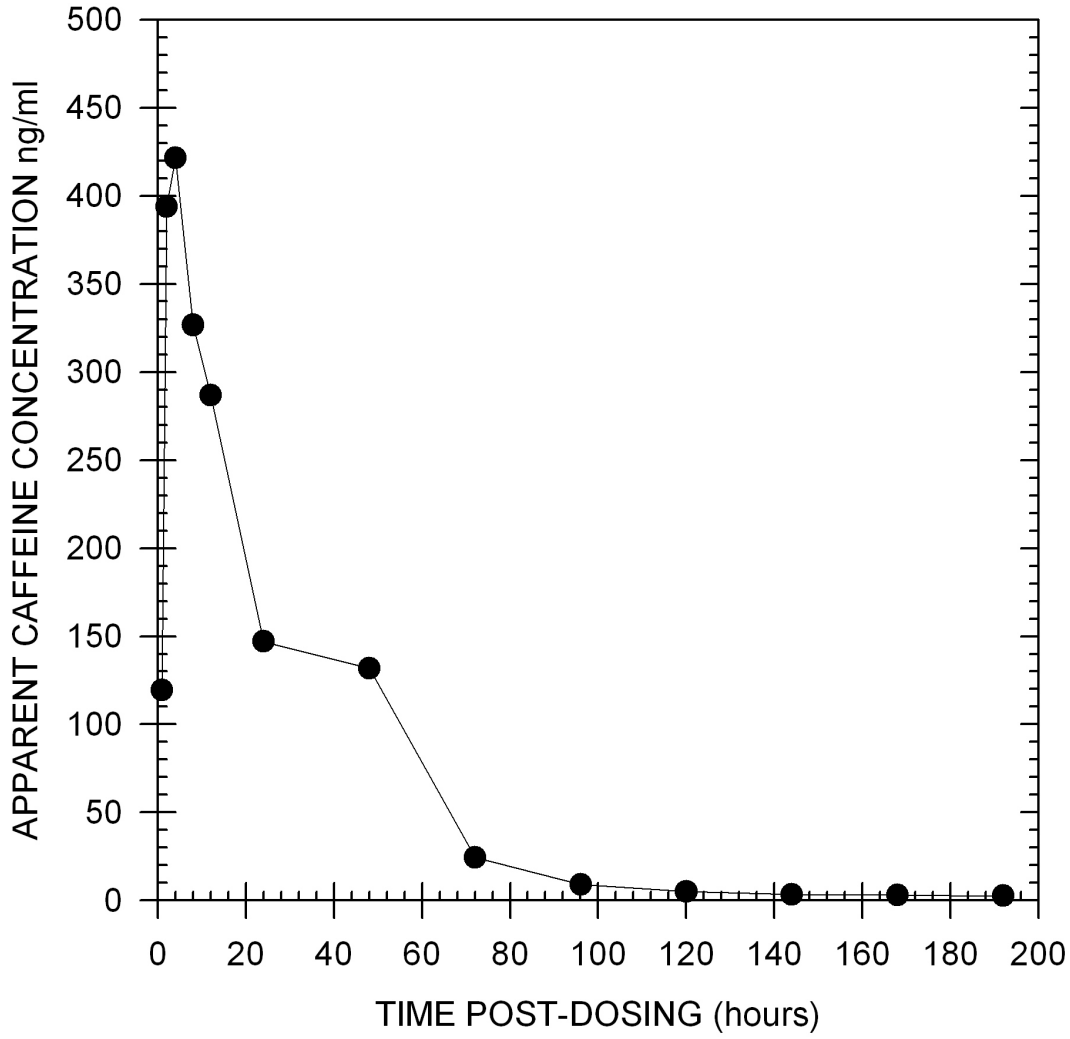


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

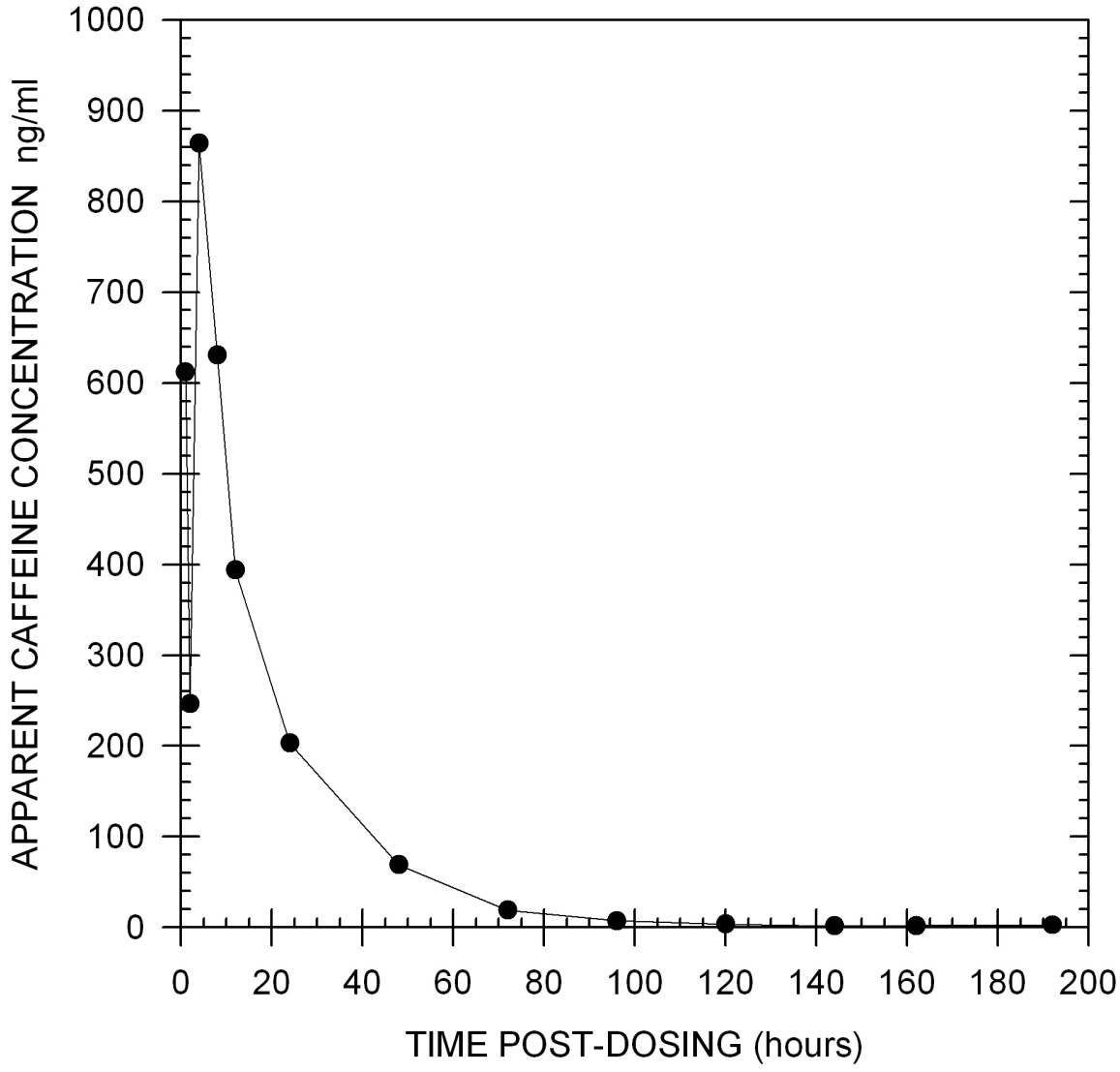
Duration of Detection: After administration of 250 mg of caffeine by intravenous injection to one horse, the presence of this drug was detected for at least 72 hours. All samples were diluted 1:5 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 250 mg of caffeine by intravenous injection to one horse, the presence of this drug was detected for at least 72 hours in equine plasma.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Pentoxifylline	173%
Caffeine	100%
Theobromine	24%
Paraxathine	3.91%
Propentofylline	0.77%
Aminophylline	0.15%
Propentofylline	0.12%
Theophylline	0.06%

Acetozolamide	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Amphetamine	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%
Atropine	<0.01%
Benzphetamine	<0.01%
Brucine	<0.01%
Bumetanide	<0.01%
Chlorothiazide	<0.01%
Clenbuterol	<0.01%
Cromolyn	<0.01%
Diclofenac	<0.01%
Diethylpropion	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Doxapram	<0.01%
Dyphylline	<0.01%
Enprofylline	<0.01%
Ethacrynic Acid	<0.01%
Ethamivan	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%
α–Ethyltryptamine	<0.01%
Flunixin	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Hordenine	<0.01%
Hydrochlorothiazide	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Ipratropium Bromide	<0.01%
Isoetharine	<0.01%
Isoproterenol	<0.01%
Ketoprofen	<0.01%
MDMA (3,4-Methylenedioxymethamphetamine)	<0.01%
Magnesium	<0.01%
Mazindol	<0.01%
Meclofenamic Acid	<0.01%
Mefexamide	<0.01%
Metaproterenol	<0.01%
Methamphetamine	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
Methylphenidate	<0.01%
6α-Methylprednisolone	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Nikethamide	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
Pemoline	<0.01%
Pentylenetetrazole	<0.01%
Phendimetrazine	<0.01%
Phenothiazine	<0.01%
Phentermine	<0.01%
Phenylbutazone	<0.01%
Picrotoxin	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Prednisone	<0.01%
Procaine	<0.01%
Pyrantel	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Terbutaline	<0.01%
Thiamine	<0.01%
Trichlormethiazide	<0.01%
Xanthine	<0.01%

CARFENTANIL

Product# 103910 & 103915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Carfentanil	0.1 ng/ml

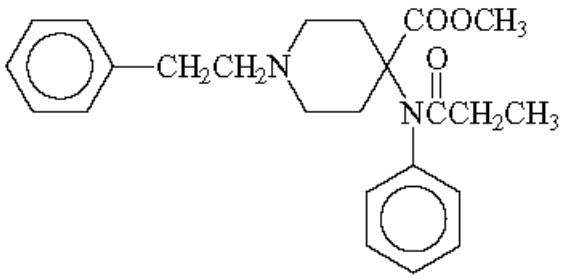
Precision:

Intra-assay	3.68 %
Inter-assay	6.02 %

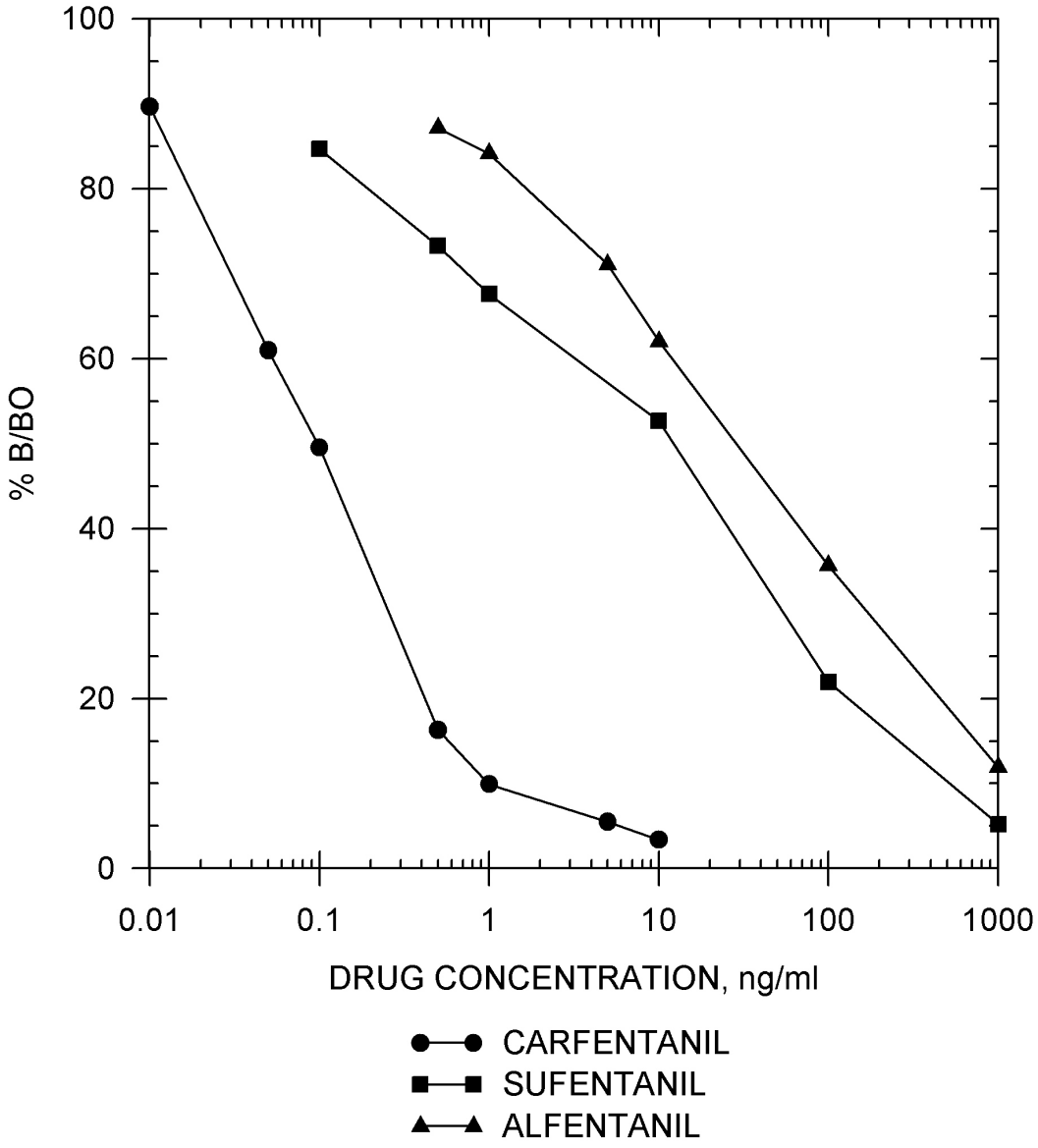
Note: Measuring wavelength was 650 nm**.**

CARFENTANIL STANDARD CURVES

Carfentanil



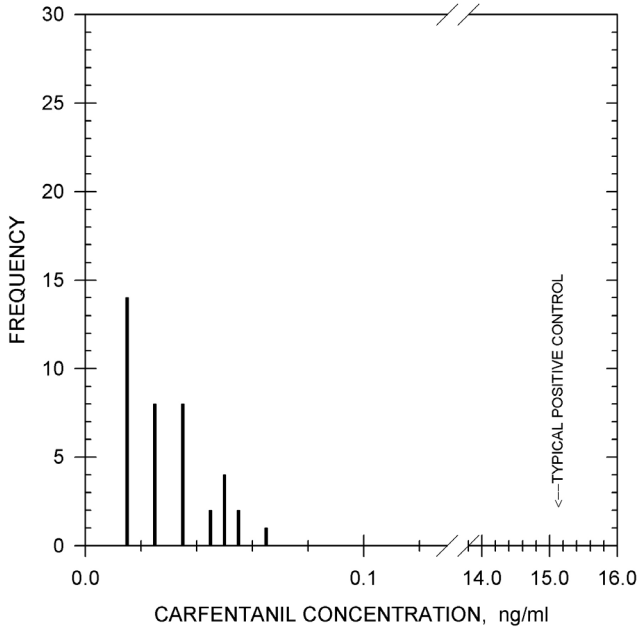
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

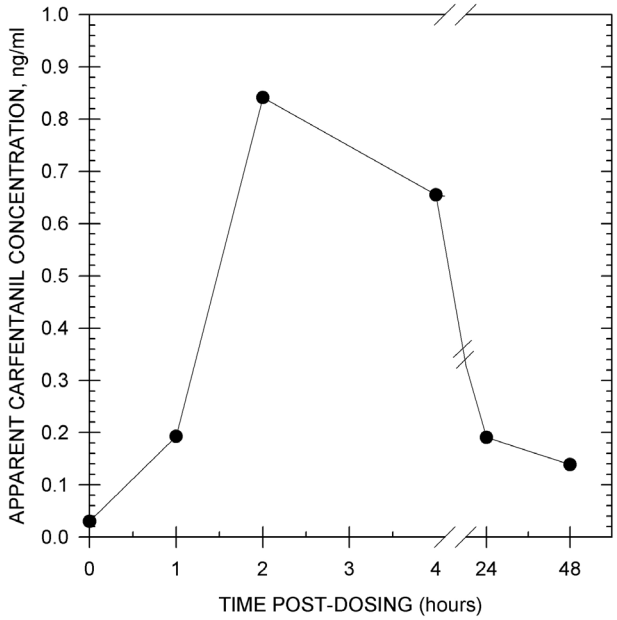
Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:2, has shown no background levels above 0.07 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recommended to reduce natural background.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 400 μg of carfentanil by intravenous injection to one horse, the presence of this drug was detected for 4 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Carfentanil	100%	Acrylfentanyl	0.02%
Sufentanil	0.5%	Cyclopropylfentanyl	0.02%
Alfentanil	0.2%	Furanylethylfentanyl	0.02%
Fentanyl	0.06%	α-Methylthiofentanyl	0.02%
B-Methylfentan yl	0.06%	Butyrfentanyl	0.01%
Lofentanil	0.04%	p-Chlorisobutyrylfentanyl	0.01%
Norsufentanil	<0.05%	Methoxyacetylfentanyl	0.01%
Acetylfentanyl	0.02%		

Acepromazine	< 0.01%	Fluoroisobutryfentanyl	< 0.01%	Nicotine	< 0.01%
Acetaminophen	< 0.01%	Folic Acid	< 0.01%	Norfentanyl	< 0.01%
Acetylsalicylic Acid	< 0.01%	Folinic Acid	< 0.01%	Nortriptyline	< 0.01%
E-amino-n-caproic Acid	<0.01%	Furosemide	< 0.01%	Ocfentanyl	< 0.01%
Amitriptyline	< 0.01%	Gemfibrozil	< 0.01%	Orphenadrine	< 0.01%
Anileridine	< 0.01%	Gentisic Acid	< 0.01%	Oxphenbutazone	< 0.01%
Ascorbic Acid	< 0.01%	Glipizide	< 0.01%	Oxymorphone	< 0.01%
Benzoic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	PCP	< 0.01%
Benzoylecgonine	< 0.01%	Glutethimide	< 0.01%	Penicillin G-Potassium	< 0.01%
Benzylfentanyl	< 0.01%	Glycopyrrolate	< 0.01%	Penicillin G-Procaine	< 0.01%
Buprenorphine	< 0.01%	Heparin	< 0.01%	Pentazocine	< 0.01%
Butorphanol	< 0.01%	Hippuric Acid	< 0.01%	Pentoxifylline	< 0.01%
Chlordiazepoxide	< 0.01%	Hordenine	< 0.01%	Phenazocine	< 0.01%
Chlorpromazine	< 0.01%	Hydrocodone	< 0.01%	Phenothiazine	< 0.01%
Clenbuterol	< 0.01%	Hydrocortisone	< 0.01%	Phenylbutazone	< 0.01%
Codeine	< 0.01%	Hydromorphone	< 0.01%	Polyethylene Glycol	< 0.01%
Cotinine	< 0.01%	B-Hydroxyfentanyl	< 0.01%	Prednisolone	< 0.01%
Cyclopentylfentanyl	< 0.01%	B-Hydroxythiofentanyl	< 0.01%	Primadone	< 0.01%
Despropionylfentanyl	< 0.01%	Ibuprofen	< 0.01%	Procainamide	< 0.01%
Despropionyl-3-methylfentanyl	< 0.01%	Imipramine	< 0.01%	Procaine	< 0.01%
Dexamethasone	< 0.01%	Isobutryfentanyl	< 0.01%	Promazine	< 0.01%
Dextromethorphan	< 0.01%	Isoxsuprine	< 0.01%	Propofol	<0.01%
Dezocine	< 0.01%	Lidocaine	< 0.01%	Pseudoephedrine	< 0.01%
Diclofenac	< 0.01%	Mazindol	< 0.01%	Pyrantel	< 0.01%
Dihydrocodeine	< 0.01%	Meperidine	< 0.01%	Pyrilamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaproterenol	< 0.01%	Pyrimethamine	< 0.01%
Dipyrone	< 0.01%	Methadone	< 0.01%	Quinidine	< 0.01%
Doxepin	< 0.01%	Methaqualone	< 0.01%	Quinine	< 0.01%
Ephedrine	< 0.01%	Methocarbamol	< 0.01%	Risperidone	< 0.01%
Erythromycin	< 0.01%	α-Methylfentanyl	< 0.01%	Salbutamol	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	3-Methylfentanyl	< 0.01%	Salicylamide	< 0.01%
Ethylmorphine	< 0.01%	Methylene Blue	< 0.01%	Salicylic Acid	< 0.01%
Etorphine	< 0.01%	Methylphenidate	< 0.01%	Theophylline	< 0.01%
Fenoprofen	< 0.01%	Methylprednisolone	< 0.01%	Thiamine	< 0.01%
Flunixin	< 0.01%	Morphine	< 0.01%	Thienylfentanyl	< 0.01%
p-Fluorobutyrylfentanyl	< 0.01%	Nalbuphine	< 0.01%	Trimethoprim	< 0.01%
p-Fluorofentanyl	< 0.01%	Nalorphine	< 0.01%	Trimipramine	< 0.01%
		Naproxen	< 0.01%	Uric Acid	< 0.01%
		Niacinamide	< 0.01%		

CARISOPRODOL (RTU) FORENSIC KIT

Product #132519 &132515

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Carisoprodol	120 ng/mL

I-50 in Equine Urine (Diluted 1:5)		**I-50 in Canine Urine**	
Carisoprodol	708.3 ng/mL	Carisoprodol	296.5 ng/mL

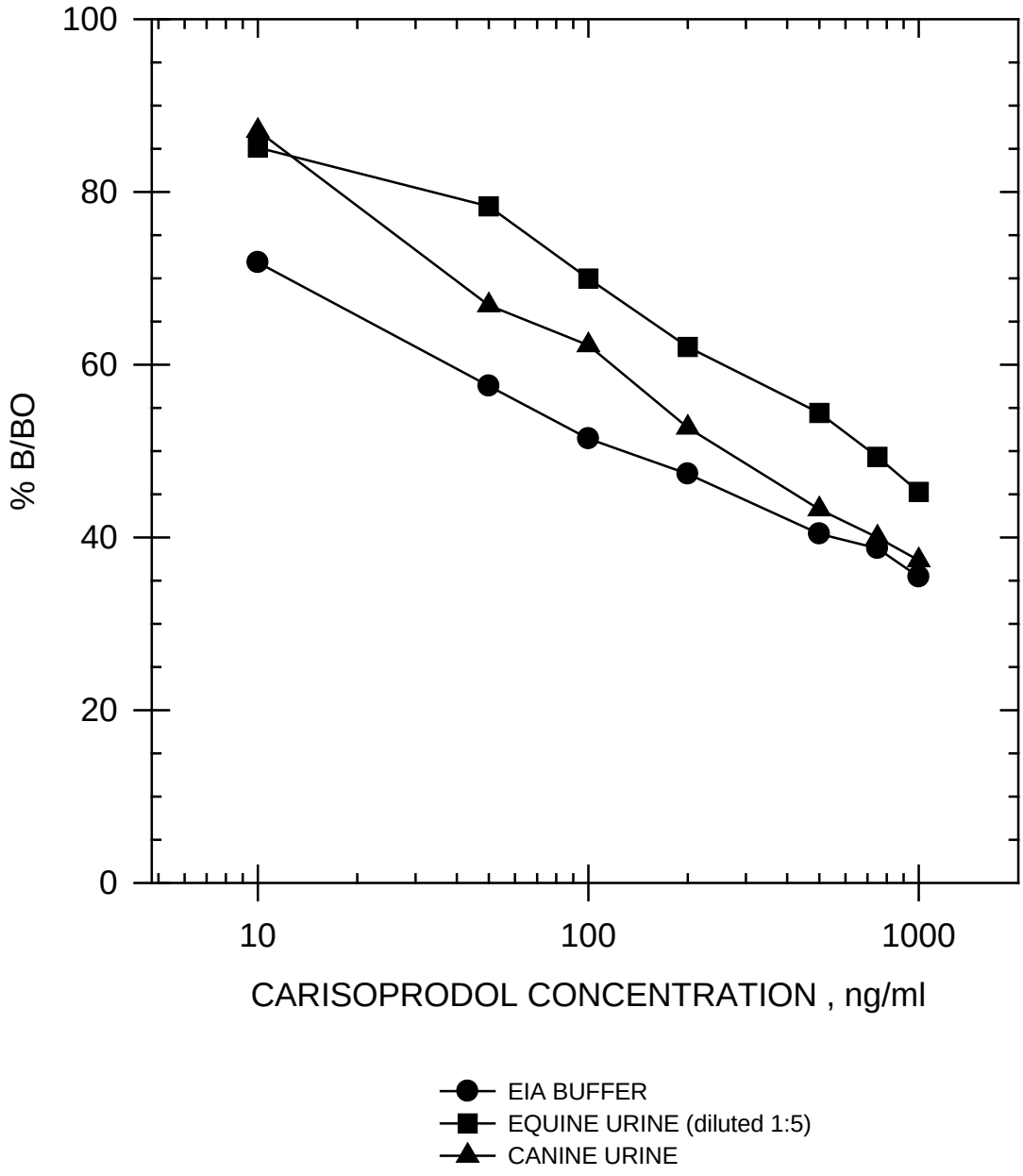
Precision:

Intra-assay	3.72%
Inter-assay	2.83%

Note: Measuring wavelength was 650 nm**.**

CARISOPRODOL STANDARD CURVES

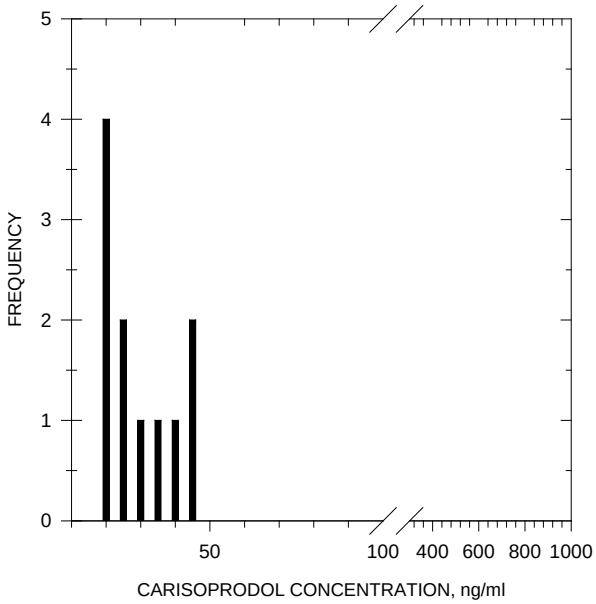
Carisoprodol Drug Standard Curve



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:5, has shown no background levels above 47 ng/mL.

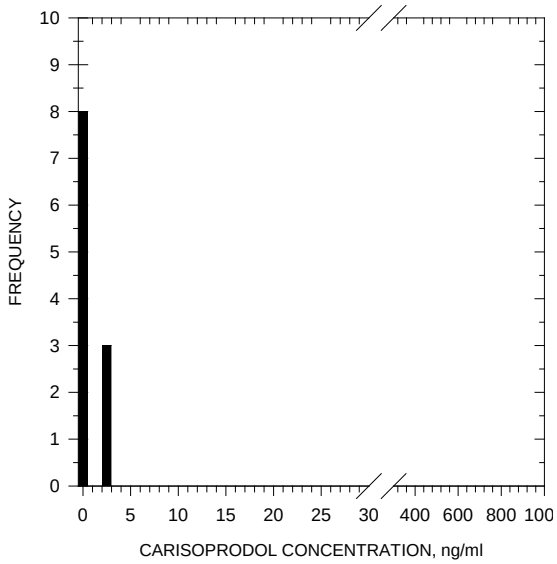
Sample Treatment: A dilution of 1:5 (i.e. 1 part to 5 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples has shown no background levels above 2.5 ng/mL.

Sample Treatment: No sample dilution necessary.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT
CARPROFEN

Product # 181110 &
181115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Carprofen	122 ng/ml
Methylene Blue	2,700 ng/ml
Phenothiazine	3,600 ng/ml
Acepromazine	4,643 ng/ml
Promazine	5,465 ng/ml

I-50 in Equine Urine (Diluted 1:4)

Carprofen	715 ng/ml
Methylene Blue	10,041 ng/ml
Phenothiazine	19,605 ng/ml
Acepromazine	16,665 ng/ml
Promazine	39,597 ng/ml

I-50 in Canine Urine (Diluted 1:4)

Carprofen	922 ng/ml
Methylene Blue	14,167 ng/ml
Phenothiazine	17,185 ng/ml
Acepromazine	35,334 ng/ml
Promazine	33,039 ng/ml

I-50 in Equine Plasma (Diluted 1:4)

Carprofen	2,123 ng/ml
Methylene Blue	10,470 ng/ml
Phenothiazine	13,362 ng/ml
Acepromazine	16,428 ng/ml
Promazine	35,769 ng/ml

I-50 in Equine Serum (Diluted 1:4)

Carprofen	1,915 ng/ml
Methylene Blue	9,119 ng/ml
Phenothiazine	6,100 ng/ml
Acepromazine	14,747 ng/ml
Promazine	28,224 ng/ml

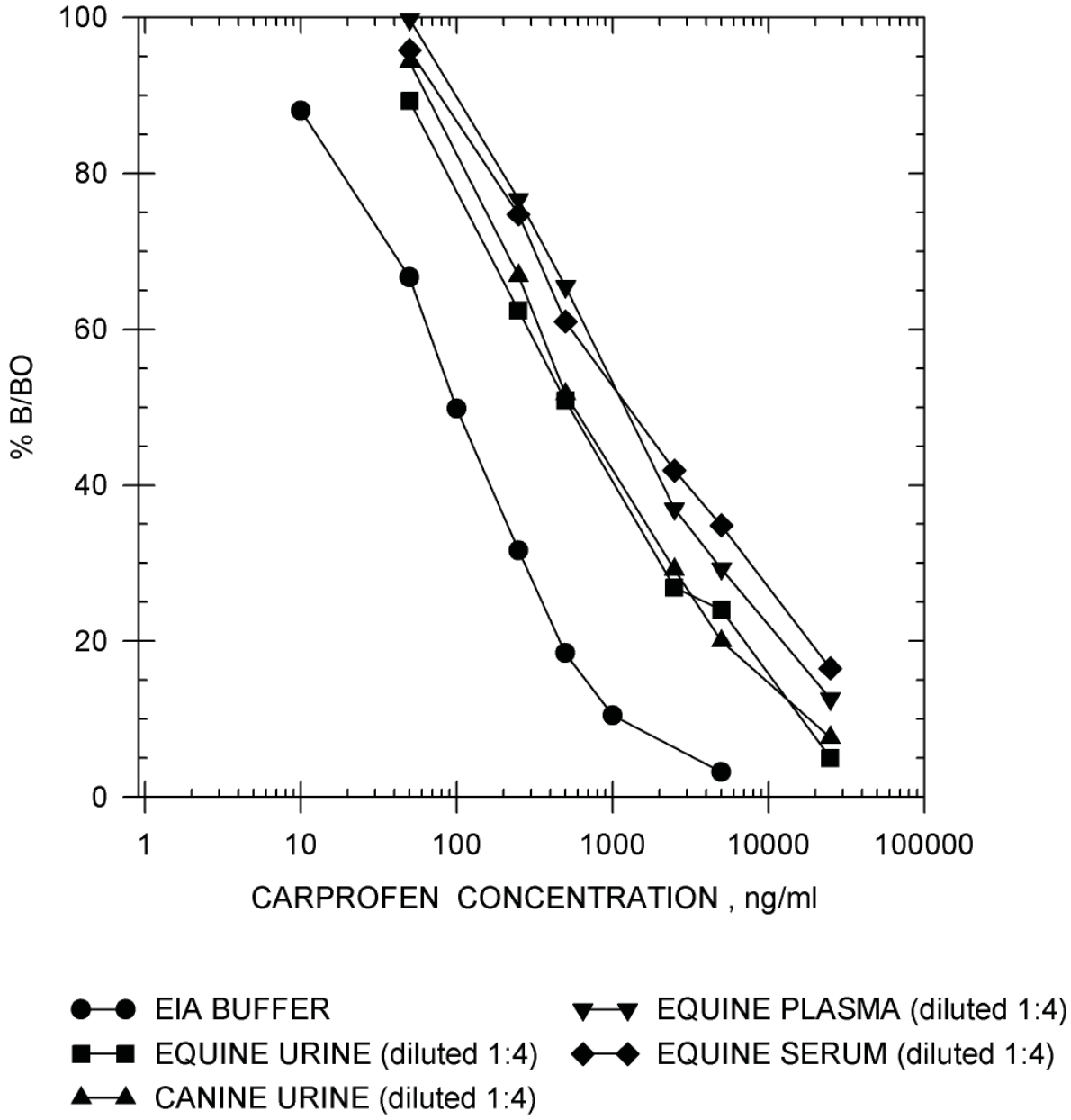
Note: Measuring wavelength was 650 nm.

Precision:

Intra-assay	3.20 %
Inter-assay	3.98 %

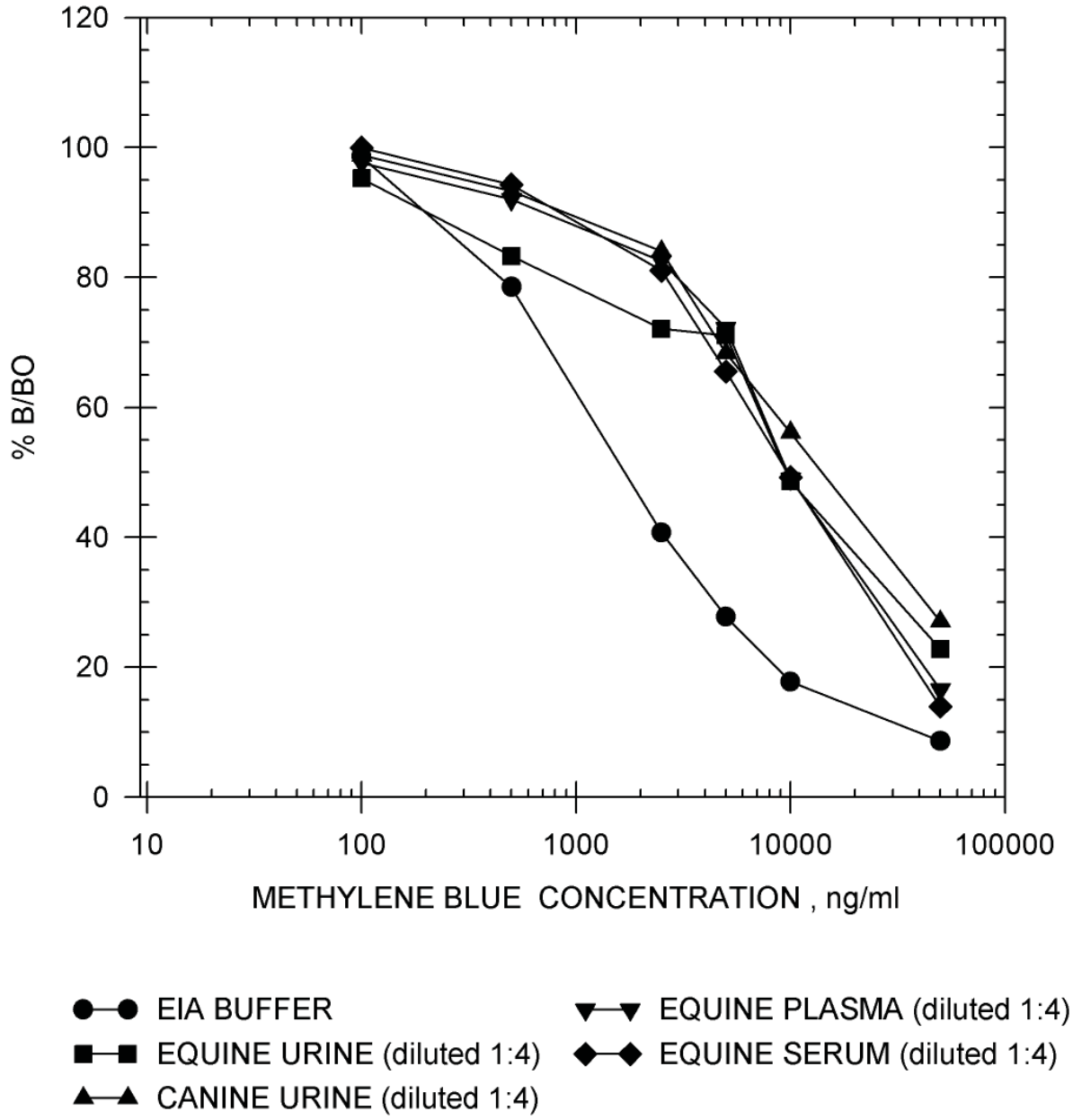
CARPROFEN STANDARD CURVE

Carprofen



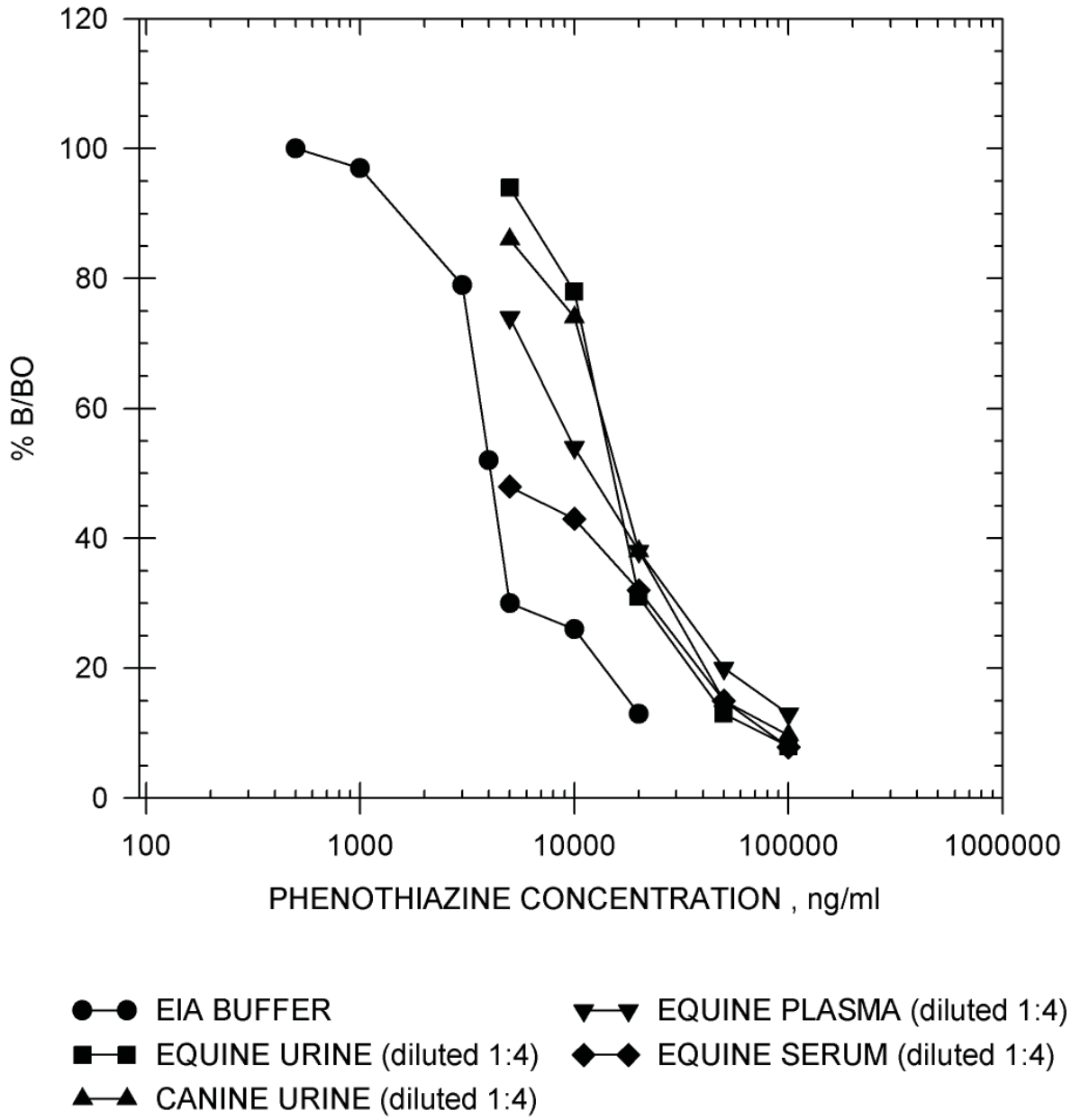
CARPROFEN STANDARD CURVE

Methylene Blue



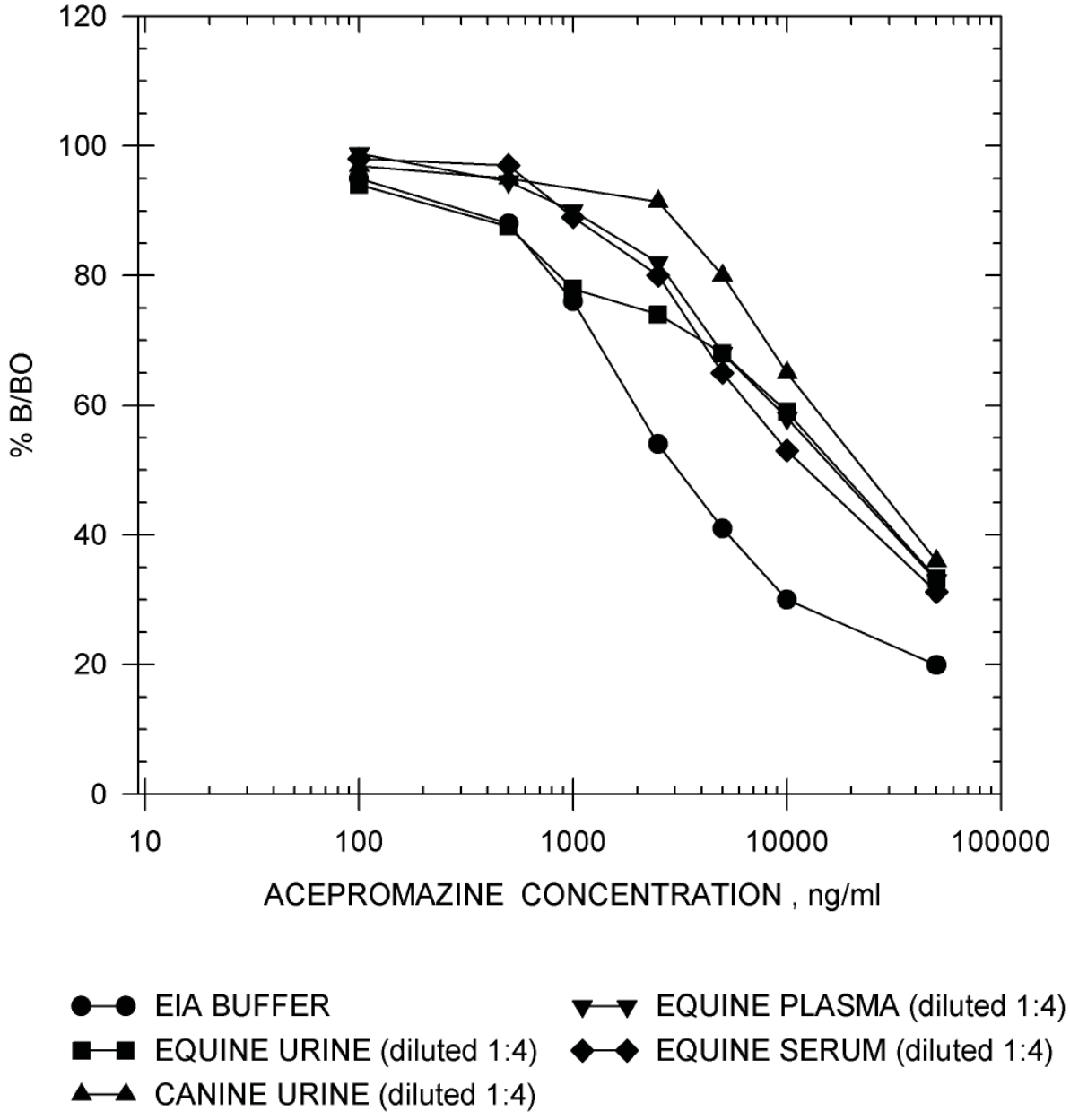
CARPROFEN STANDARD CURVE

Phenothiazine



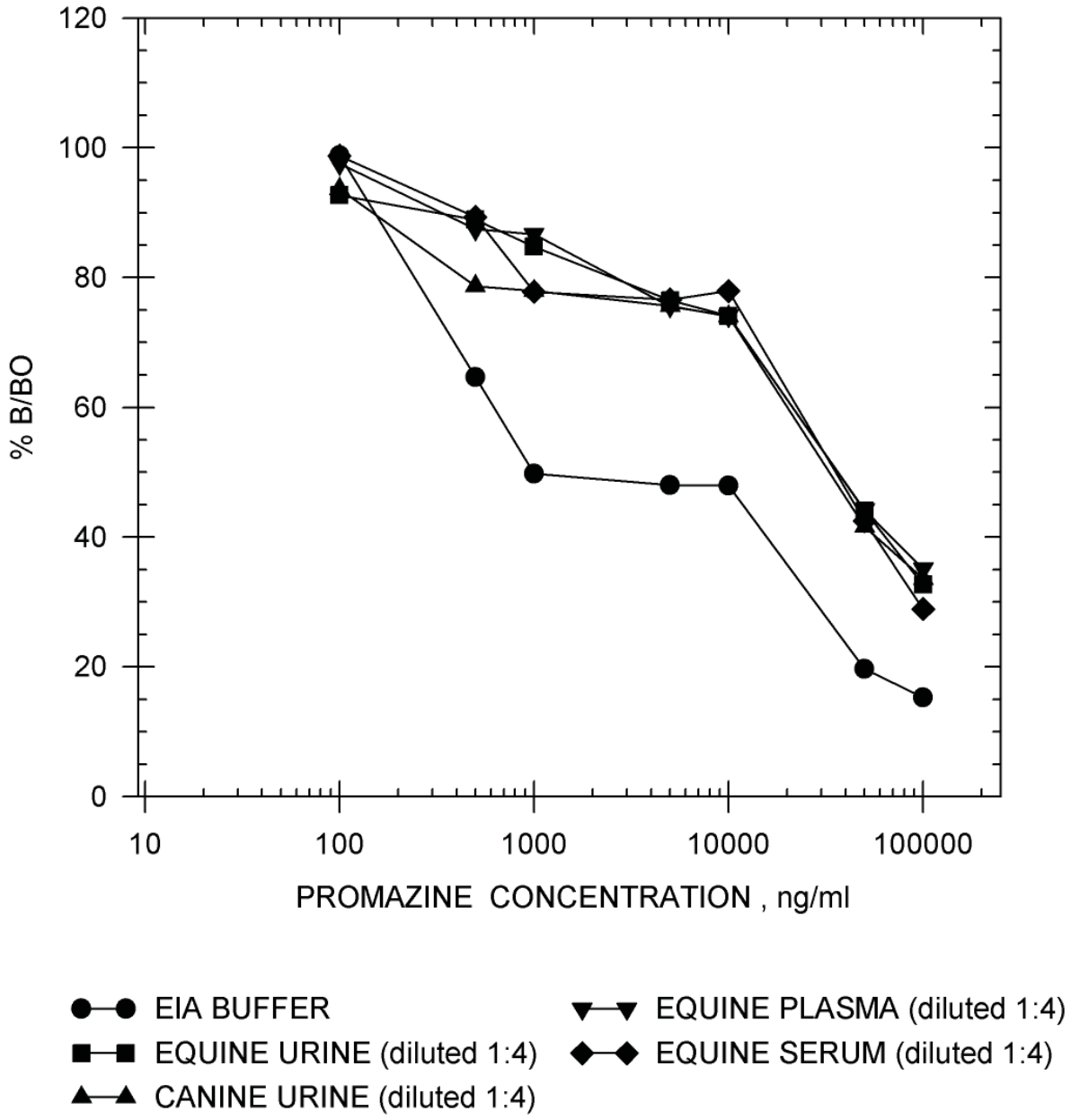
CARPROFEN STANDARD CURVE

Acepromazine



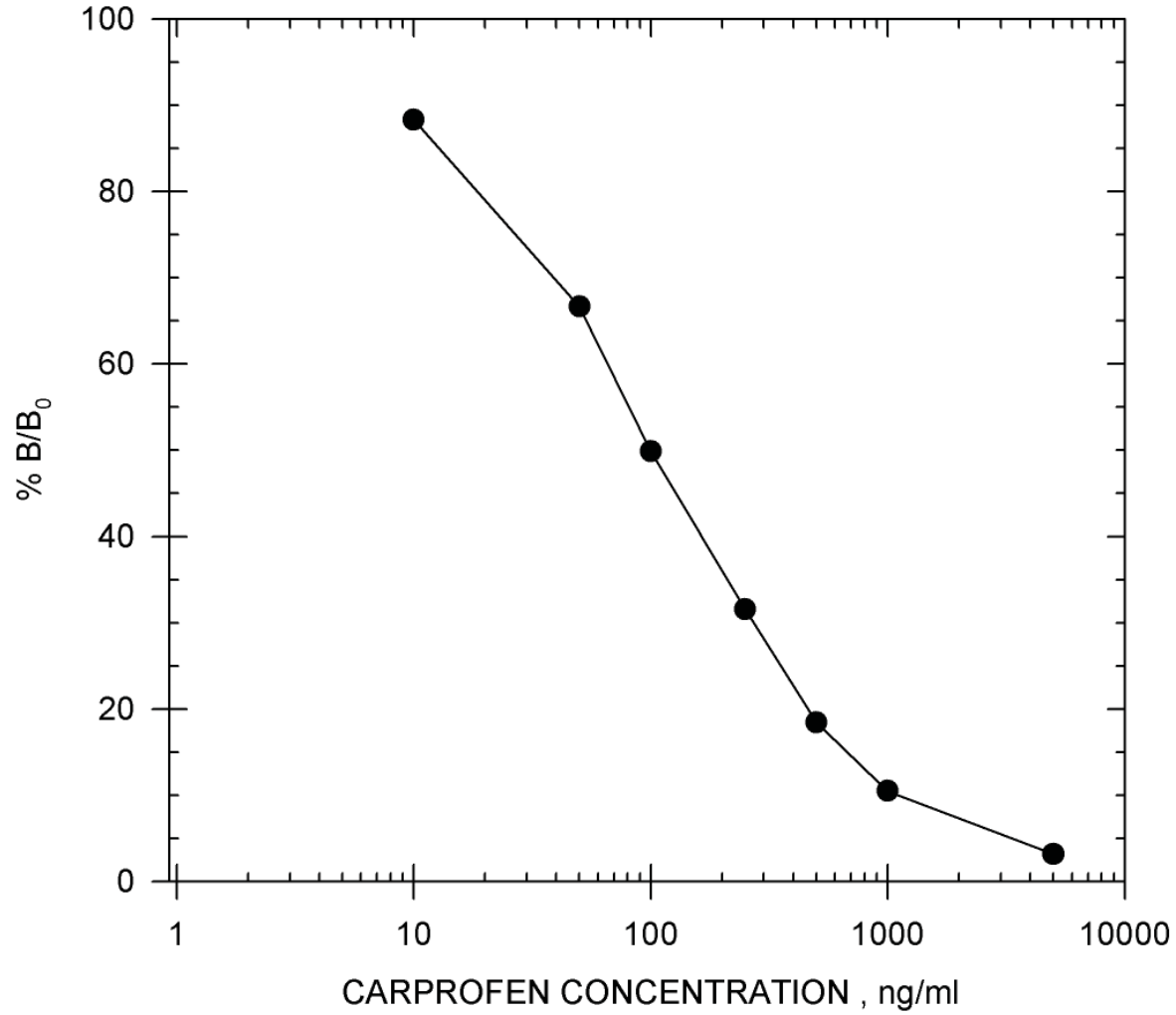
CARPROFEN STANDARD CURVE

Promazine



CARPROFEN STANDARD CURVE

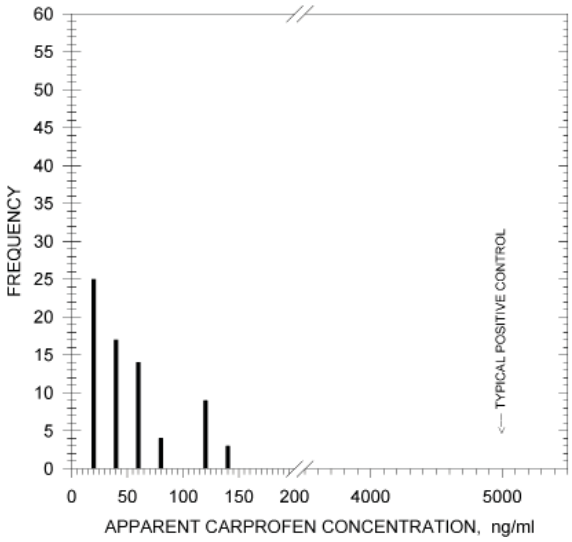
Carprofen Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples has shown no background levels above 140 ng/ml.

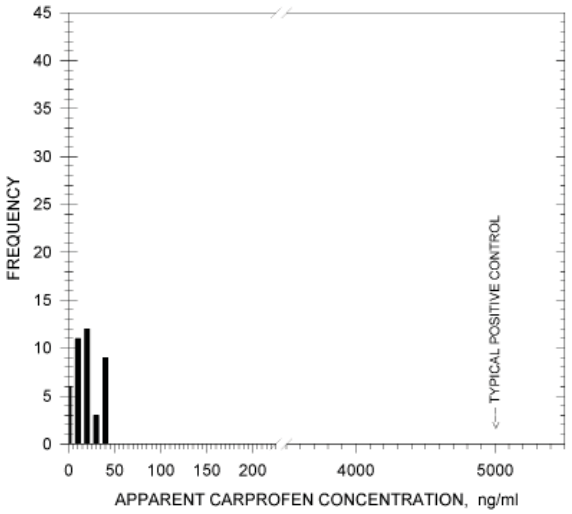
Sample Treatment: A dilution of 1:4 (i.e., 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 40 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e., 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Carprofen	100%
Methylene Blue	5%
Phenothiazine	3%
Acepromazine	3%
Promazine	2%
Oxyphenbutazone	0.03%

Acetaminophen	< 0.01%	Glipizide	< 0.01%	Phenylbutazone	< 0.01%
Acetylsalicylic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Polyethylene Glycol	< 0.01%
E-Amino-n-Caproic Acid	< 0.01%	Glutethimide	< 0.01%	Prednisolone	< 0.01%
Amitriptyline	< 0.01%	Glycopyrrolate	< 0.01%	Primidone	< 0.01%
Ascorbic Acid (Vitamin C)	< 0.01%	Heparin	< 0.01%	Procainamide	< 0.01%
Benzoic Acid	< 0.01%	Hippuric Acid	< 0.01%	Procaine	< 0.01%
Caffeine	< 0.01%	Hordenine	< 0.01%	Pseudoephedrine	< 0.01%
Chlordiazepoxide	< 0.01%	Hydrocortisone	< 0.01%	Pyrantel	< 0.01%
Chlorpromazine	< 0.01%	Ibuprofen	< 0.01%	Pyrilamine	< 0.01%
Clenbuterol	< 0.01%	Imipramine	< 0.01%	Pyrimethamine	< 0.01%
Cotinine	< 0.01%	Isoxsuprine	< 0.01%	Quinidine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Quinine	< 0.01%
Diclofenac	< 0.01%	Meperidine	< 0.01%	Salbutamol	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaproterenol	< 0.01%	Salicylamide	< 0.01%
Dipyrone	< 0.01%	Methadone	< 0.01%	Salicylic Acid	< 0.01%
Doxepin	< 0.01%	Methaqualone	< 0.01%	Theophylline	< 0.01%
Ephedrine	< 0.01%	Methocarbamol	< 0.01%	Thiamine	< 0.01%
Erythromycin	< 0.01%	Methylprednisolone	< 0.01%	Trimethoprim	< 0.01%
Ethyl-p-Amino-Benzoate (Benzocaine)	< 0.01%	Naproxen	< 0.01%	Trimipramine	< 0.01%
		Niacinamide	< 0.01%	Uric Acid	< 0.01%
Fenoprofen	< 0.01%	Nicotine	< 0.01%		
Flunixin	< 0.01%	Nortriptyline	< 0.01%		
Folic Acid	< 0.01%	Orphenadrine	< 0.01%		
Folinic Acid	< 0.01%	PCP	< 0.01%		
Furosemide	< 0.01%	Penicillin G-Potassium	< 0.01%		
Gemfibrozil	< 0.01%	Penicillin G-Procaine	< 0.01%		
Gentisic Acid	< 0.01%	Pentoxifylline	< 0.01%		

ENHANCED KIT
CELECOXIB

Product #180710 &
180715 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Celecoxib	1.44 ng/ml
Celecoxib-COOH	1.01 ng/ml

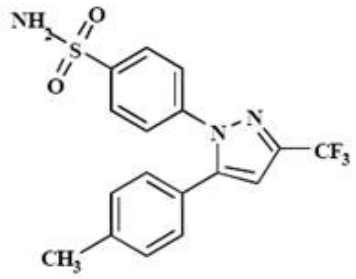
I-50 in Equine Urine (Diluted 1:1)		I-50 in Canine Urine (Diluted 1:1)	
Celecoxib	1.75 ng/ml	Celecoxib	4.41 ng/ml
Celecoxib-COOH	3.49 ng/ml	Celecoxib-COOH	3.28 ng/ml
I-50 in Equine Plasma (Diluted 1:1)		**I-50 in Equine Serum (Neat)**	
Celecoxib	12.13 ng/ml	Celecoxib	7.49 ng/ml
Celecoxib-COOH	2.56 ng/ml	Celecoxib-COOH	1.88 ng/ml

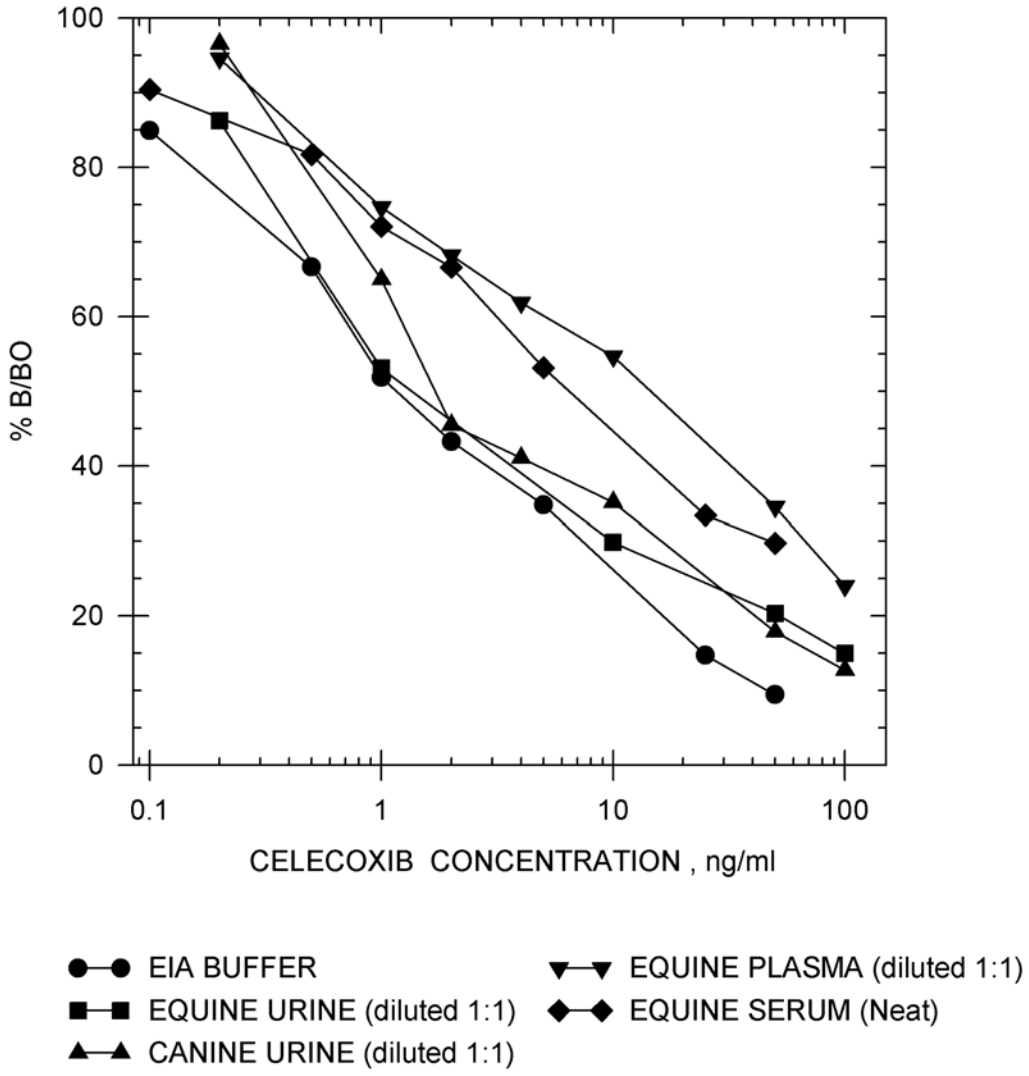
Precision:	Intra-assay	5.92%
	Inter-assay	7.83%

Note: Measuring wavelength was 650 nm**.**

CELECOXIB STANDARD CURVES

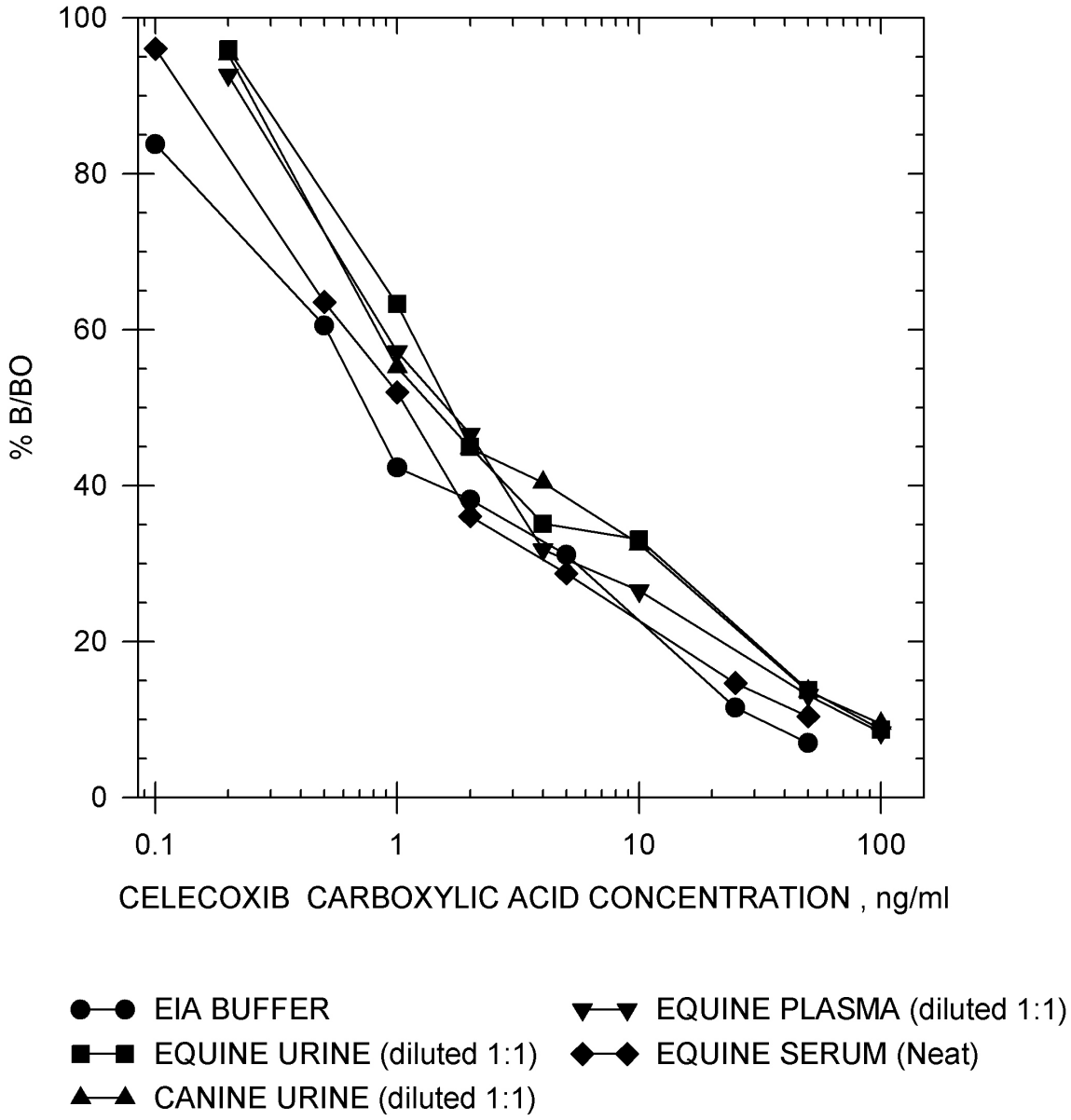
Celecoxib





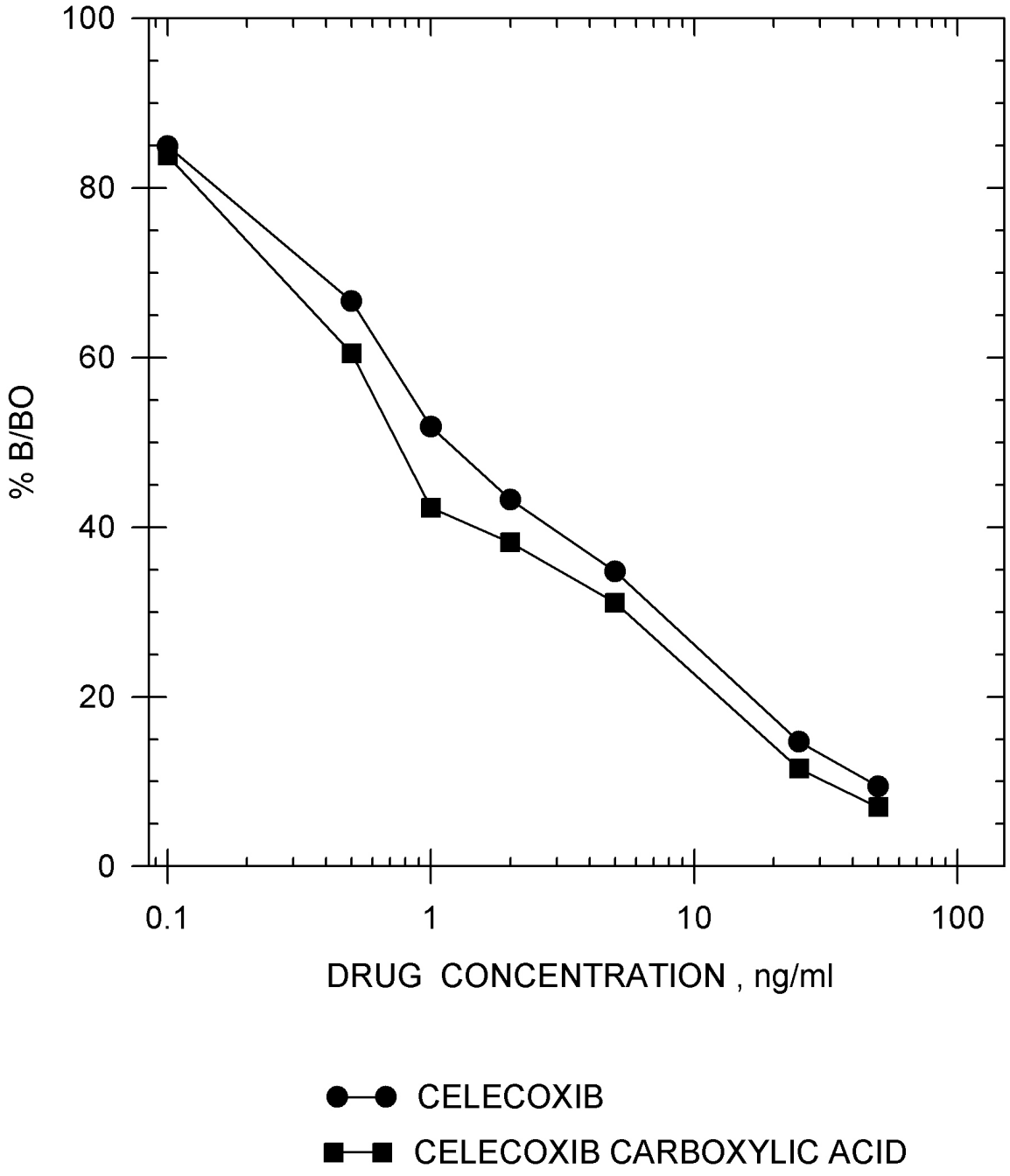
CELECOXIB STANDARD CURVES

Celecoxib-COOH



CELECOXIB STANDARD CURVES

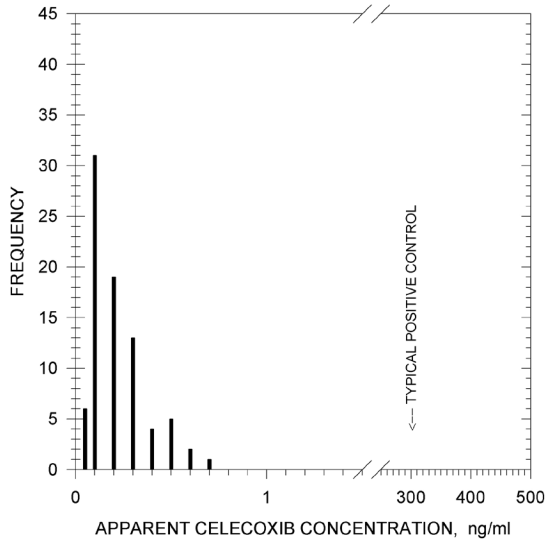
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 81 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.70 ng/ml.

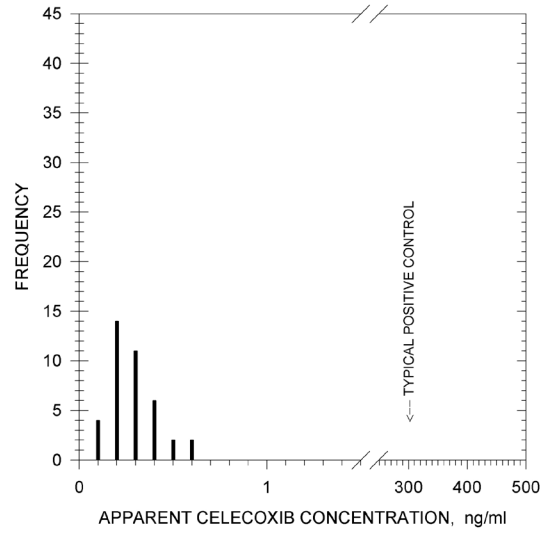
Sample Treatment: A dilution of 1:1 (i.e. 1 part to 1 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race canine urine samples, diluted 1:1, has shown no background levels above 0.60 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part to 1 parts EIA buffer) is recommended to reduce natural background.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Sample Treatment: A dilution of 1:1 (i.e. 1 part plasma to 1 part EIA buffer) is recommended to reduce natural background.

TYPICAL EQUINE SERUM BACKGROUND LEVELS

Sample Treatment: No sample dilution is necessary.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Celecoxib	100%
Celecoxib-COOH	143%
Deracoxib	56%

Acepromazine	<0.01%
Acetaminophen	<0.01%
Acetylsalicylic Acid	<0.01%
Amitriptyline	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%
Ethyl p-amino-Benzoate (Benzocaine)	<0.01%
Benzoic Acid	<0.01%
Caffeine	<0.01%
E-amino-n-Caproic Acid	<0.01%
Chlordiazepoxide	<0.01%
Chlorpromazine	<0.01%
Clenbuterol	<0.01%
Codeine	<0.01%
Cotinine	<0.01%
Dexamethasone	<0.01%
Dextromethorphan	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Doxepin	<0.01%
Ephedrine	<0.01%
Erythromycin	<0.01%
Escitalopram	<0.01%
Fenoprofen	<0.01%
Flunixin	<0.01%
Folic Acid	<0.01%
Folinic Acid	<0.01%
Furosemide	<0.01%
Gemfibrozil	<0.01%
Gentisic Acid	<0.01%
Glipizide	<0.01%
L-Glutamic Acid	<0.01%
Glutethimide	<0.01%
Glycopyrrolate	<0.01%
Heparin	<0.01%
Hippuric Acid	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Imipramine	<0.01%
Isoxsuprine	<0.01%
Lidocaine	<0.01%

Meperidine	<0.01%
Metaproterenol	<0.01%
Methadone	<0.01%
Methaqualone	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
Methylprednisolone	<0.01%
Nalorphine	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Nicotine	<0.01%
Nortriptyline	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
Penicillin G-Potassium	<0.01%
Penicillin G-Procaine	<0.01%
Pentoxifylline	<0.01%
Phencyclidine (PCP)	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Primadone	<0.01%
Procainamide	<0.01%
Procaine	<0.01%
Promazine	<0.01%
Pseudoephedrine	<0.01%
Pyrantel	<0.01%
Pyrilamine	<0.01%
Pyrimethamine	<0.01%
Quinidine	<0.01%
Quinine	<0.01%
Rofecoxib	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Theophylline	<0.01%
Thiamine	<0.01%
Trimethoprim	<0.01%
Trimipramine	<0.01%
Uric Acid	<0.01%
Valdecoxib	<0.01%

ENHANCED KIT
CLENBUTEROL

Product #101210 &
101215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

Clenbuterol

I-50 in EIA Buffer	0.25 ng/ml
I-50 in Equine Urine (diluted 1:1)	0.72 ng/ml
I-50 in Canine Urine (diluted 1:2)	0.35 ng/ml
I-50 in Equine Plasma	0.52 ng/ml
I-50 in Equine Serum	1.01 ng/ml

SENSITIVITY

Cross-Reactants
I-50 in EIA Buffer

Hydroxyclenbuterol	0.35 ng/ml
Tulobuterol	18.91 ng/ml
Propranolol	80.64 ng/ml

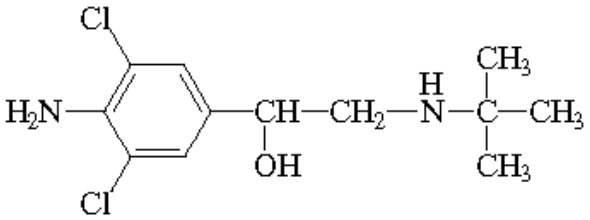
Precision:

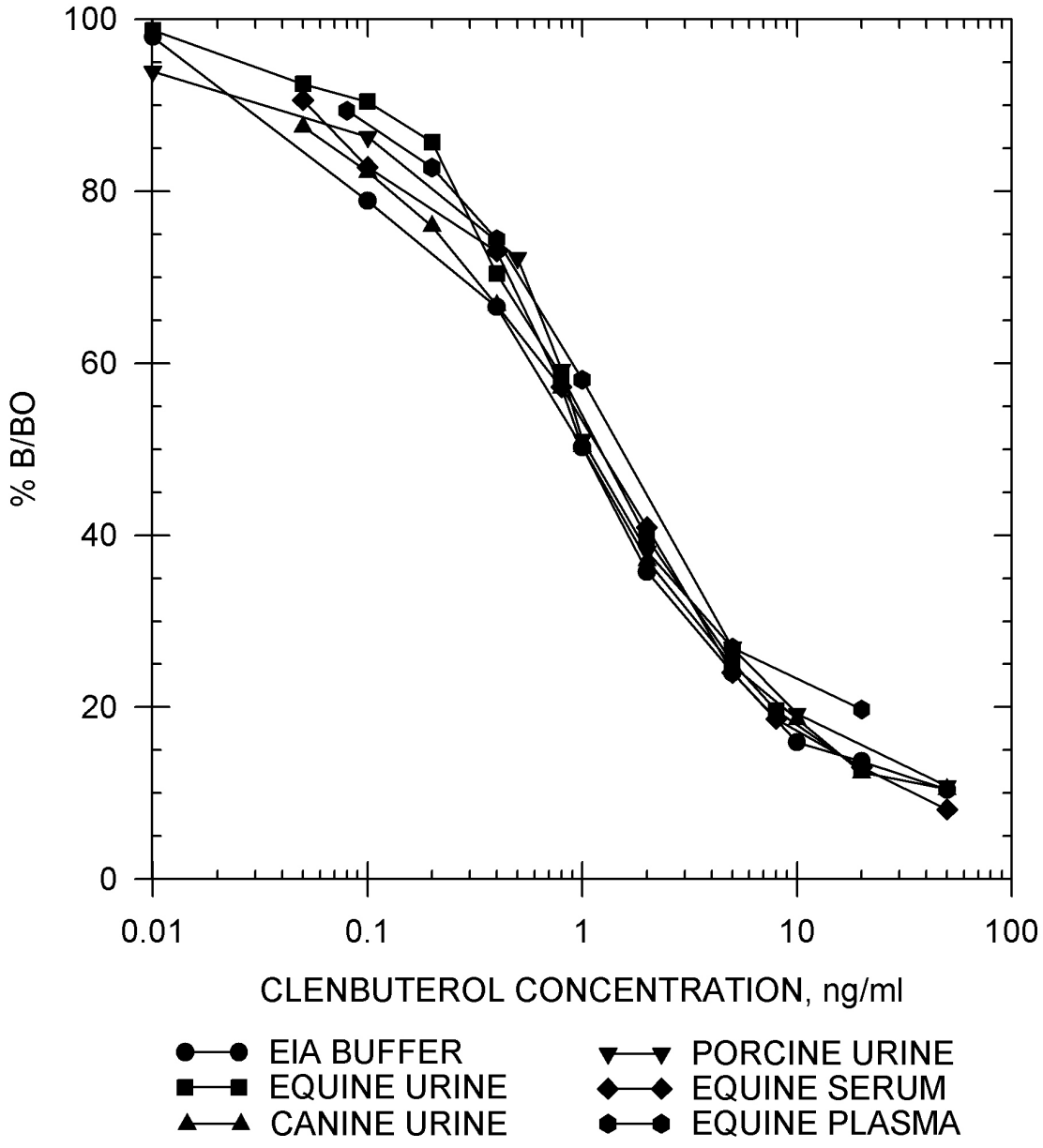
Intra-assay	5.97 %
Inter-assay	4.73 %

Note: Measuring wavelength was 650 nm**.**

CLENBUTEROL STANDARD CURVE

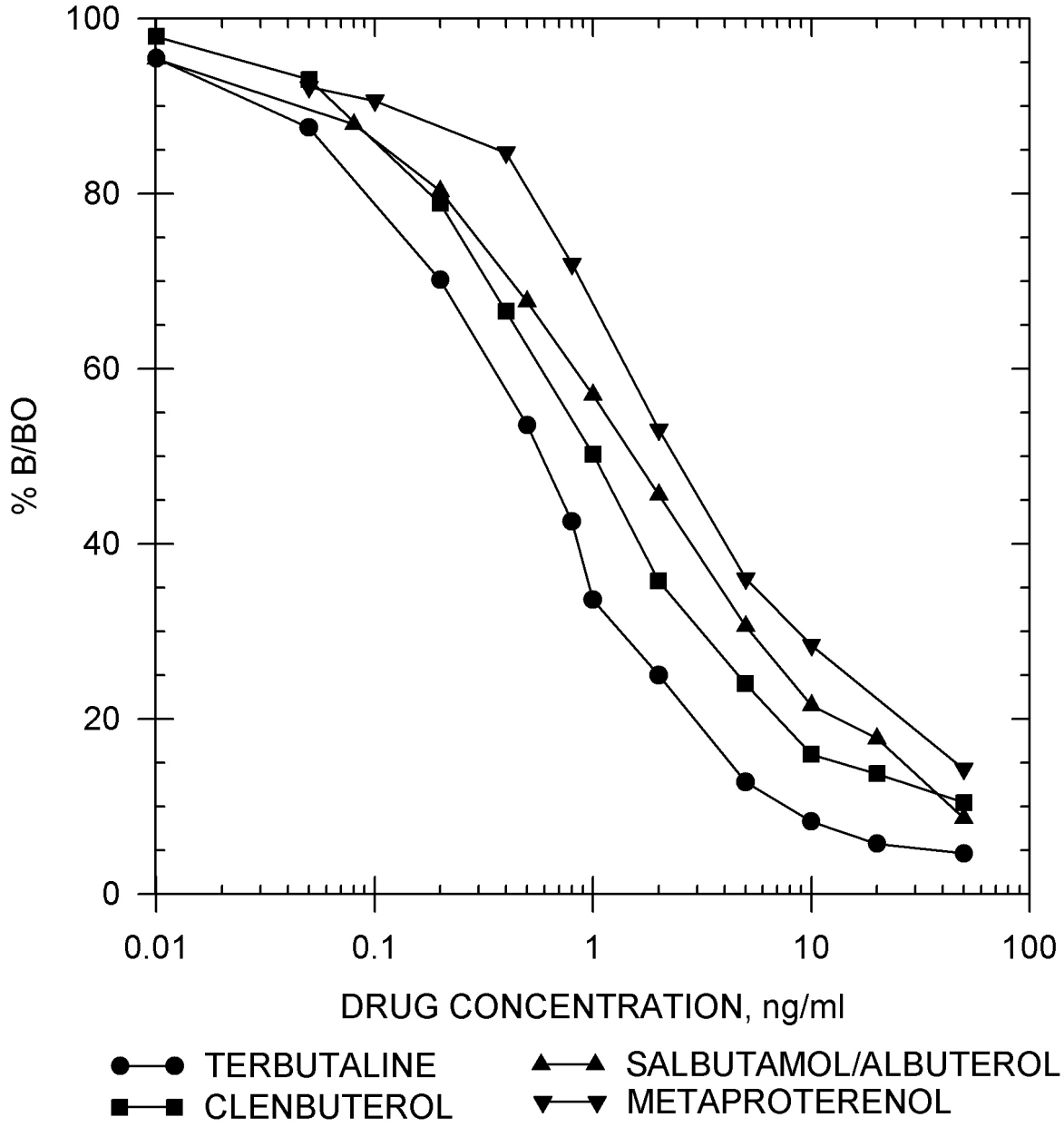
Clenbuterol





CLENBUTEROL STANDARD CURVE

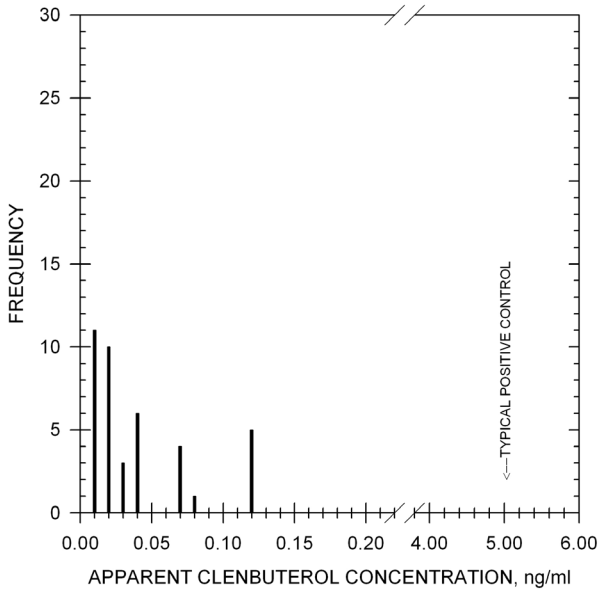
Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.12 ng/ml.

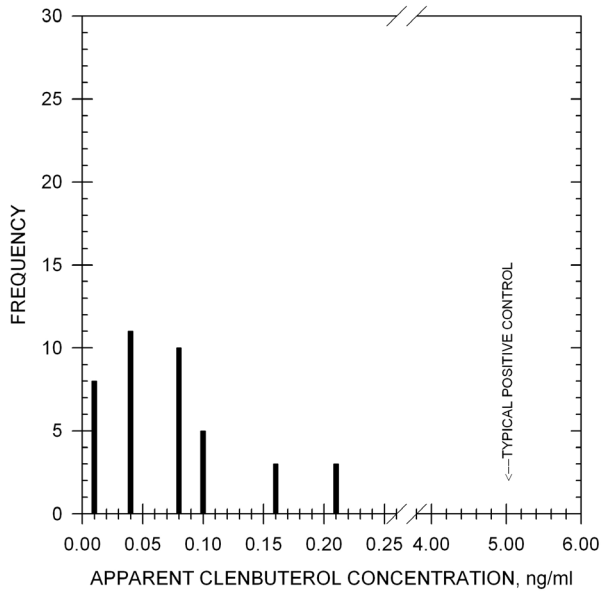
Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:2, has shown no background levels above 0.21 ng/ml.

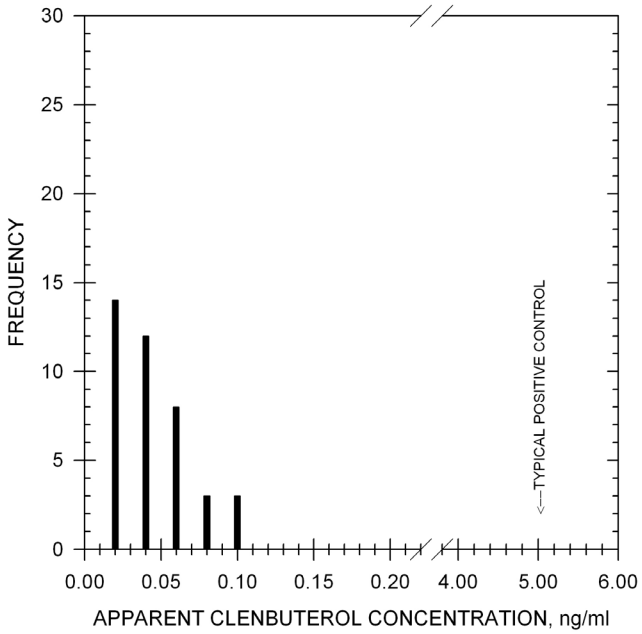
Sample Treatment: A dilution of 1:2 (i.e. 1 part urine to 2 parts EIA buffer) is recommended to reduce natural background.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

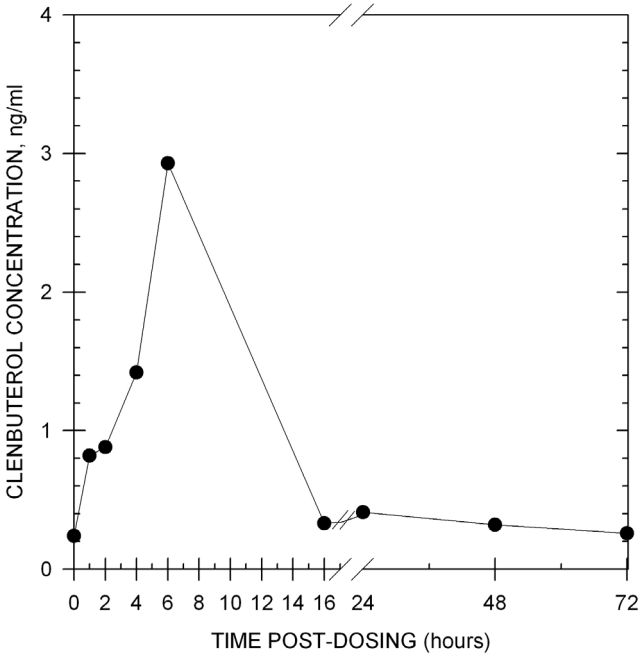
Backgrounds: Analysis of 40 post-race equine plasma samples, undiluted, has shown no background levels above 0.10 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 0.8 μg/kg of clenbuterol by intravenous injection to one horse, the presence of this drug was detected for at least 6 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. These compounds that have cross-reactivity below 0.01% did not show significant reaction up to 10 μg/ml.

Clenbuterol	100%
Hydroxymethylclenbuterol	80%
Hydroxyclenbuterol	60%
Tulobuterol	1.85%
Propranolol	0.47%
Pindolol	0.06%
Alprenolol	0.04%
Fenspiride	0.04%
Fenfluramine	0.03%
Methylene Blue	0.01%
Penbutolol	0.01%
Propafenone	0.01%

Acebutolol	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Amphetamine	<0.01%
Ascorbic Acid	<0.01%
Atenolol	<0.01%
Benzphetamine	<0.01%
Betaxolol	<0.01%
Carteolol	<0.01%
Cimaterol	<0.01%
Dexamethasone	<0.01%
Diclofenac	<0.01%
Diethylpropion	<0.01%
Dihydroergotamine	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Dobutamine	<0.01%
Dopamine (3-hydroxytyramine)	<0.01%
Ephedrine	<0.01%
Epinephrine	<0.01%
Ethyl p-Amino-Benzoate	<0.01%
Fenoterol	<0.01%
Flunixin	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Heptaminol	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Ipratropium Bromide	<0.01%
Isoetharine	<0.01%
Isoproterenol	<0.01%
Isoxsuprine	<0.01%
Labetalol	<0.01%
Lidocaine	<0.01%
Metaproterenol	<0.01%
Metaraminol	<0.01%
Methamphetamine	<0.01%
Methocarbamol	<0.01%
Methoxamine	<0.01%

6-α Methylprednisolone	<0.01%
Metoprolol	<0.01%
Nadolol	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Norepinephrine	<0.01%
Olanzapine	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
Oxyprenolol	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phentermine	<0.01%
Phenylbutazone	<0.01%
Phenylephrine	<0.01%
Phenylethylamine	<0.01%
Phenylpropanolamine	<0.01%
Pirbuterol	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Procaine	<0.01%
Procaterol	<0.01%
Promazine	<0.01%
Pyrantel	<0.01%
Pyrilamine	<0.01%
Ritodrine	<0.01%
Salbutamol (albuterol)	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Sotalol	<0.01%
Terbutaline	<0.01%
Theophylline	<0.01%
Thiamine	<0.01%
Tilmicosin	<0.01%
Timolol	<0.01%
Tylocin	<0.01%
Tyramine	<0.01%

ENHANCED KIT
CLONIDINE/ROMIFIDINE

Product #180110 &
180115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Clonidine	0.27 ng/ml
Romifidine	0.74 ng/ml

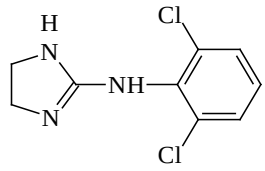
I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (Diluted 1:4)**	
Clonidine	1.8 ng/ml	Clonidine	2.1 ng/ml
Romifidine	4.4 ng/ml	Romifidine	4.6 ng/ml
I-50 in Equine Plasma (Diluted 1:4)		**I-50 in Equine Serum (Diluted 1:4)**	
Clonidine	1.8 ng/ml	Clonidine	1.5 ng/ml
Romifidine	3.6 ng/ml	Romifidine	3.4 ng/ml

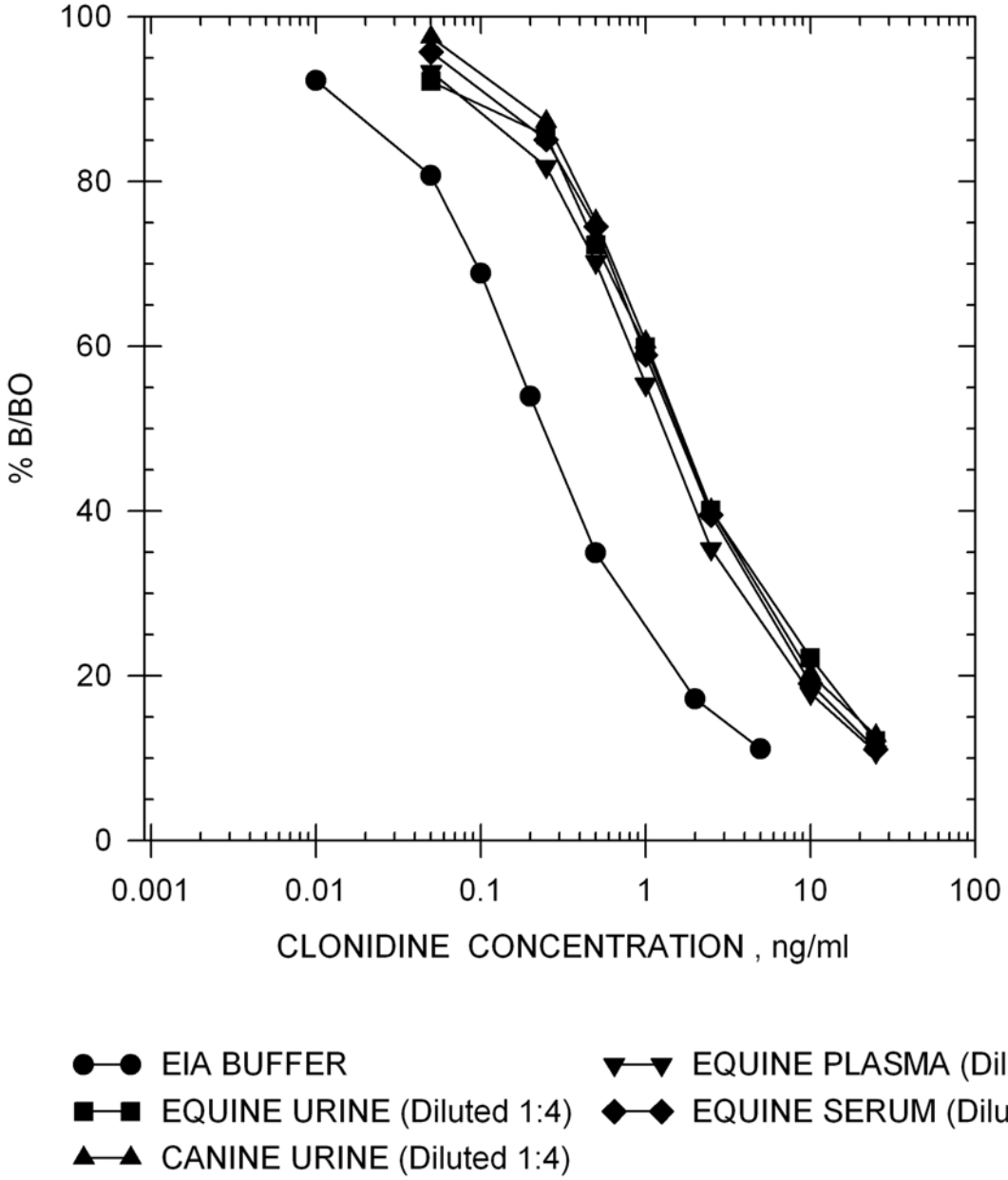
Precision:	Intra-assay	4.57 %
	Inter-assay	4.96 %

Note: Measuring wavelength was 650 nm**.**

CLONIDINE/ROMIFIDINE STANDARD CURVES

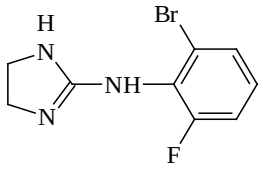
Clonidine

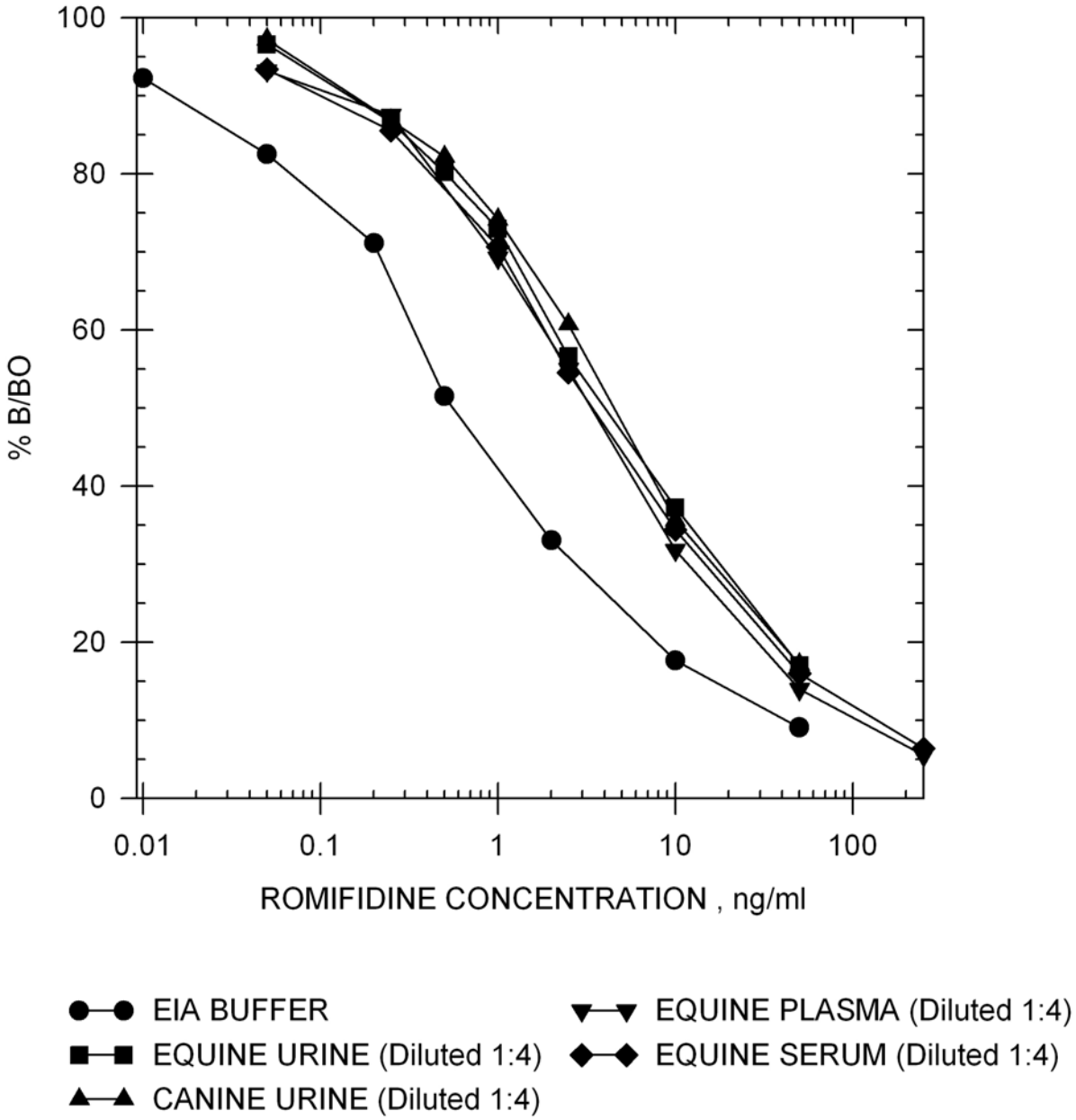




CLONIDINE/ROMIFIDINE STANDARD CURVES

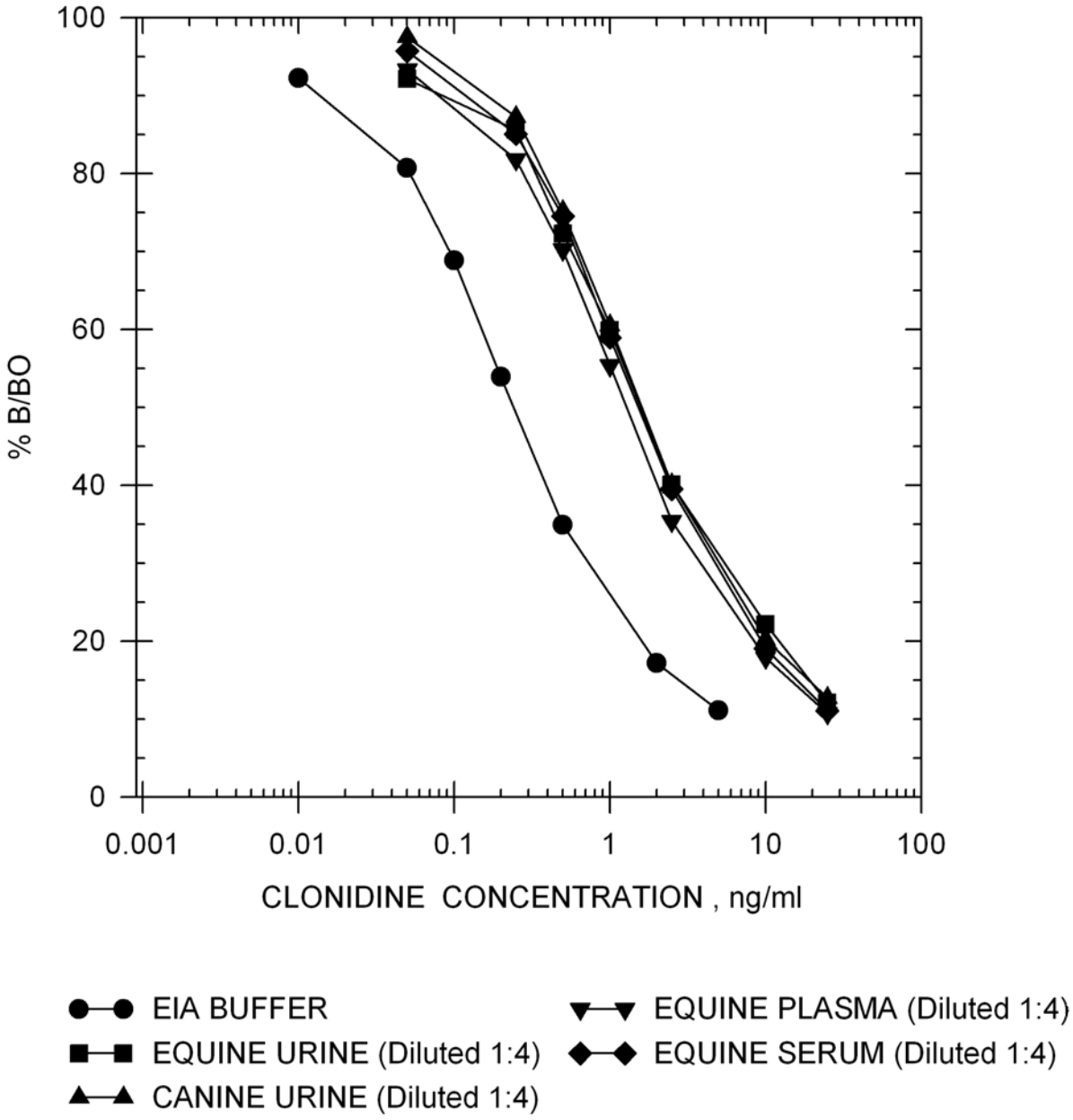
Romifidine





CLONIDINE/ROMIFIDINE STANDARD CURVES

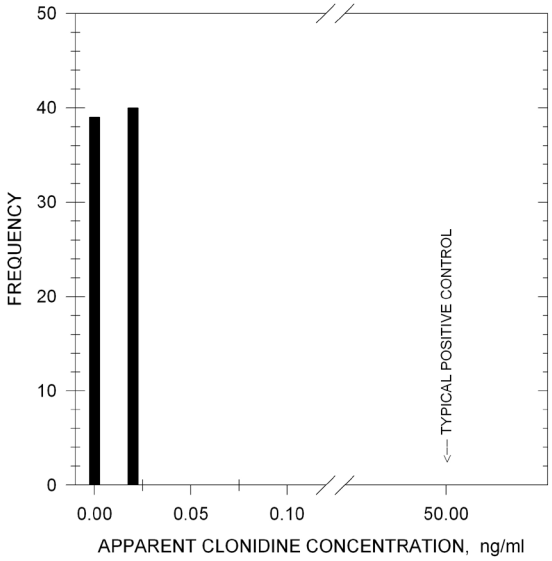
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 79 post-race equine urine samples, diluted 1:4, has shown no background levels above 0.02 ng/ml.

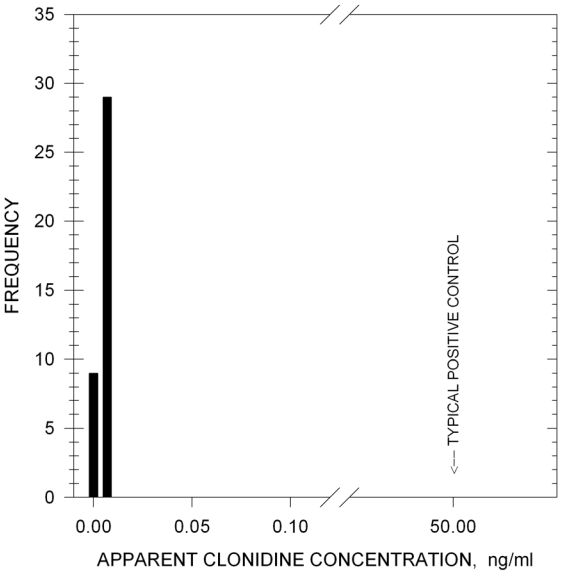
Sample Treatment: A 1:4 dilution (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 38 canine urine samples, diluted 1:4, has shown no background levels above 0.01 ng/mL.

Sample Treatment: A 1:4 dilution (i.e. 1 part sample to 4 parts EIA buffer) will reduce natural backgrounds.



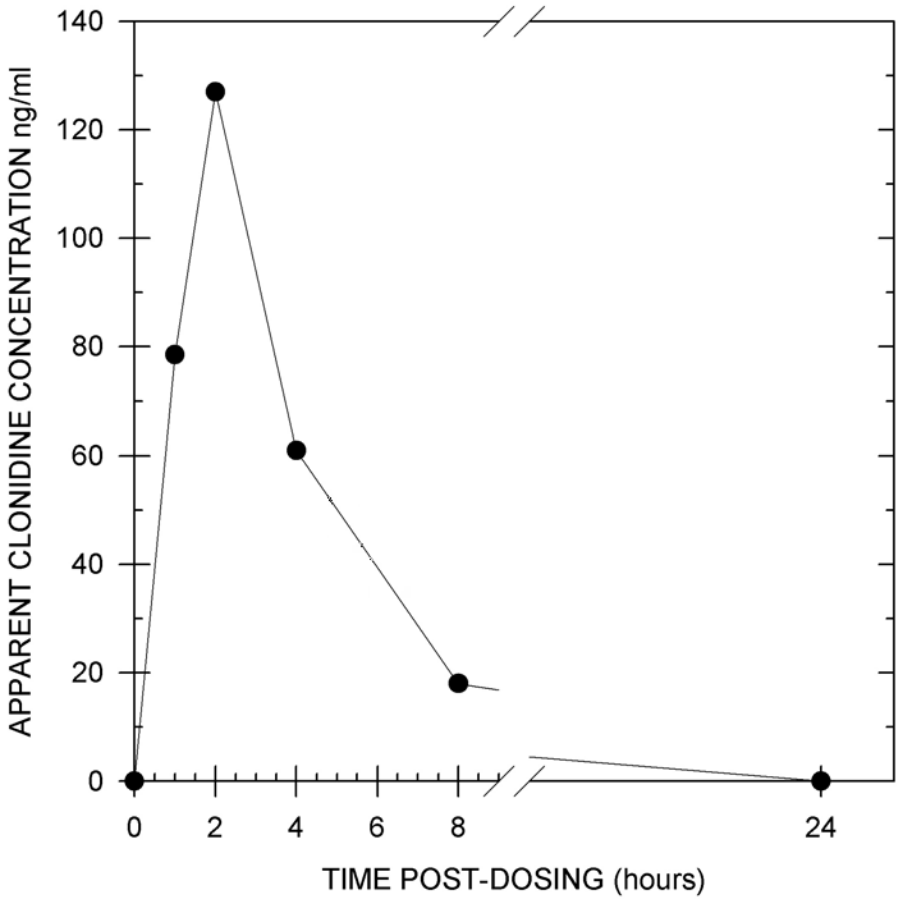
TYPICAL EQUINE SERUM AND PLASMA BACKGROUND LEVELS

Sample Treatment: A 1:4 dilution (i.e. 1 part sample to 4 parts EIA buffer) may be necessary to reduce natural backgrounds.

TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 1.5 mg of Clonidine by intravenous injection, the presence of this drug was detected for at least 8 hours in equine urine but below detection by 24 hours.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Clonidine	100%
Romifidine	44%
Tizanidine	8%
Xylazine	0.03%

Acepromazine	< 0.01%	Gentisic Acid	< 0.01%	PCP	< 0.01%
Acetaminophen	< 0.01%	Glipizide	< 0.01%	Penicillin G-Potassium	< 0.01%
Acetylsalicylic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	Glutethimide	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	Guanabenz	< 0.01%	Phenylbutazone	< 0.01%
Caffeine	< 0.01%	Heparin	< 0.01%	Polyethylene Glycol	< 0.01%
E-amino-n-Caproic Acid	< 0.01%	Hippuric Acid	< 0.01%	Prednisolone	< 0.01%
Chlordiazepoxide	< 0.01%	Hordenine	< 0.01%	Primadone	< 0.01%
Chlorpromazine	< 0.01%	Hydrocortisone	< 0.01%	Procainamide	< 0.01%
Clenbuterol	< 0.01%	Ibuprofen	< 0.01%	Procaine	< 0.01%
Codeine	< 0.01%	Imipramine	< 0.01%	Promazine	< 0.01%
Cotinine	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
Dextromethorphan	< 0.01%	Meperidine	< 0.01%	Pyrilamine	< 0.01%
Diclofenac	< 0.01%	Metaproterenol	< 0.01%	Pyrimethamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methadone	< 0.01%	Quinidine	< 0.01%
Dipyrone	< 0.01%	Methaqualone	< 0.01%	Quinine	< 0.01%
Doxepin	< 0.01%	Methylene Blue	< 0.01%	Salbutamol	< 0.01%
Ephedrine	< 0.01%	Methylprednisolone	< 0.01%	Salicylamide	< 0.01%
Erythromycin	< 0.01%	Nalorphine	< 0.01%	Salicylic Acid	< 0.01%
Ethyl p-amino-benzoate	< 0.01%	Naproxen	< 0.01%	Theophylline	< 0.01%
Fenoprofen	< 0.01%	Niacinamide	< 0.01%	Thiamine	< 0.01%
Flunixin	< 0.01%	Nicotine	< 0.01%	Trimethoprim	< 0.01%
Folic Acid	< 0.01%	Nortriptyline	< 0.01%	Trimipramine	< 0.01%
Folinic Acid	< 0.01%	Orphenadrine	< 0.01%	Uric Acid	< 0.01%
Furosemide	< 0.01%	Oxymetazoline	< 0.01%		
Gemfibrozil	< 0.01%	Oxyphenbutazone	< 0.01%		

ENHANCED KIT

COCAINE/ BENZOYLECGONINE

Product# 101310 & 101315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Cocaine	0.2 ng/ml
Benzoylecgonine	0.2 ng/ml
Cocaethylene	0.3 ng/ml

I-50 in Equine Urine (Diluted 1:7)

Cocaine	1.7 ng/ml
Benzoylecgonine	1.4 ng/ml
Cocaethylene	3.3 ng/ml

I-50 in Canine Urine (Diluted 1:7)

Cocaine	2.4 ng/ml
Benzoylecgonine	2.2 ng/ml
Cocaethylene	N/A

I-50 in Equine Plasma

Cocaine	0.5 ng/ml
Benzoylecgonine	0.2 ng/ml
Cocaethylene	0.2 ng/ml

I-50 in Equine Serum

Cocaine	0.8 ng/ml
Benzoylecgonine	1.1 ng/ml
Cocaethylene	2.5 ng/ml

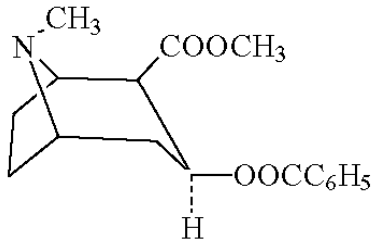
Precision:

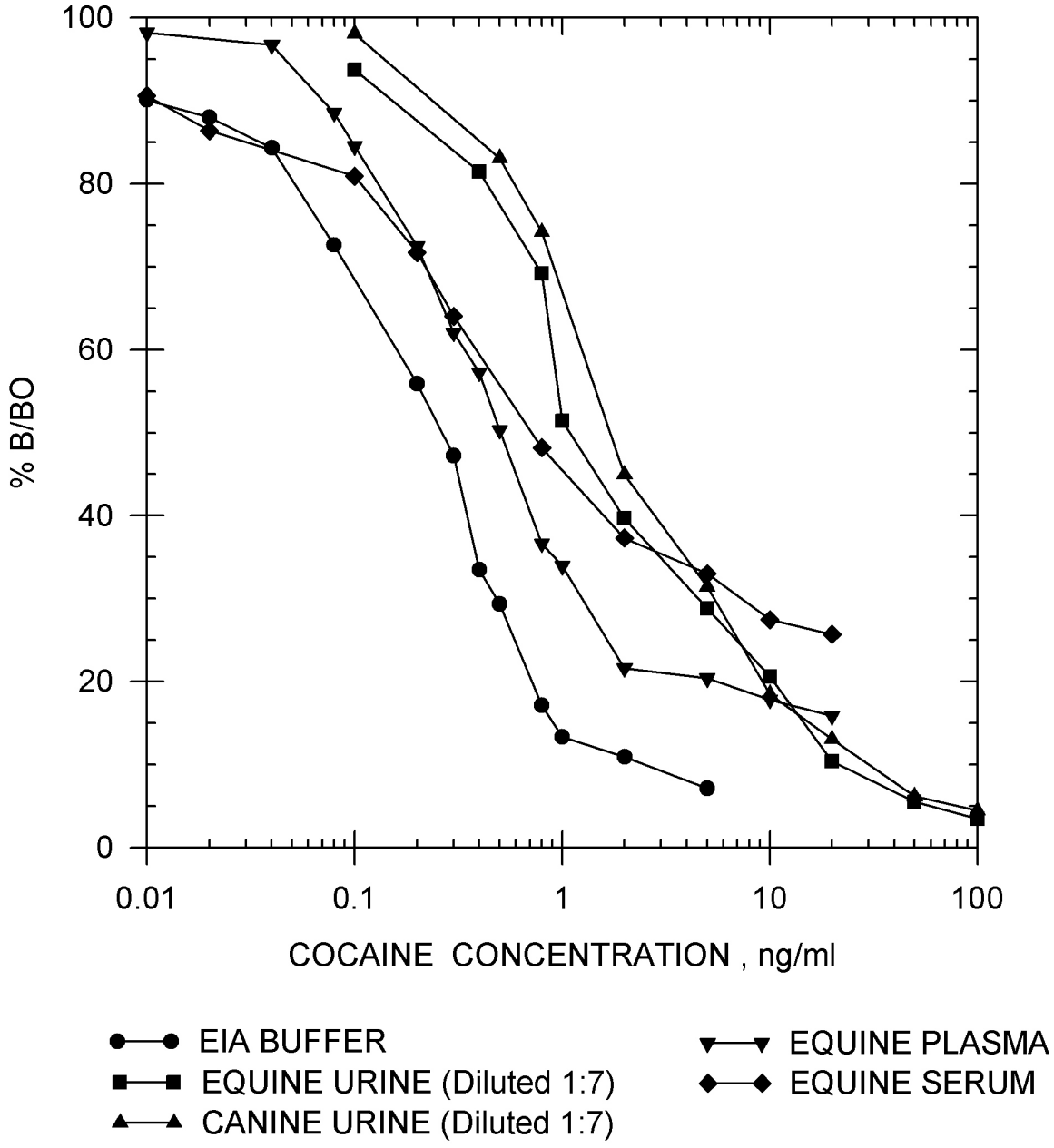
Intra-assay	2.99 %
Inter-assay	2.28 %

Note: Measuring wavelength was 650 nm**.**

COCAINE/BENZOYLECGONINE STANDARD CURVES

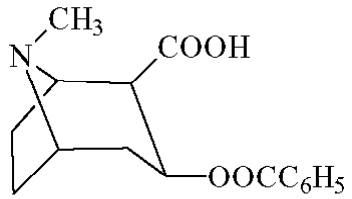
Cocaine

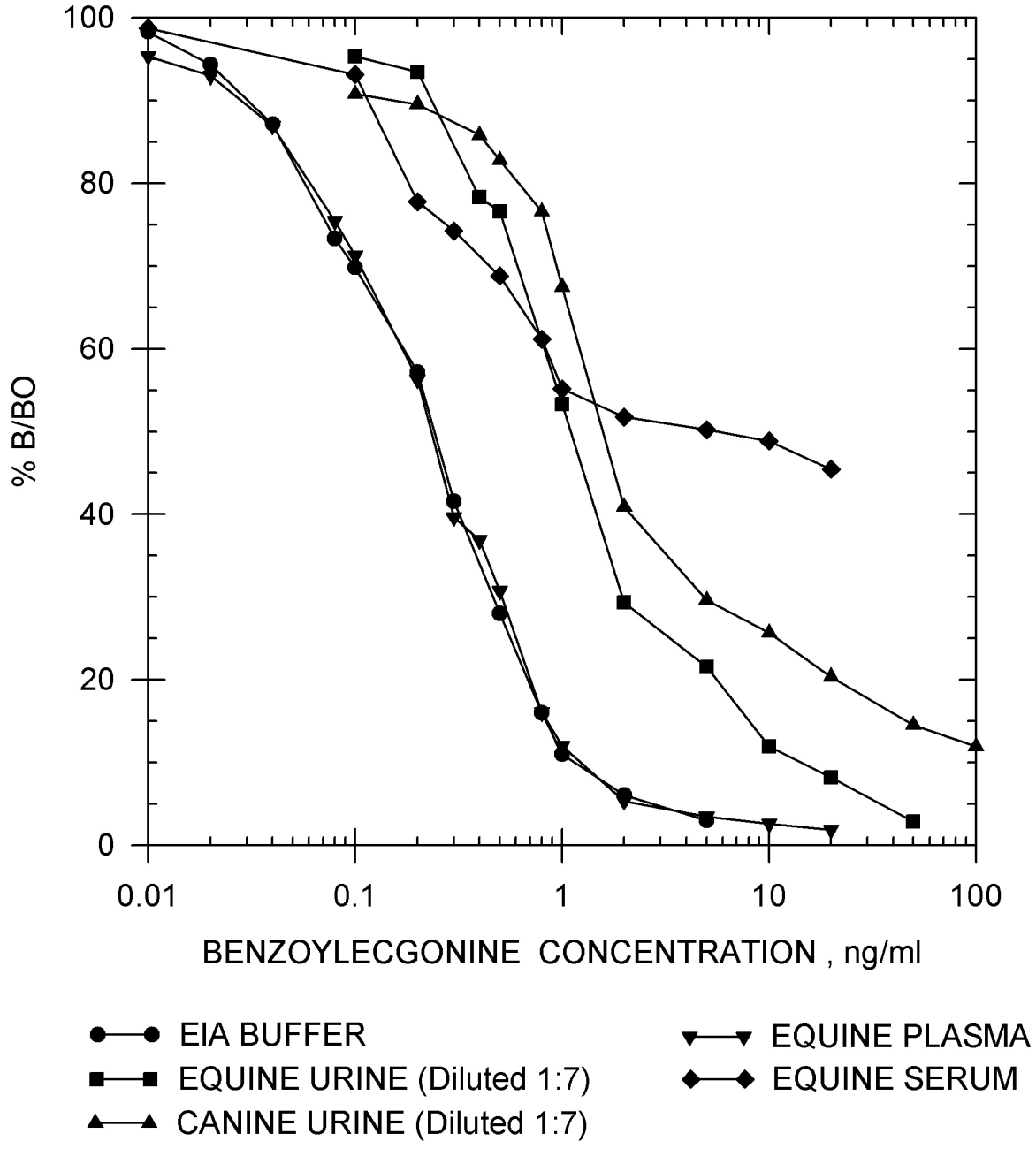




COCAINE/BENZOYLECGONINE STANDARD CURVES

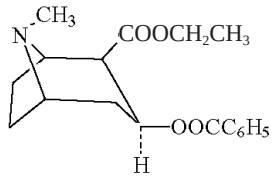
Benzoylecgonine

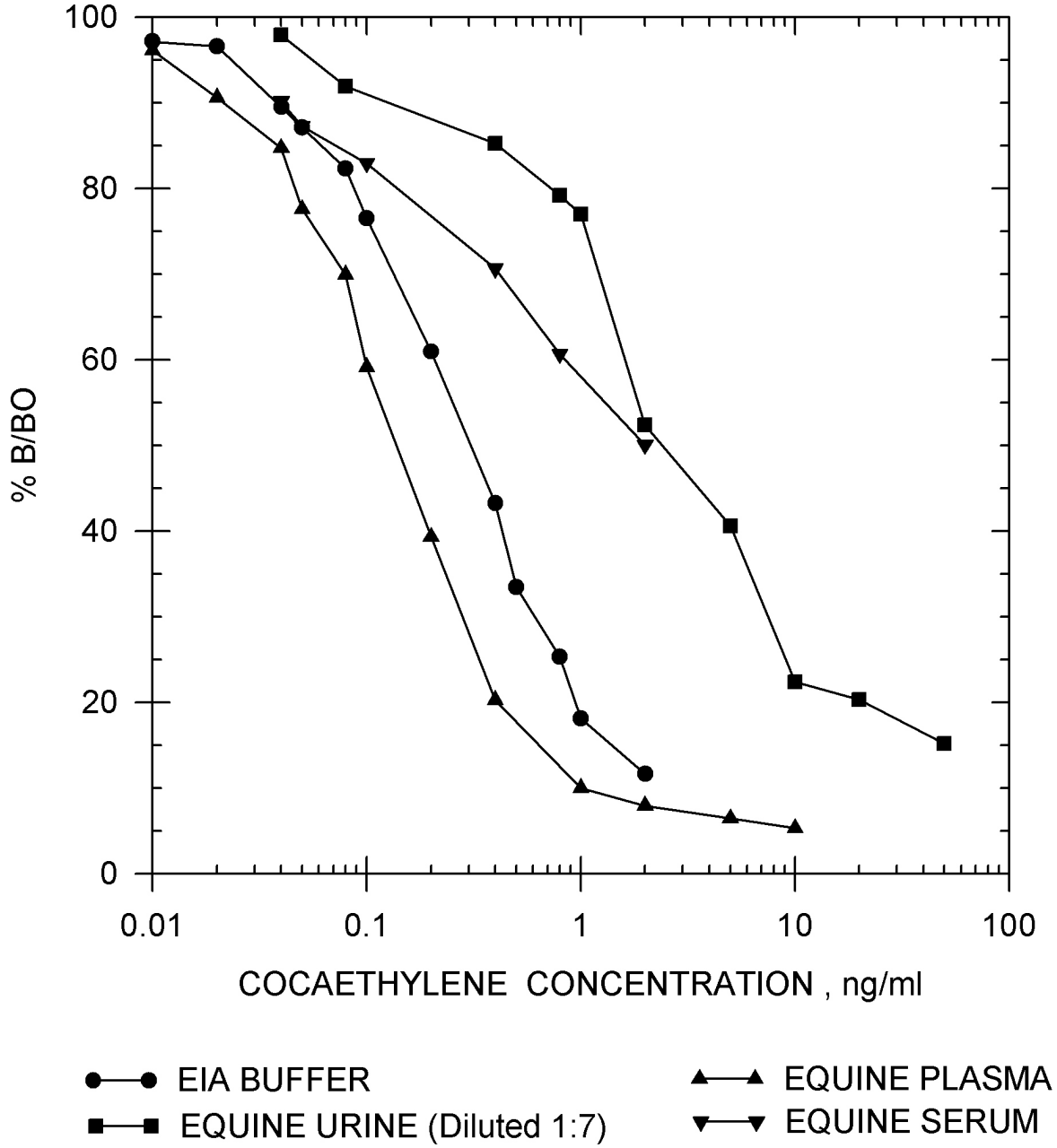




COCAINE/BENZOYLECGONINE STANDARD CURVES

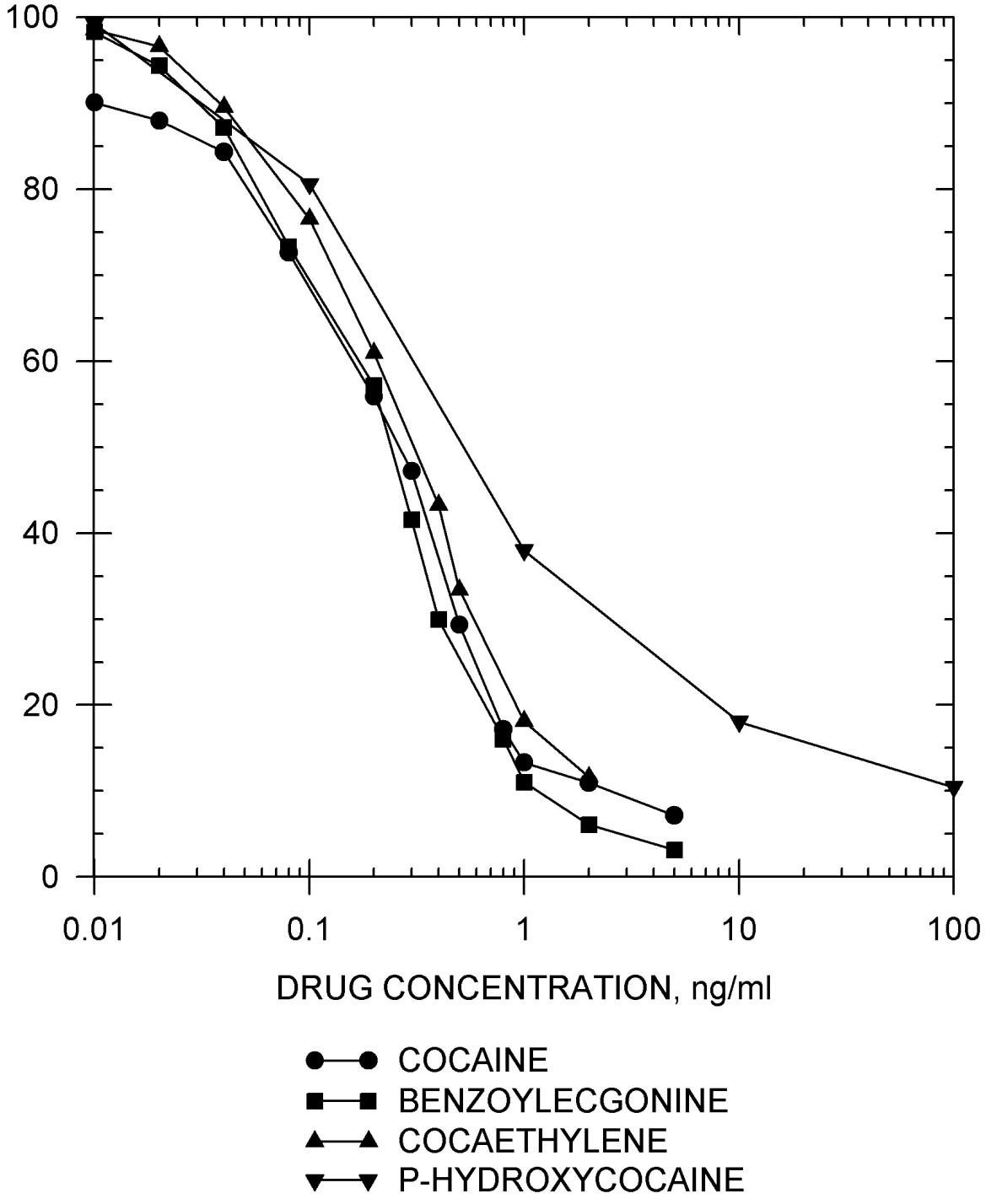
Cocaethylene





COCAINE/BENZOYLECGONINE STANDARD CURVES

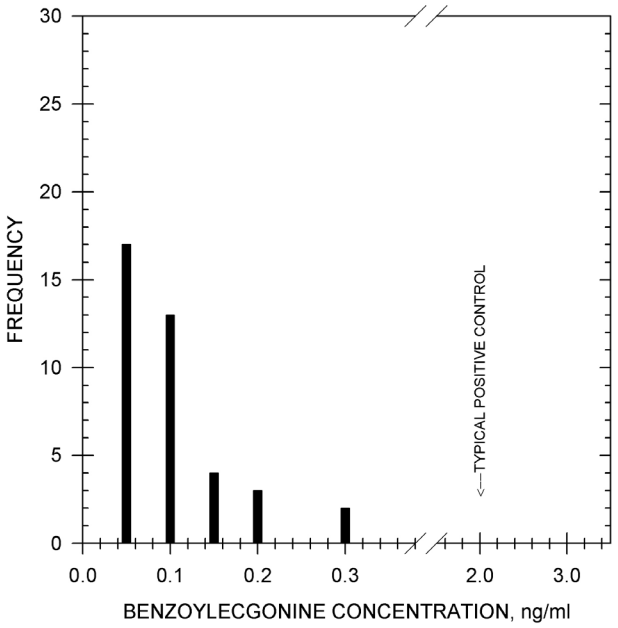
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race equine urine samples, diluted 1:7, has shown no background levels above 0.3 ng/ml.

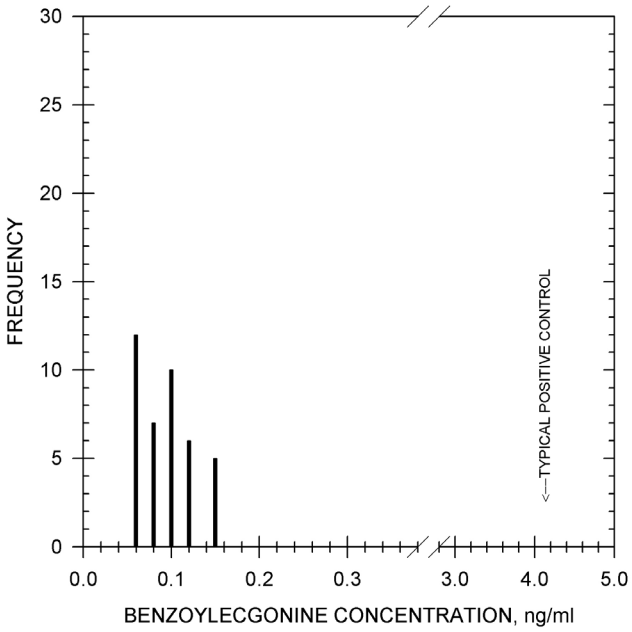
Sample Treatment: A dilution of 1:7 (i.e. 1 part sample to 7 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:7, has shown no background levels above 0.15 ng/ml.

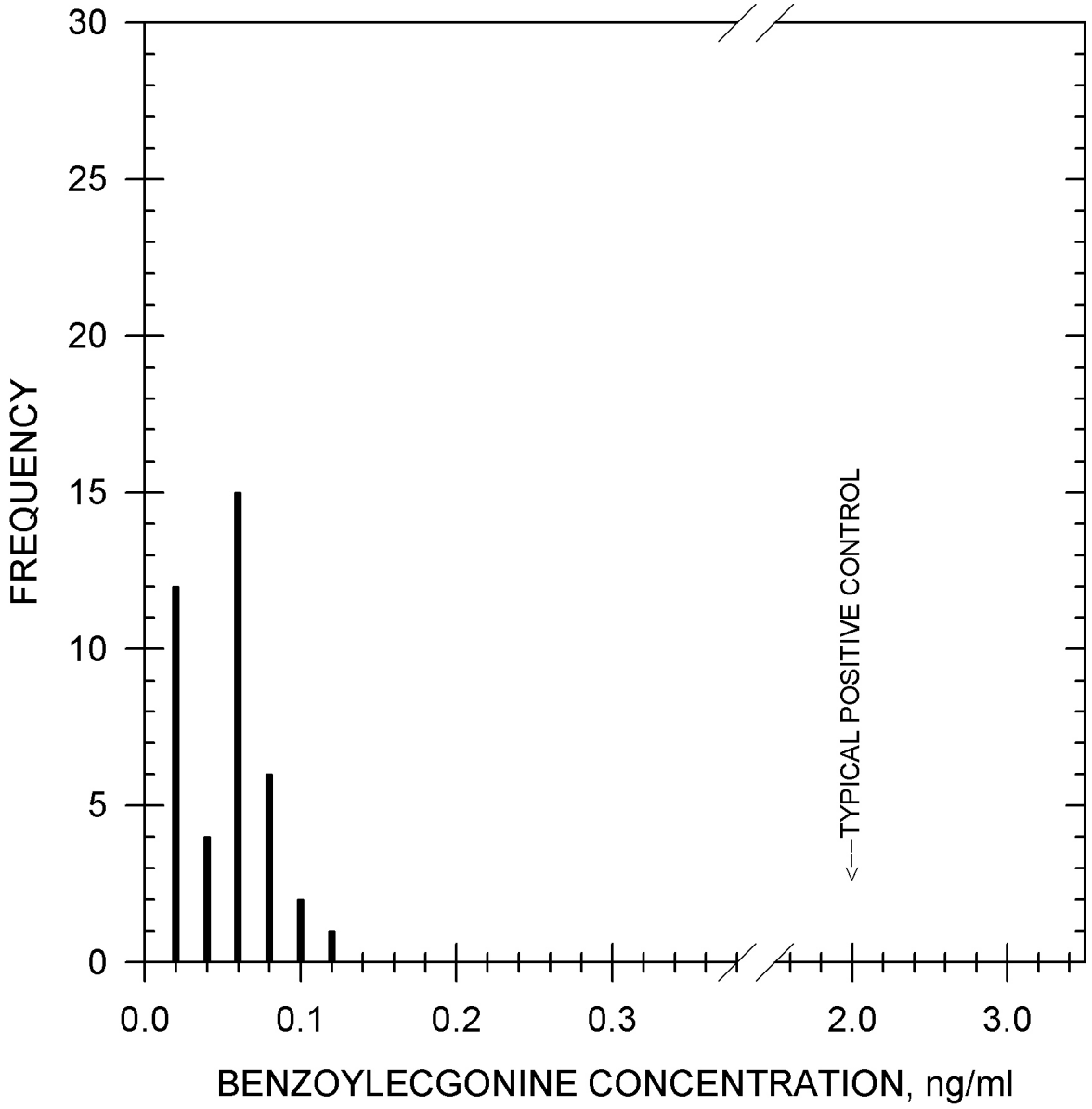
Sample Treatment: A dilution of 1:7 (i.e. 1 part sample to 7 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 post race equine plasma samples, undiluted, has shown no background levels above 0.12 ng/ml.

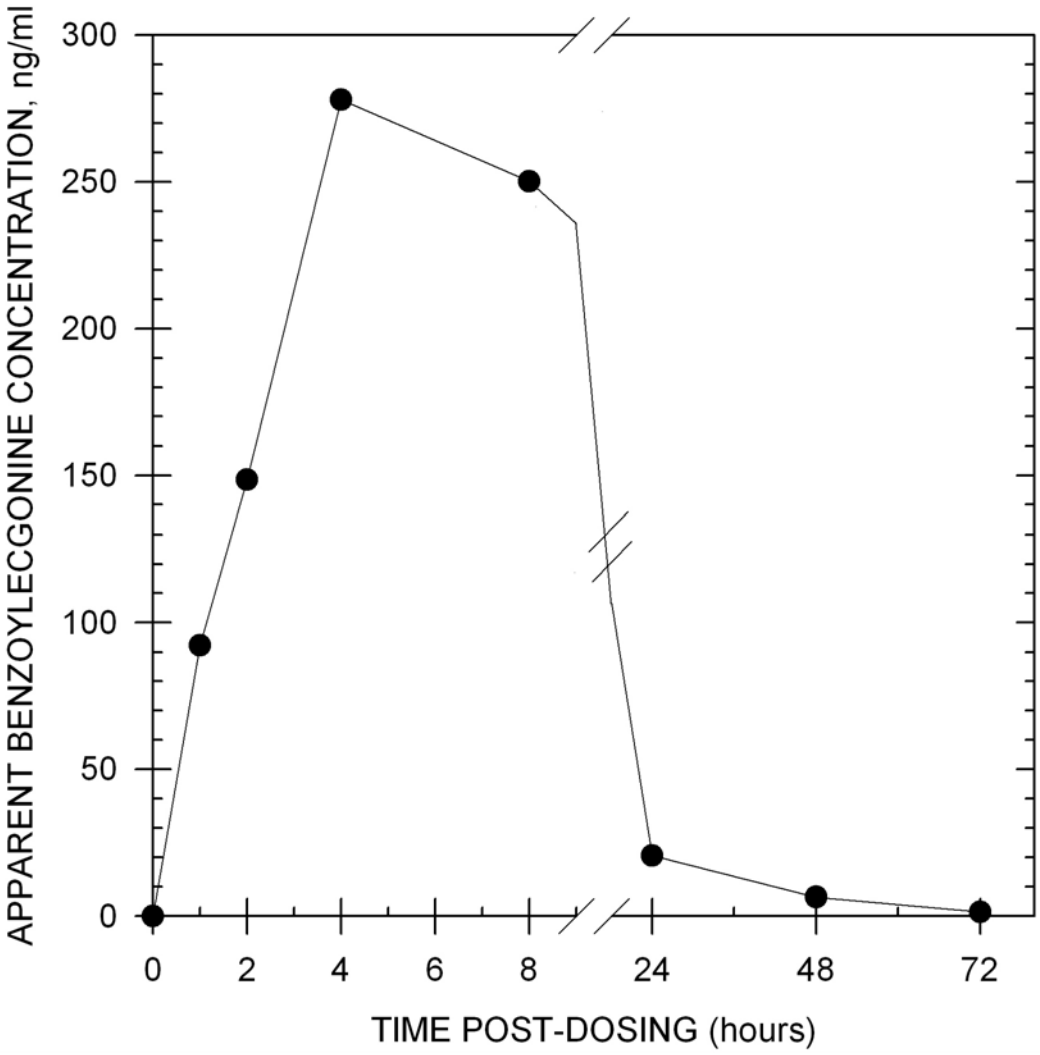
Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

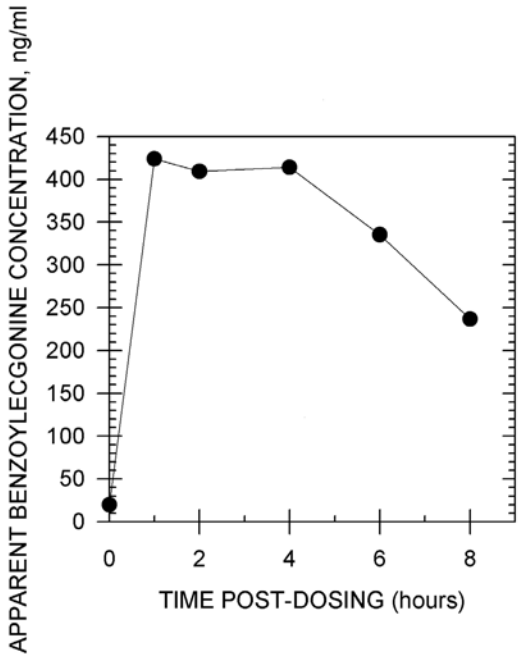
Duration of Detection:

After administration of 40 mg of cocaine by intravenous injection to one horse, the presence of this drug was detected for at least 72 hours in equine urine. All samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.

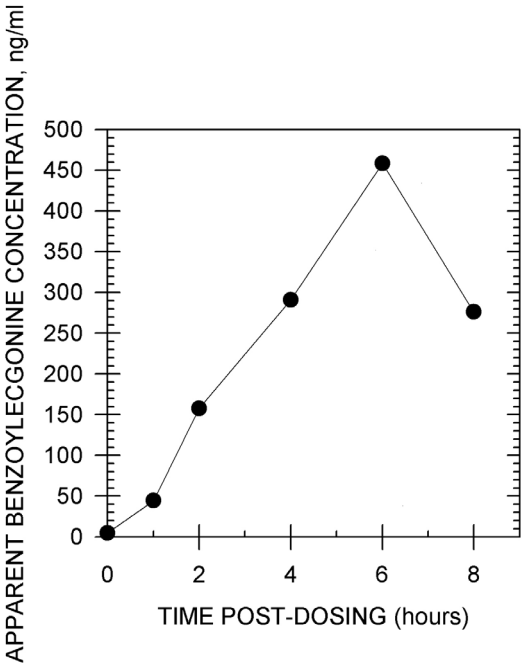


TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 5 mg of benzoylecgonine by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine urine. Because the post-time points 1 through 8 hours exceeded the range of the assay, samples were diluted 1:500 with EIA buffer and back-calculated to the recommended 1:7 dilution.



Duration of Detection: After administration of 5 mg of benzoylecgonine orally to one horse, the presence of this drug was detected for at least 8 hours in equine urine. Because the post-time points 1 through 8 hours exceeded the range of the assay, samples were diluted 1:500 with EIA buffer and back-calculated to the recommended 1:7 dilution.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Cocaethylene	144%
Benzoylecgonine	100%
Cocaine	75%
p-Hydroxycocaine	37.5%
N-Norcaine	1.3%
Allopseudococaine	1%
Ecgonine	0.3%
Ecgonine Methyl Ester	0.3%
Chloroprocaine	0.3%
Procaine	0.05%

Acepromazine	<0.01	Folic Acid	<0.01	Pemoline	<0.01
Acetaminophen	<0.01	Folinic Acid	<0.01	Penicillin G-Potassium	<0.01
Acetylsalicylic Acid	<0.01	Furosemide	<0.01	Penicillin G-Procaine	<0.01
E-Amino-n-caproic acid	<0.01	Gemfibrozil	<0.01	Pentoxifylline	<0.01
Amitriptyline	<0.01	Gentisic Acid	<0.01	Pentylenetetrazole	<0.01
Amphetamine	<0.01	Glipizide	<0.01	Phendimetrazine	<0.01
Ascorbic Acid	<0.01	L-Glutamic Acid	<0.01	Phenmetrazine	<0.01
Atropine	<0.01	Glutethimide	<0.01	Phenothiazine	<0.01
Bemegride	<0.01	Glycopyrrolate	<0.01	Phenylbutazone	<0.01
Benoxinate	<0.01	Heparin	<0.01	Picrotoxin	<0.01
Benzoic Acid	<0.01	Hexylcaine	<0.01	Polyethylene Glycol	<0.01
Brucaine	<0.01	Hippuric Acid	<0.01	Pramoxine	<0.01
Bupivacaine	<0.01	Hordenine	<0.01	Prednisolone	<0.01
Butamben	<0.01	Hydrocodone	<0.01	Prilocaine	<0.01
Caffeine	<0.01	Hydrocortisone	<0.01	Primadone	<0.01
Chlordiazepoxide	<0.01	Ibuprofen	<0.01	Procainamide	<0.01
Chlorpromazine	<0.01	Imipramine	<0.01	Promazine	<0.01
Clenbuterol	<0.01	Isoxsuprine	<0.01	Propoxycaine	<0.01
Codeine	<0.01	Lidocaine	<0.01	Pseudoephedrine	<0.01
Cotinine	<0.01	Mazindol	<0.01	Pyrantel	<0.01
Dexamethasone	<0.01	Mefexamide	<0.01	Pyrilamine	<0.01
Dextromethorphan	<0.01	Meperidine	<0.01	Pyrimethamine	<0.01
Dibucaine	<0.01	Metaproterenol	<0.01	Quinidine	<0.01
Diclofenac	<0.01	Methadone	<0.01	Quinine	<0.01
Diethylpropion	<0.01	Methaqualone	<0.01	Salbutamol	<0.01
Dimethyl Sulfoxide	<0.01	Methocarbamol	<0.01	Salicylamide	<0.01
Diperodon	<0.01	Methylene Blue	<0.01	Salicylic Acid	<0.01
Doxepin	<0.01	6α-Methylprednisolone	<0.01	Scopalamine	<0.01
Dyclonine	<0.01	Nalorphine	<0.01	Tetracaine	<0.01
Ephedrine	<0.01	Naproxen	<0.01	Thebaine	<0.01
Erythromycin	<0.01	Niaciamide	<0.01	Theophylline	<0.01
Ethamivan	<0.01	Nicotine	<0.01	Thiamine	<0.01
Ethyl p-amino-benzoate	<0.01	Nikethamide	<0.01	Trimethoprim	<0.01
N-Ethylamphetamine	<0.01	Nortriptyline	<0.01	Trimipramine	<0.01
Fencamfamine	<0.01	Orphenadrine	<0.01	Uric Acid	<0.01
Fenoprofen	<0.01	Oxyphenbutazone	<0.01		
Flunixin	<0.01	PCP	<0.01		

ENHANCED KIT
CORTICOSTEROID GROUP

Product# 100410 &
100415 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Flumethasone	0.25 ng/ml
Dexamethasone	0.3 ng/ml
Isoflupredone	6 ng/ml
Beclomethasone	9 ng/ml
Betamethasone	10 ng/ml
Hydrocortisone	50 ng/ml
Methylprednisolone	60 ng/ml
Prednisolone	80 ng/ml

I-50 in Equine Urine (Diluted 1:3)

Flumethasone	0.98 ng/ml
Dexamethasone	4.0 ng/ml
Isoflupredone	100 ng/ml

I-50 in Canine Urine (Diluted1:9)

Flumethasone	5.50 ng/ml
Dexamethasone	15 ng/ml
Isoflupredone	400 ng/ml

I-50 in Equine Plasma

Flumethasone	0.42 ng/ml
Dexamethasone	0.7 ng/ml
Isoflupredone	15 ng/ml

I-50 in Equine Serum

Flumethasone	0.3 ng/ml
Dexamethasone	0.7 ng/ml
Isoflupredone	10 ng/ml

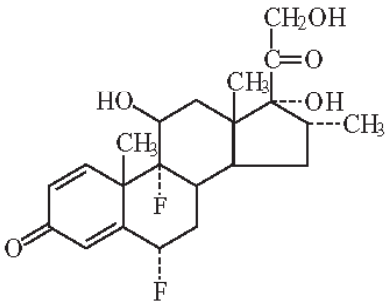
Note: Measuring wavelength was 650 nm**.**

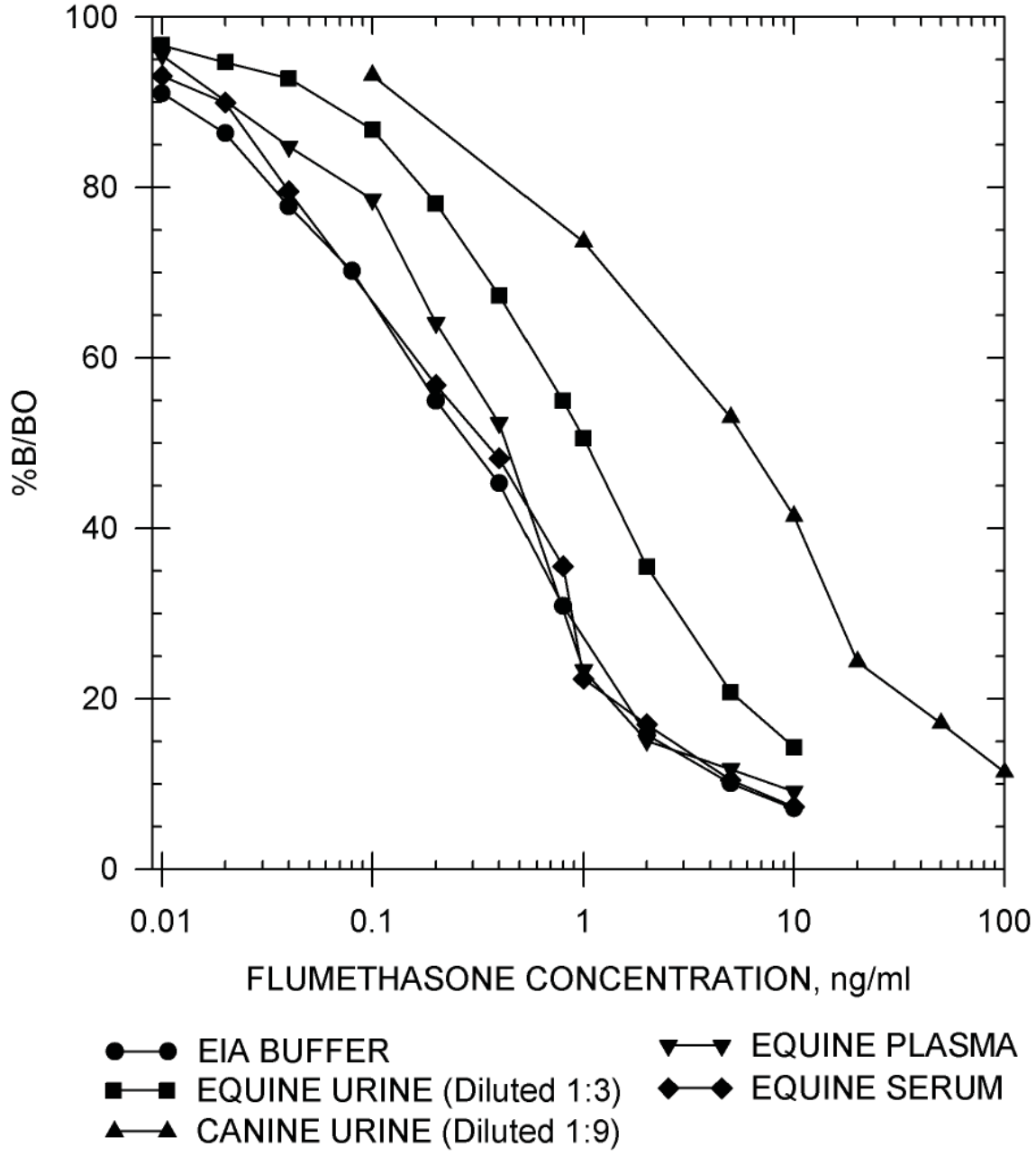
Precision:

Intra-assay	5.94%
Inter-assay	4.92%

CORTICOSTEROID GROUP STANDARD CURVES

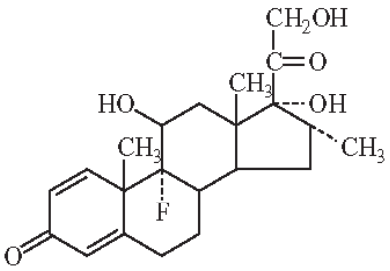
Flumethasone

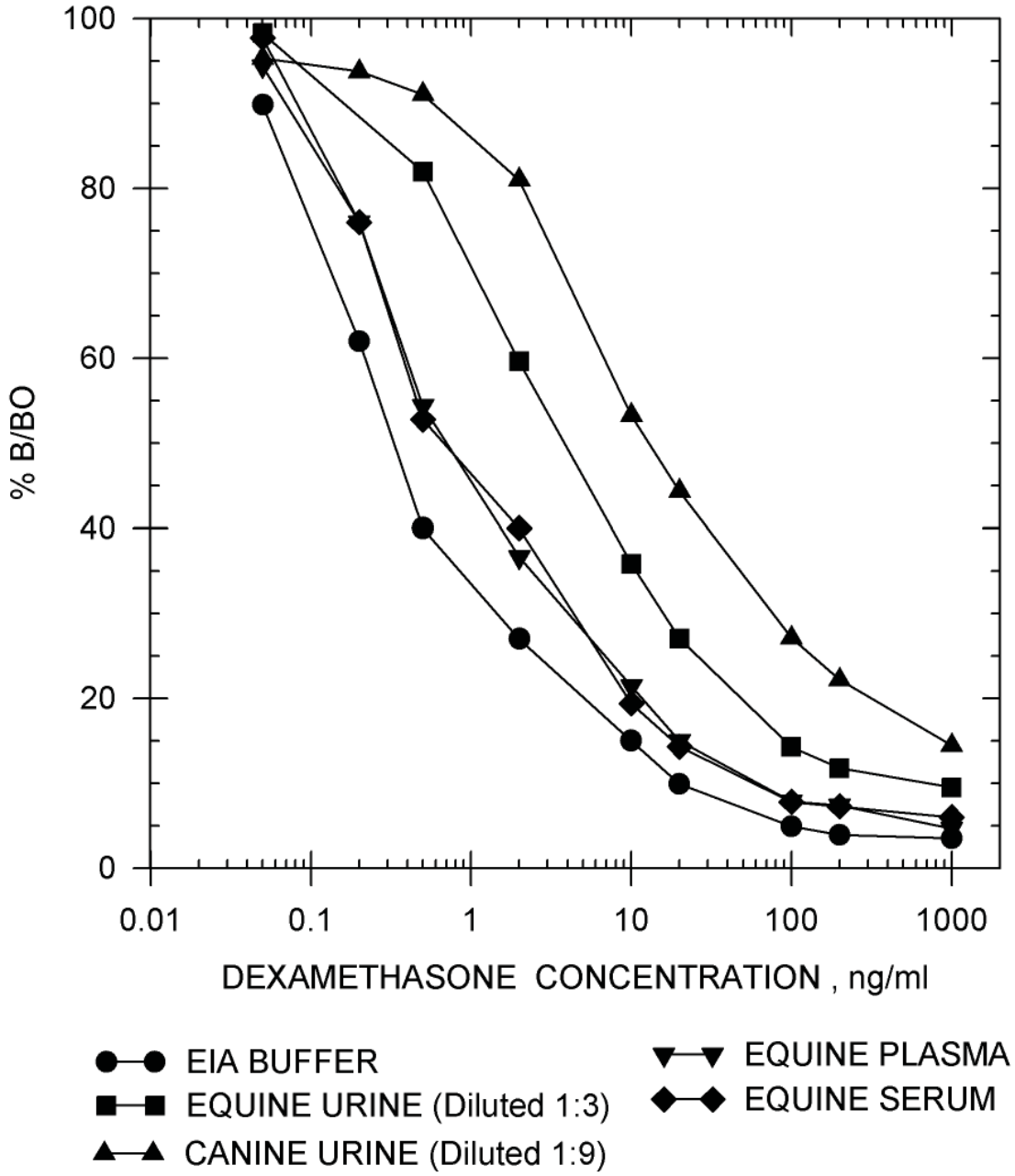




CORTICOSTEROID GROUP STANDARD CURVES

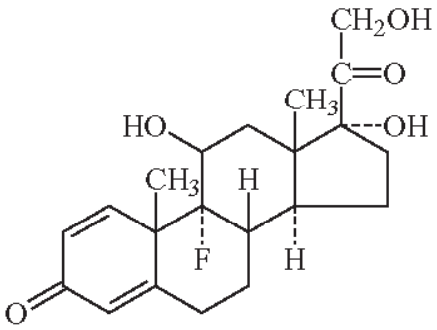
Dexamethasone

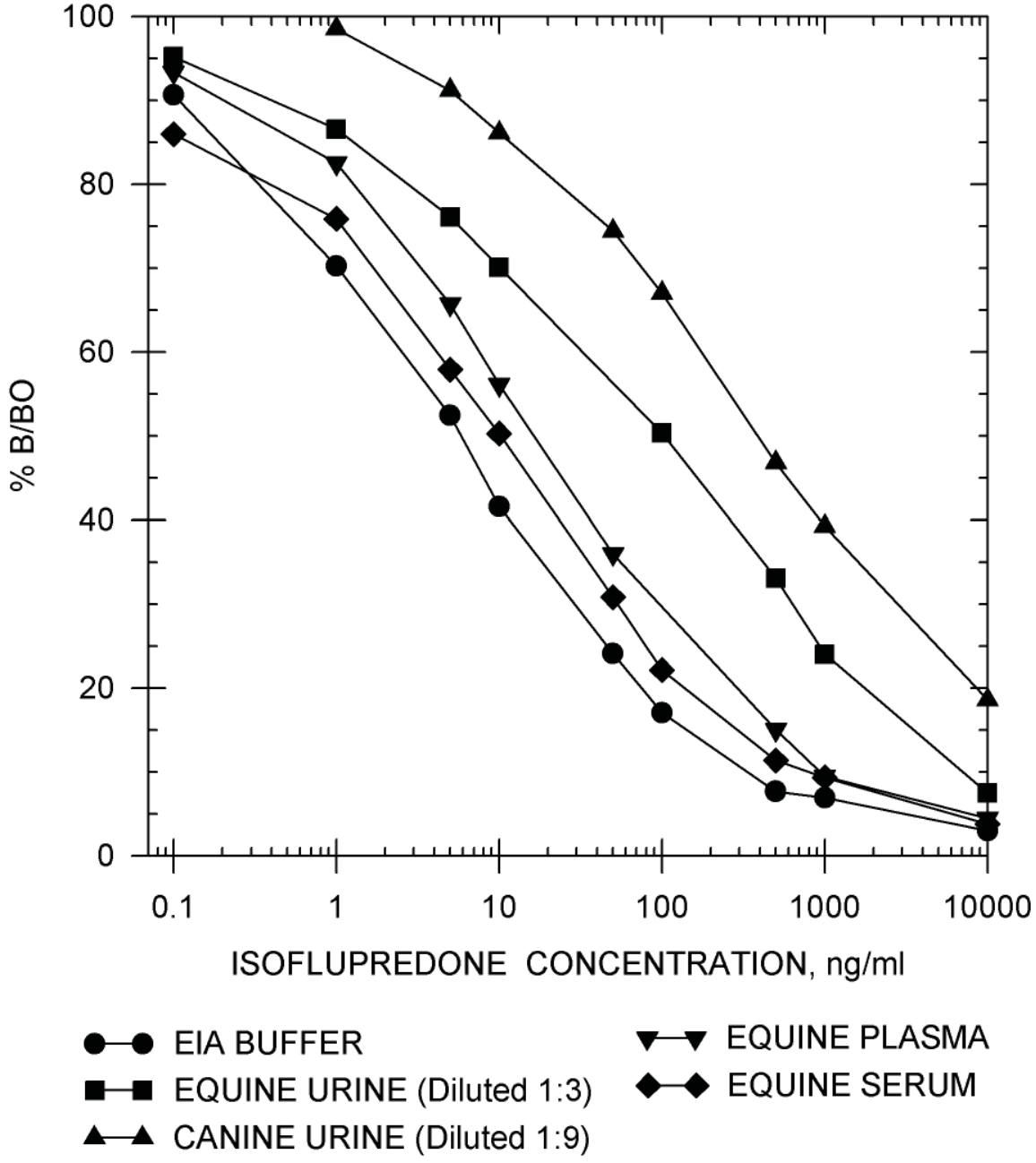




CORTICOSTEROID GROUP STANDARD CURVES

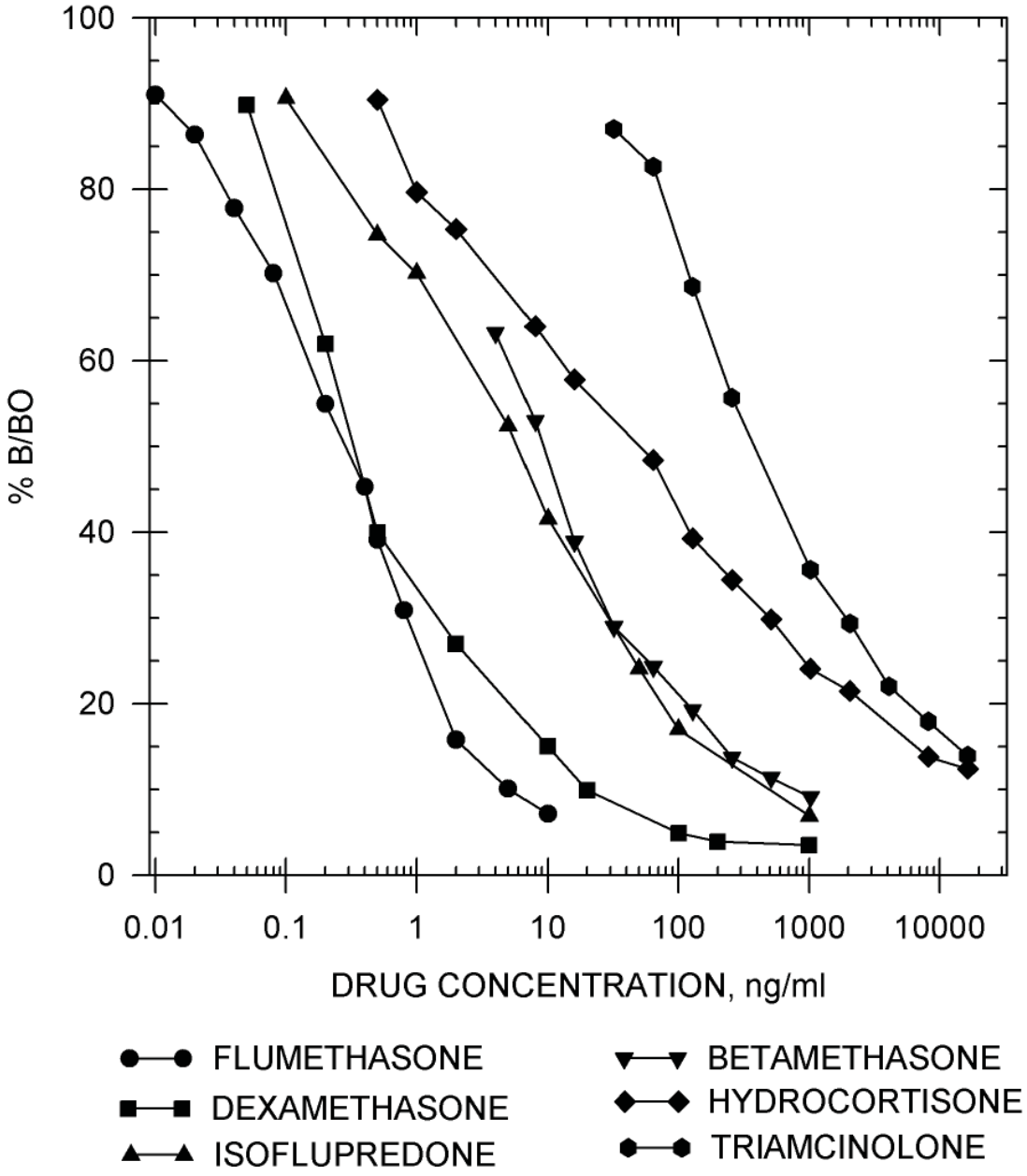
Isoflupredone





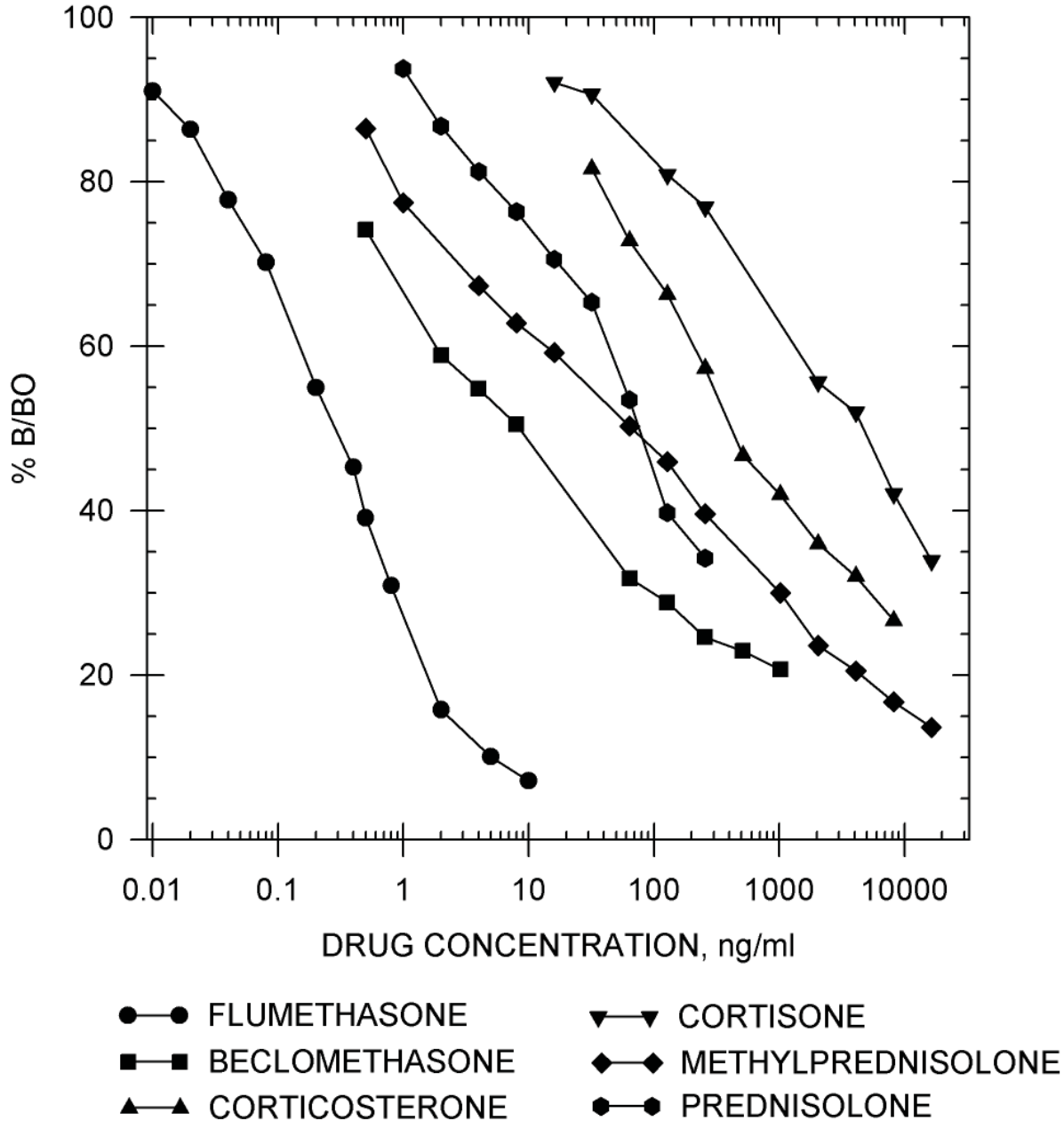
CORTICOSTEROID GROUP STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



CORTICOSTEROID GROUP STANDARD CURVES

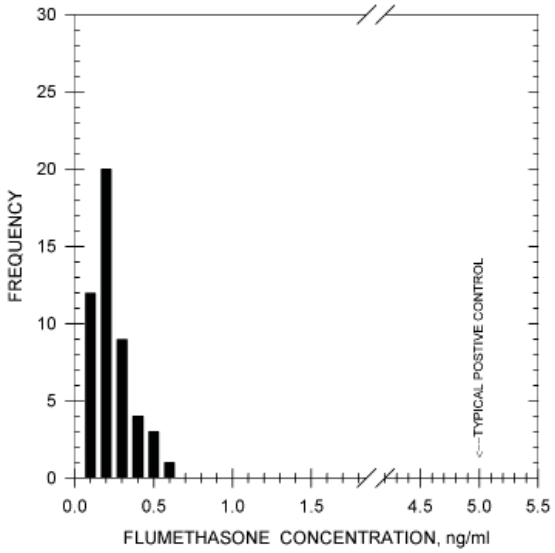
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 49 post-race equine urine samples, diluted 1:3, has shown no background levels above 0.57 ng/ml.

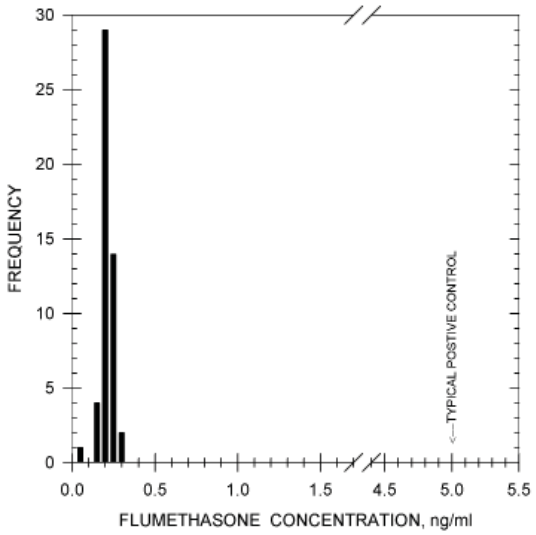
Sample Treatment: A dilution of 1:3 (i.e. 1 part sample to 3 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples, diluted 1:9, has shown no background levels above 0.21 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.

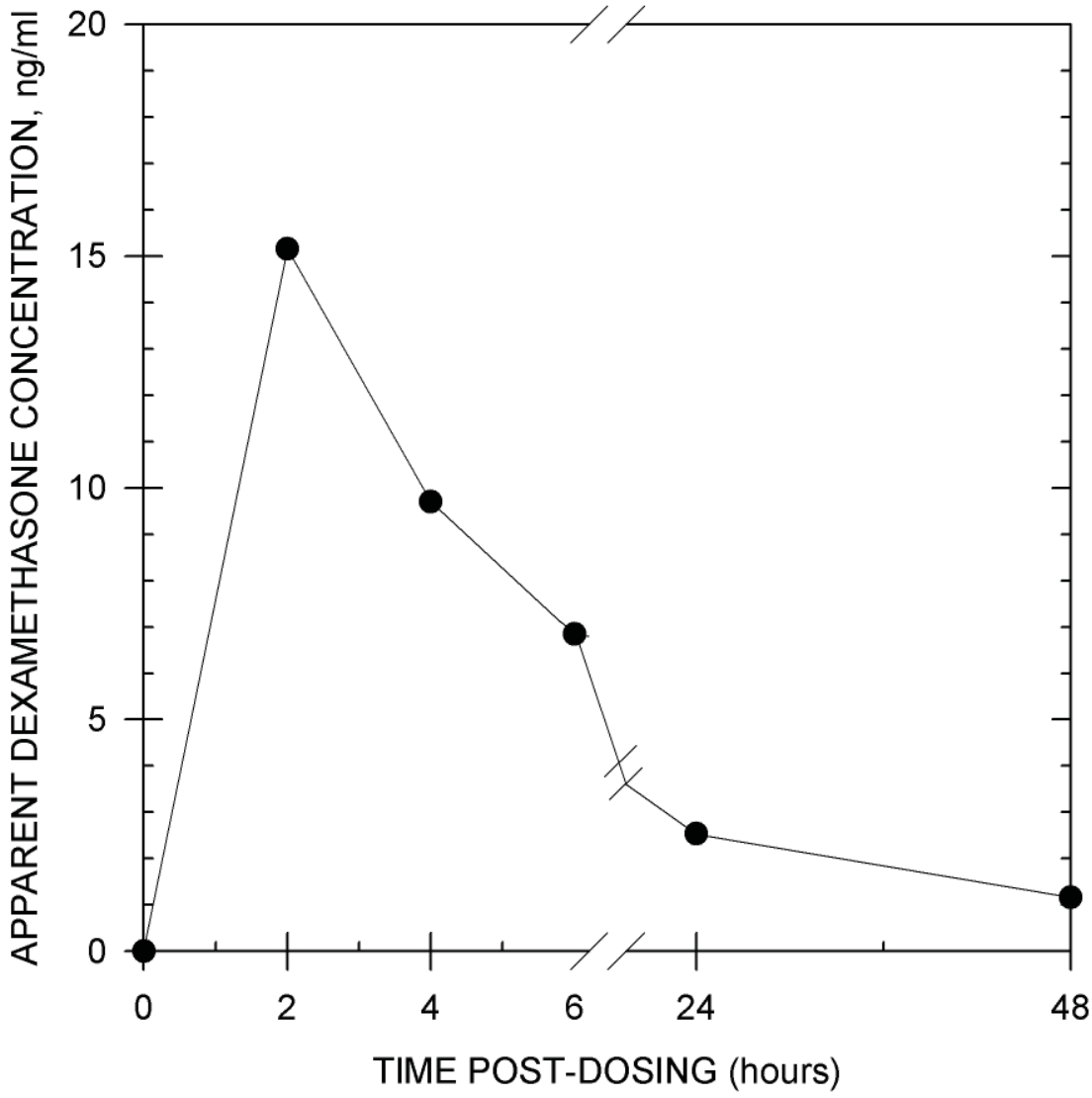


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 10 mg of dexamethasone by intravenous injection to one horse, the presence of this drug was detected for 6 hours in equine urine



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Flumethasone	100%
Dexamethasone	83%
Isoflupredone	4.2%
Beclomethasone	2.8%
Betamethasone	2.5%
Hydrocortisone	0.5%
6α-Methylprednisolone	0.4%
Prednisolone	0.3%
Corticosterone	0.04%
Triamcinolone	0.04%

E-Amino-n-Caproic Acid	<0.01%	Methandrostenolone	<0.01%
5-Androstene-3β-17β-diol	<0.01%	Methocarbamol	<0.01%
Androsterone	<0.01%	Methylene Blue	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	17 α- Methyltestosterone	<0.01%
Bolasterone	<0.01%	Nandrolone	<0.01%
Boldenone	<0.01%	Naproxen	<0.01%
4-Chlorotestosterone-17-Acetate	<0.01%	Niacinamide	<0.01%
Clenbuterol	<0.01%	Orphenadrine	<0.01%
Cortisone	<0.01%	Oxymetholone	<0.01%
Diclofenac	<0.01%	Oxyphenbutazone	<0.01%
Dimethyl Sulfoxide	<0.01%	Pentoxifylline	<0.01%
Dipyrone	<0.01%	Phenothiazine	<0.01%
Estradiol	<0.01%	Phenylbutazone	<0.01%
Estriol	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Prednisone	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Fluoxymesterone	<0.01%	Progesterone	<0.01%
Furosemide	<0.01%	Pyrantel	<0.01%
Glycopyrrolate	<0.01%	Salbutamol	<0.01%
Hordenine	<0.01%	Salicylamide	<0.01%
Ibuprofen	<0.01%	Salicylic Acid	<0.01%
Meclofenamic Acid	<0.01%	Stanozolol	<0.01%
Magnesium	<0.01%	Testosterone	<0.01%
Mesterolone	<0.01%	Thiamine	<0.01%
Metaproterenol	<0.01%	Triamcinolone Acetonide	<0.01%
		Zearalenone	<0.01%

CROMOGLYCATE

Product# 105810

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer	
Sodium Cromoglycate	9.8 ng/ml

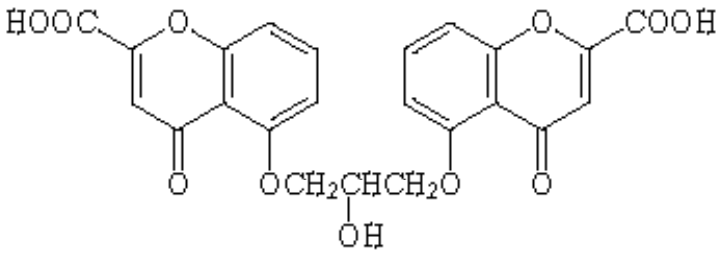
Precision:

Intra-assay	N/A
Inter-assay	N/A

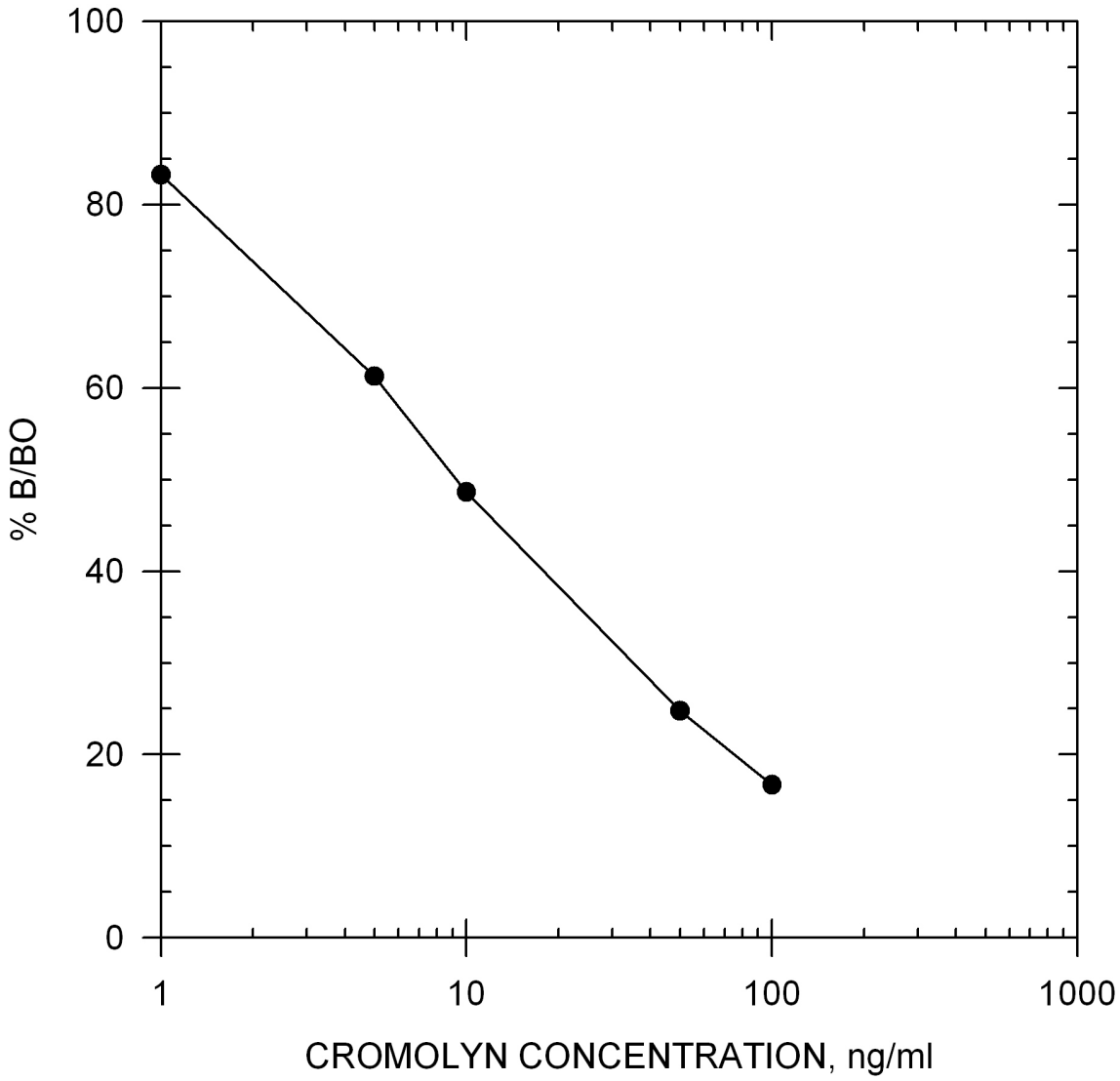
Note: Measuring wavelength was 650 nm**.**

CROMOGLYCATE STANDARD CURVE

Cromolyn



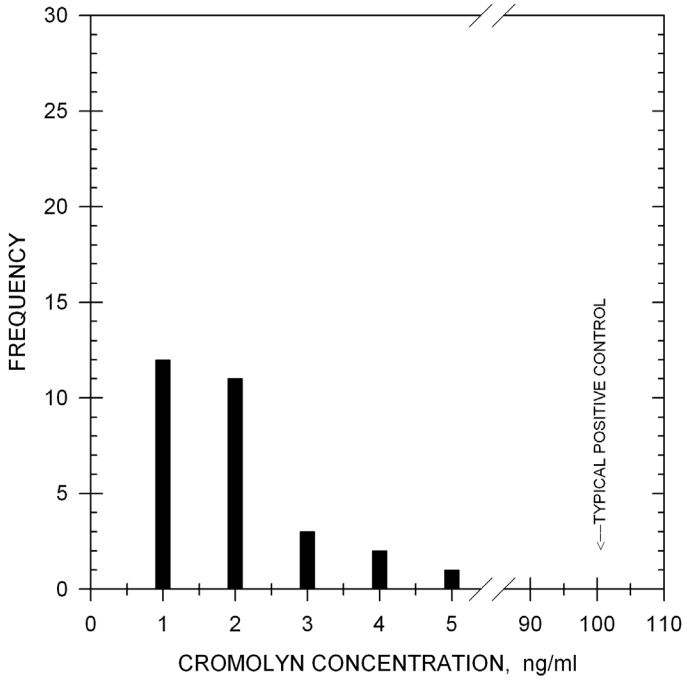
Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

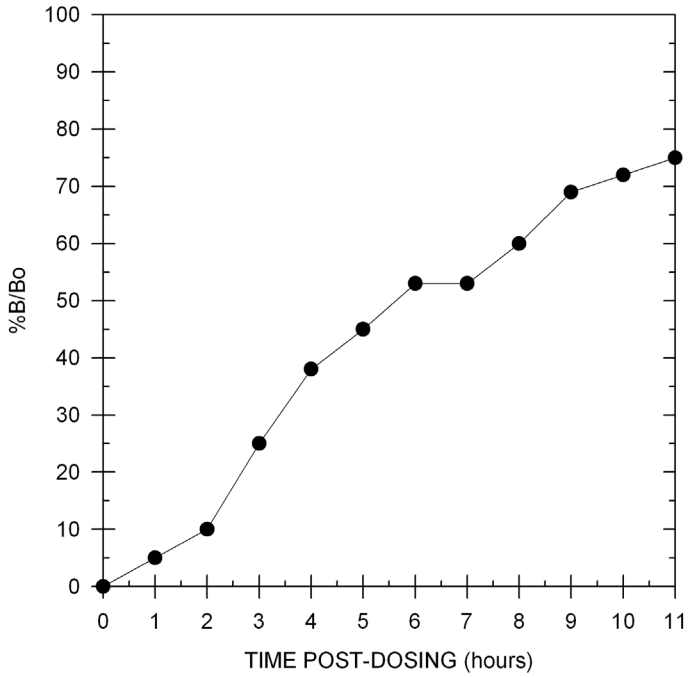
Backgrounds: Analysis of 39 post-race equine urine samples has shown no background levels above 5 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

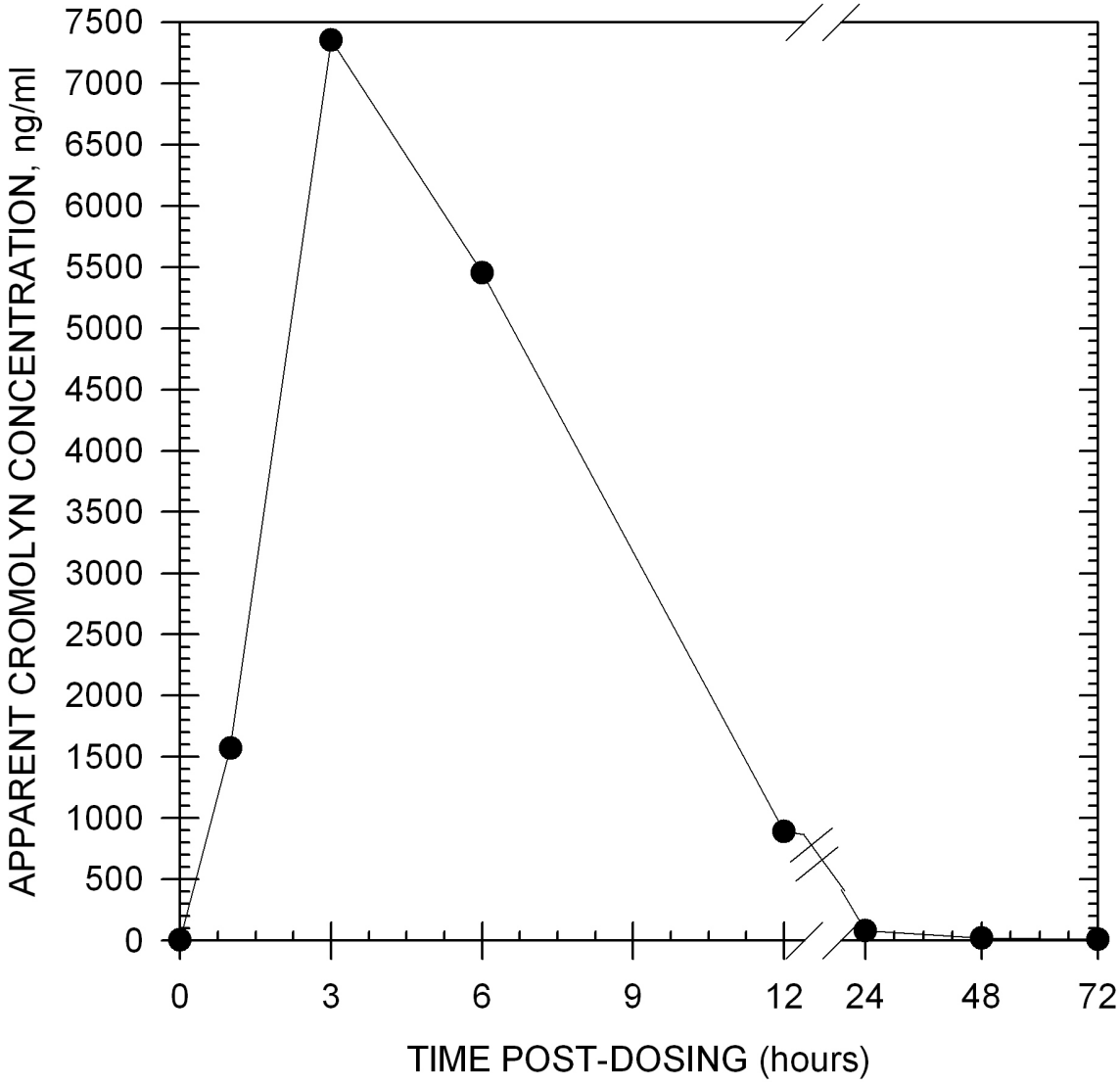
Duration of Detection: After administration of 80 mg of nebulized cromolyn to one horse, the presence of this drug was detected for 7 hours in equine urine.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 110 mg of cromolyn by intratracheal injection to one horse, the presence of this drug was detected for 12 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description.

Sodium Cromoglycate	100%
Acetominophen	<1.0%
A.S.A.	<1.0%
Benoxaprofen	<1.0%
Bumetanide	<1.0%
Dantrolene	<1.0%
Dantrolene Metabolite	<1.0%
Diclofenac	<1.0%
Ethacrynic Acid	<1.0%
Flunixin	<1.0%
Furosemide	<1.0%
Indomethacin	<1.0%
Ketoprofen	<1.0%
Meclofenamic Acid	<1.0%
Mefanamic Acid	<1.0%
Methysalicylate	<1.0%
Naproxen	<1.0%
Phenylbutazone	<1.0%
Salicylic Acid	<1.0%
Trichloromethiazide	<1.0%

ENHANCED KIT

DANTROLENE

Product #106310 &

106315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

DANTROLENE

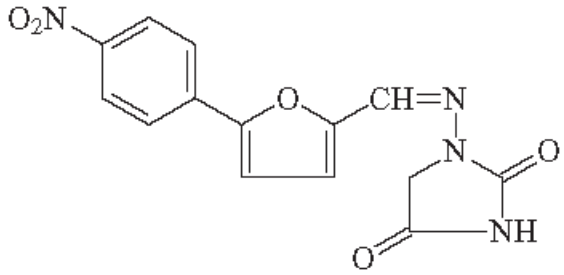
I-50 in EIA Buffer	0.40 ng/ml
I-50 in Equine Urine (Diluted 1:9)	7.21 ng/ml
I-50 in Canine Urine (Diluted 1:9)	1.83 ng/ml
I-50 in Equine Plasma	0.77 ng/ml
I-50 in Equine Serum	0.66 ng/ml

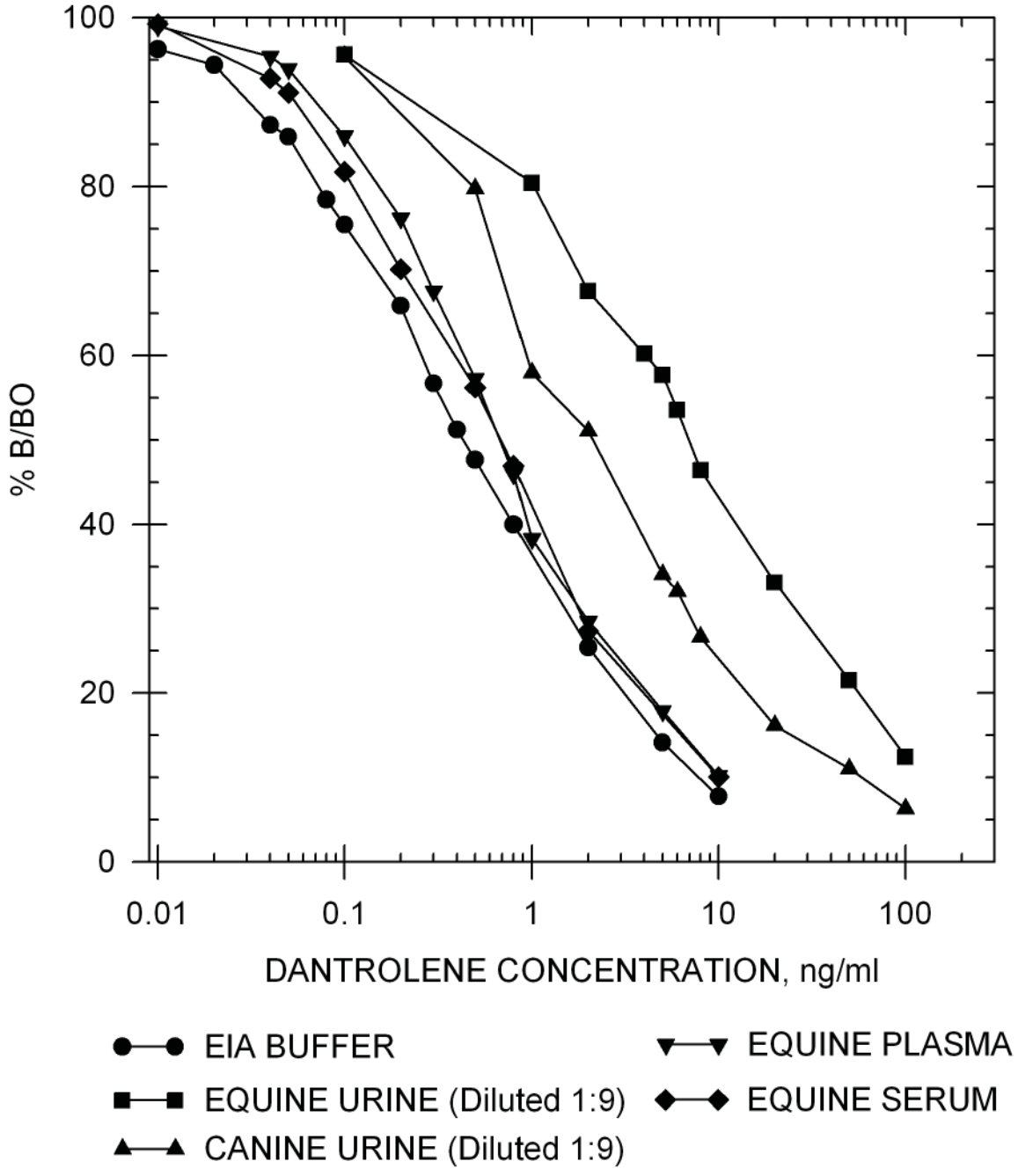
Precision:	Intra-assay	2.37%
	Inter-assay	2.87%

Note: Measuring wavelength was 650 nm.

DANTROLENE STANDARD CURVES

Dantrolene

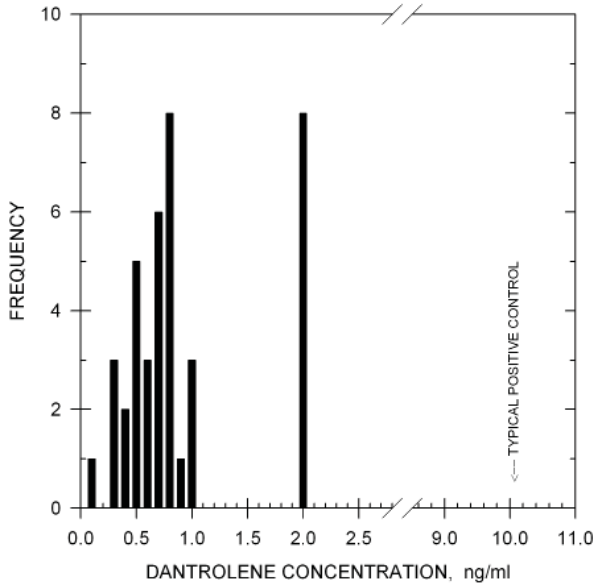




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 32 post-race equine urine samples, diluted 1:9, has shown no background levels above 2 ng/ml.

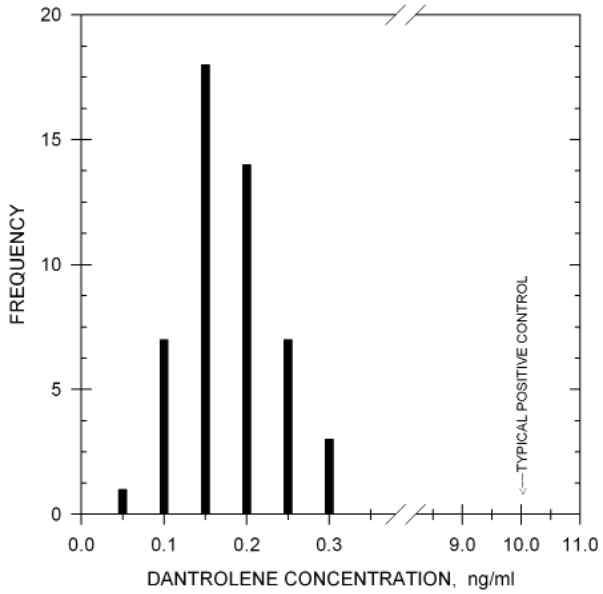
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples, diluted 1:9, has shown no background levels above 0.30 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.

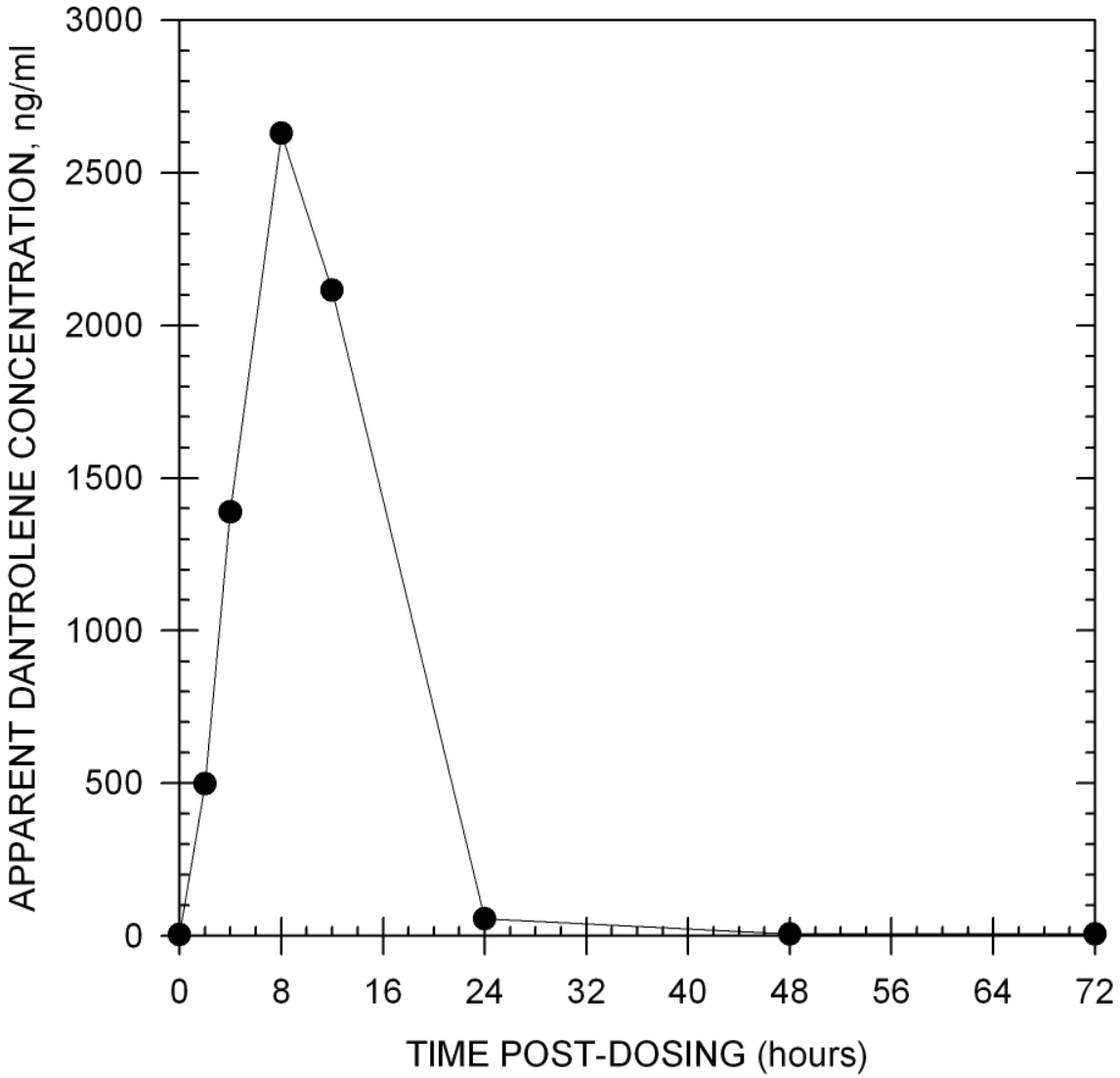


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

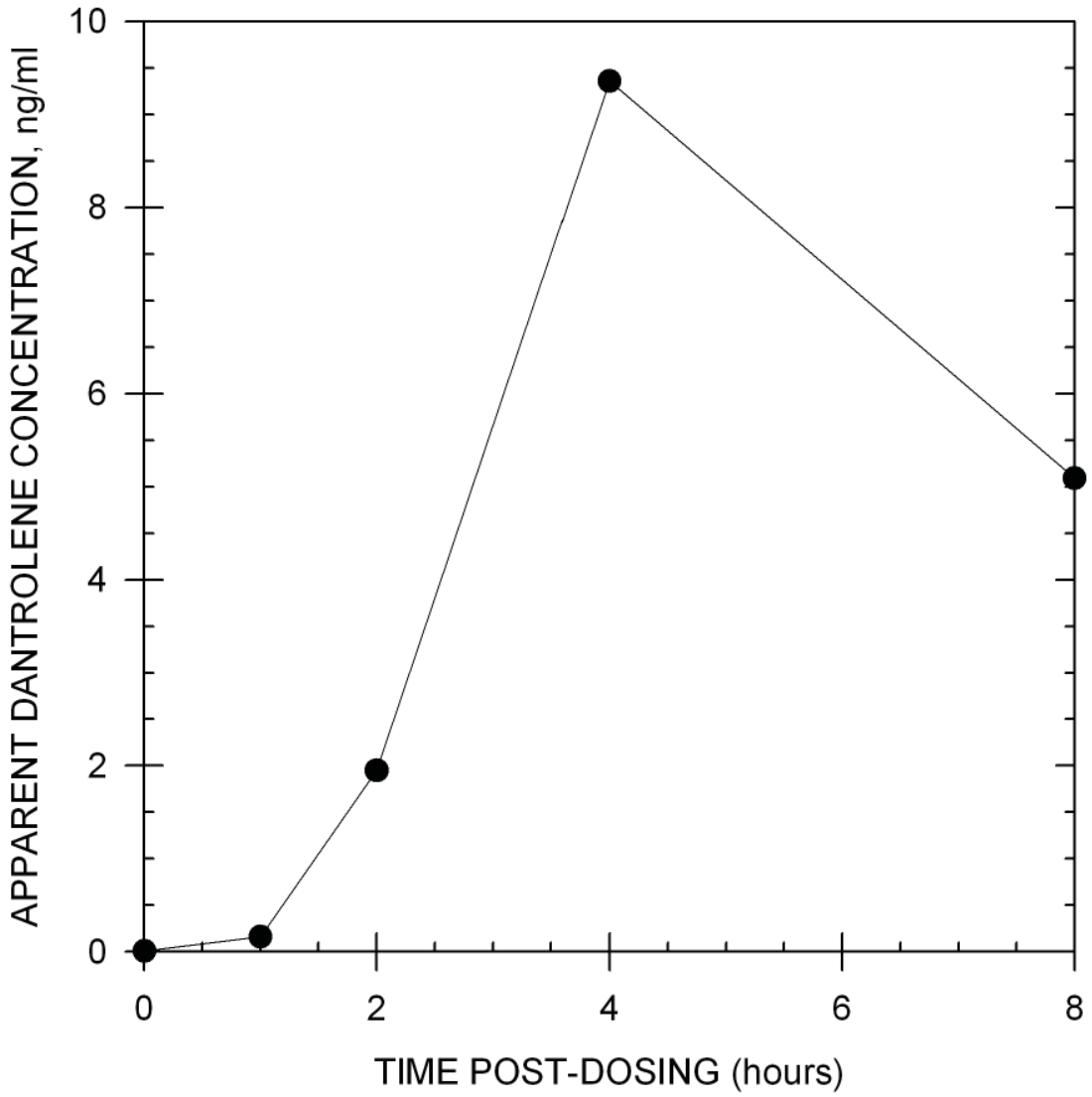
Duration of Detection: After administration of 250 mg of dantrolene orally to one horse, the presence of this drug was detected for 24 hours in equine urine. All samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 250 mg of dantrolene orally to one horse, the presence of this drug was detected for at least 8 hours in equine serum, probably longer. All samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Dantrolene	100%
Phenothiazine	0.02%

E-Amino-n-Caproic Acid	<0.01%	Methocarbamol	<0.01%
Aminophylline	<0.01%	Methylene Blue	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	6α-Methylprednisolone	<0.01%
Baclofen	<0.01%	Naproxen	<0.01%
Carisoprodol	<0.01%	Niacinamide	<0.01%
Clenbuterol	<0.01%	Orphenadrine	<0.01%
Curare	<0.01%	Oxyphenbutazone	<0.01%
Cyclobenzaprine	<0.01%	Pancuronium Bromide	<0.01%
Decamethonium Bromide	<0.01%	Papaverine	<0.01%
Diazepam	<0.01%	Pentoxifylline	<0.01%
Diclofenac	<0.01%	Phenylbutazone	<0.01%
Dimethyl Sulfoxide	<0.01%	Polyethylene Glycol	<0.01%
Dipyrone	<0.01%	Prednisolone	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Procaine	<0.01%
		Procyclidine	<0.01%
Flunixin	<0.01%	Pyrantel	<0.01%
Furosemide	<0.01%	Quinine	<0.01%
Gallamine Triethiodide	<0.01%	Ritrodrine	<0.01%
Glycopyrrolate	<0.01%	Salbutamol	<0.01%
Guaifenesin	<0.01%	Salicylamide	<0.01%
Hordenine	<0.01%	Salicyclic Acid	<0.01%
Hydrocortisone	<0.01%	Succinylcholine Chloride	<0.01%
Ibuprofen	<0.01%	Thiamine	<0.01%
Mebeverine	<0.01%	Tolperisone	<0.01%
Mephenesin	<0.01%	Tubercurarine Chloride	<0.01%
Metaproterenol	<0.01%	Xylazine	<0.01%

ENHANCED KIT

DERMORPHIN

Product #181910 & 181915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.

SENSITIVITY

I-50 in EIA Buffer

Dermorphin 0.2 ng/ml

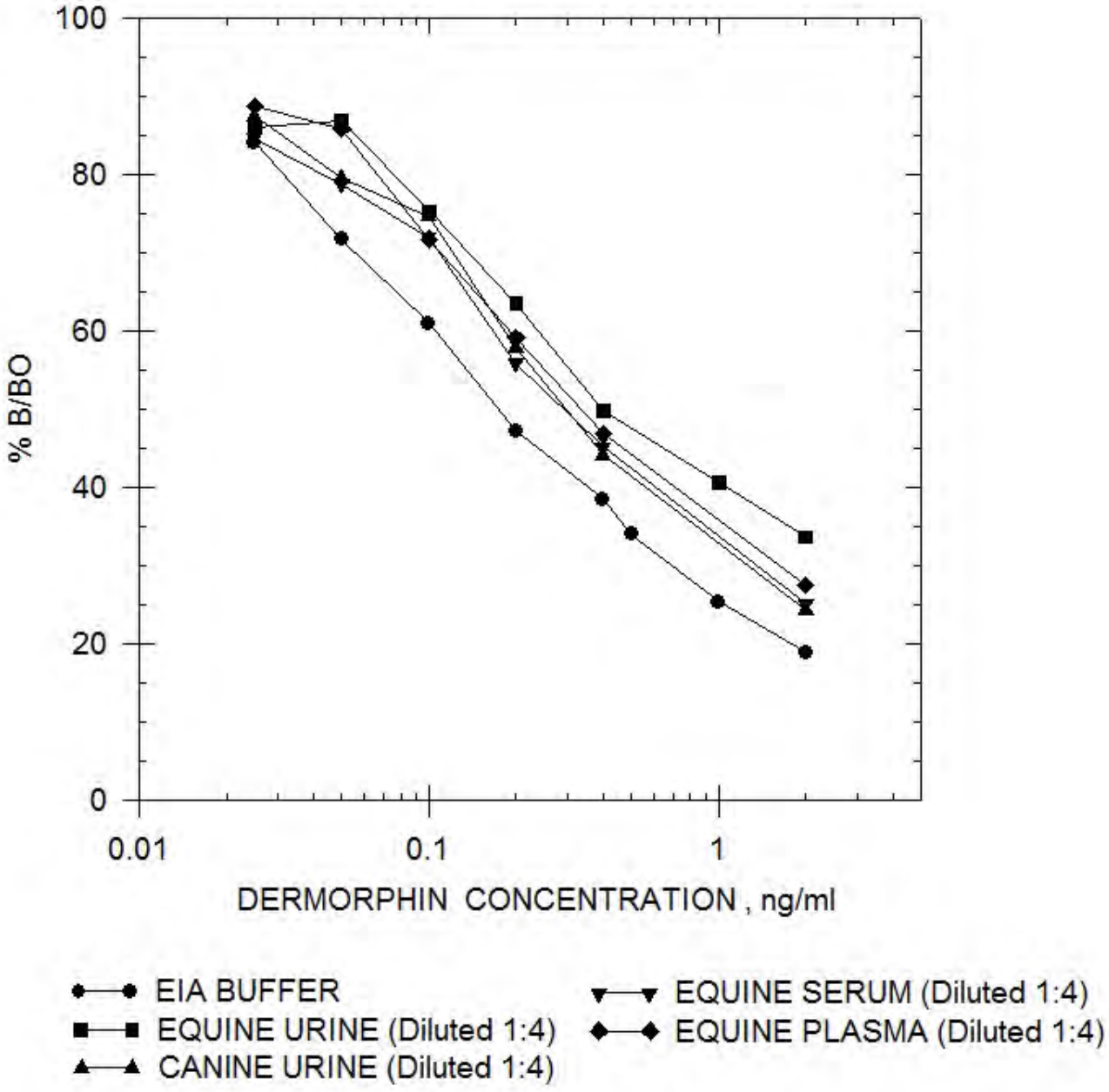
I-50 in Equine Urine (Diluted 1:4)		I-50 in Canine Urine (Diluted 1:4)	
Dermorphin	1.30 ng/ml	Dermorphin	1.45 ng/ml
I-50 in Equine Plasma (Diluted 1:4)		**I-50 in Equine Serum (Diluted 1:4)**	
Dermorphin	2.09 ng/ml	Dermorphin	2.30 ng/ml

Precision:

Intra-assay	3.43 %
Inter-assay	6.93 %

Note: Measuring wavelength was 650 nm**.**

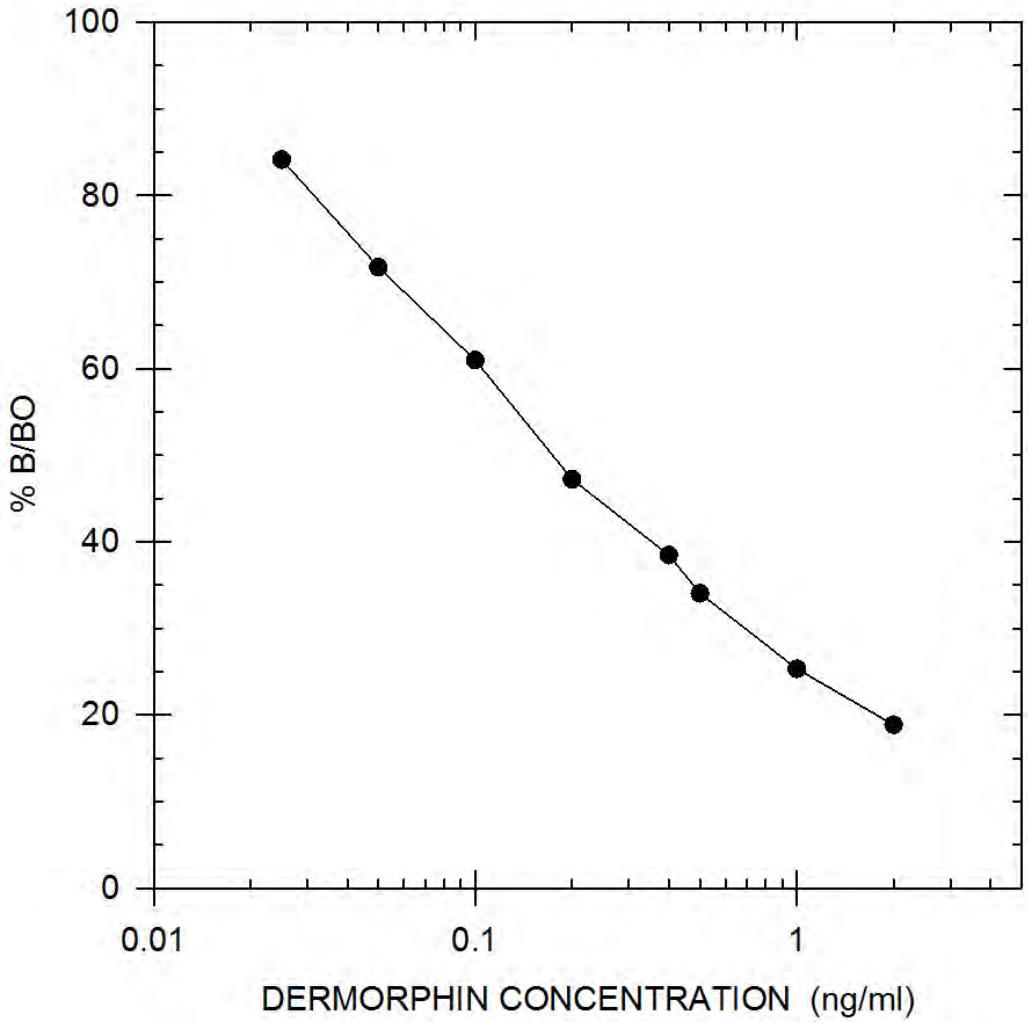
DERMORPHIN STANDARD CURVES



Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.

DERMORPHIN STANDARD CURVES

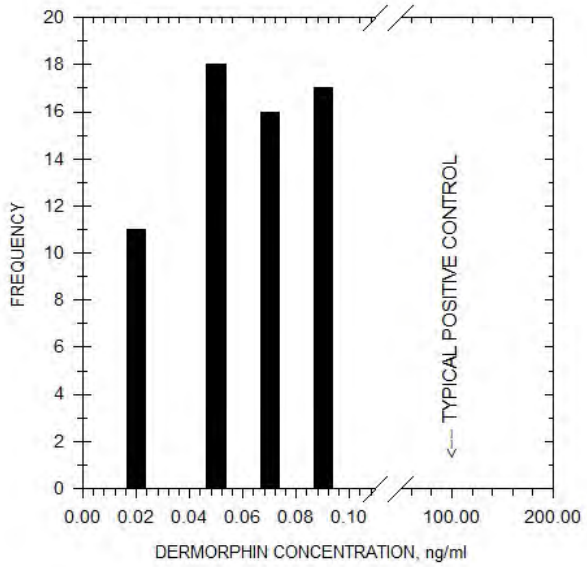
Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:4, has shown no background levels above 0.23 ng/mL.

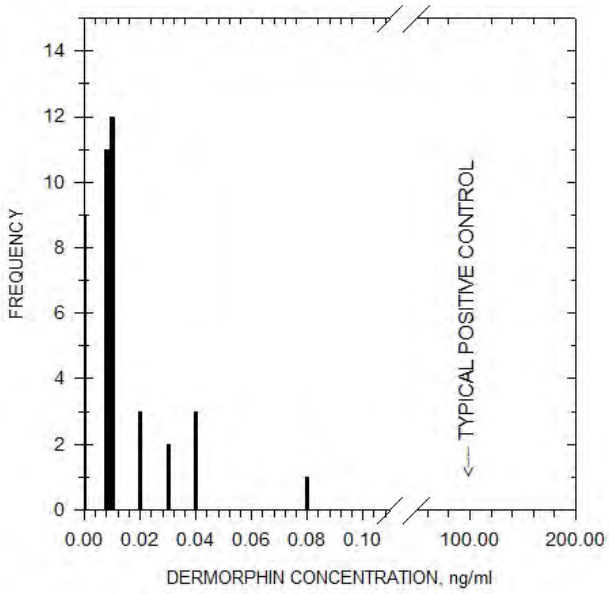
Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 41 post-race canine urine samples, diluted 1:4, has shown no background levels above 0.08 ng/ml.

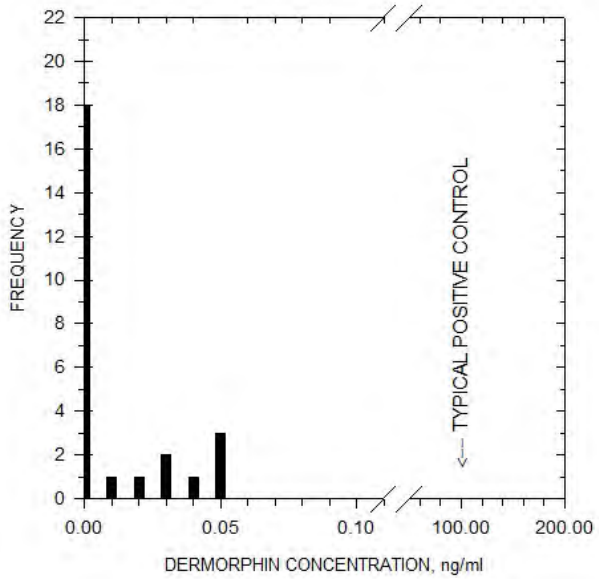
Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

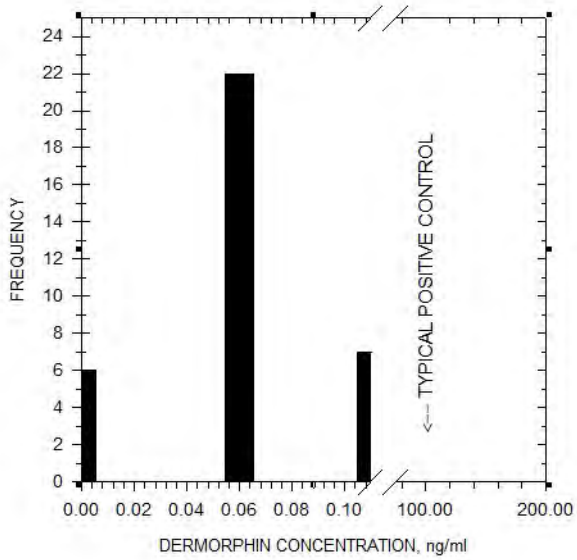
Equine Serum : Analysis of 23 post-race equine serum samples, diluted 1:4, has shown no background levels above 0.04 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



Equine Plasma : Analysis of 39 post-race equine plasma samples, diluted 1:4, has shown no background levels above 0.57 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.002% did not show any significant reaction up to 10μg/ml.

Dermorphin	100%
[Hyp6]-Dermorphin	6.25%
[L-Ala2]-Dermorphin	0.056%
Dermorphin Analog	0.002%
Dermorphin (1-4) Tetrapeptide-Amide [D-Arg2]	<0.002%

Acetaminophen	<0.002%	ξ-amino-n-caproic Acid	<0.002%
Acetylsalicylic Acid	<0.002%	Ethyl p-amino benzoate	<0.002%
Amitryptyline	<0.002%	Flunixin	<0.002%
Caffeine	<0.002%	Folic Acid	<0.002%
Chlordiazepoxide	<0.002%	Furosemide	<0.002%
Chlorpromazine	<0.002%	Glycopyrrolate	<0.002%
Codeine	<0.002%	Heparin	<0.002%
Cotinine	<0.002%	Hippuric Acid	<0.002%
Dextromethorphan	<0.002%	Hordenine	<0.002%
Doxepin	<0.002%	Hydrocortisone	<0.002%
Ephedrine	<0.002%	Ibuprofen	<0.002%
Erythromycin	<0.002%	Isoxuprine	<0.002%
Fenoprofen	<0.002%	Lidocaine	<0.002%
Gemfibrozil	<0.002%	Metaproterenol	<0.002%
Gentisic Acid	<0.002%	Methocarbamol	<0.002%
Glipizide	<0.002%	Methylene Blue	0.04%
Glutethamide	<0.002%	Methylprednisolone	<0.002%
Imipramine	<0.002%	Naproxen	<0.002%
Meperidine	<0.002%	Niacinamide	<0.002%
Methadone	<0.002%	Orphenadrine	<0.002%
Methaqualone	<0.002%	Oxyphenbutazone	<0.002%
Nalorphine	<0.002%	Pentoxyfylline	<0.002%
Nicotine	<0.002%	Phenothiazine	<0.002%
Nortriptyline	<0.002%	Phenylbutazone	<0.002%
PCP	<0.002%	Polyethylene glycol	<0.002%
Penicillin G-Potassium	<0.002%	Prednisolone	<0.002%
Penicillin G-Procaine	<0.002%	Procaine	<0.002%
Primadone	<0.002%	Promazine	<0.002%
Procainamide	<0.002%	Pyrantel	<0.002%
Pseudoephedrine	<0.002%	Pyrillamine	<0.002%
Quinidine	<0.002%	Salbutamol	<0.002%
Quinine	<0.002%	Salicylamide	<0.002%
Theophylline	<0.002%	Salicylic Acid	<0.002%
Trimipramine	<0.002%	Thiamine	<0.002%
Acetopromazine	<0.002%	Uric Acid	<0.002%
Ascorbic Acid	<0.002%	Folinic Acid	<0.002%
Benzoic Acid	<0.002%	L-Glutamic Acid	<0.002%
Clenbuterol	<0.002%	Pyrimethamine	<0.002%
Dexamethasone	<0.002%	Trimethoprim	<0.002%
Diclofenac	<0.002%	Sodium Azide	<0.002%
Dimethyl Sulfoxide	<0.002%		

DETOMIDINE

Product #181310 & 181315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Detomidine	1.8 ng/ml
Carboxydetomidine	2.4 ng/ml
Medetomidine	6.8 ng/ml

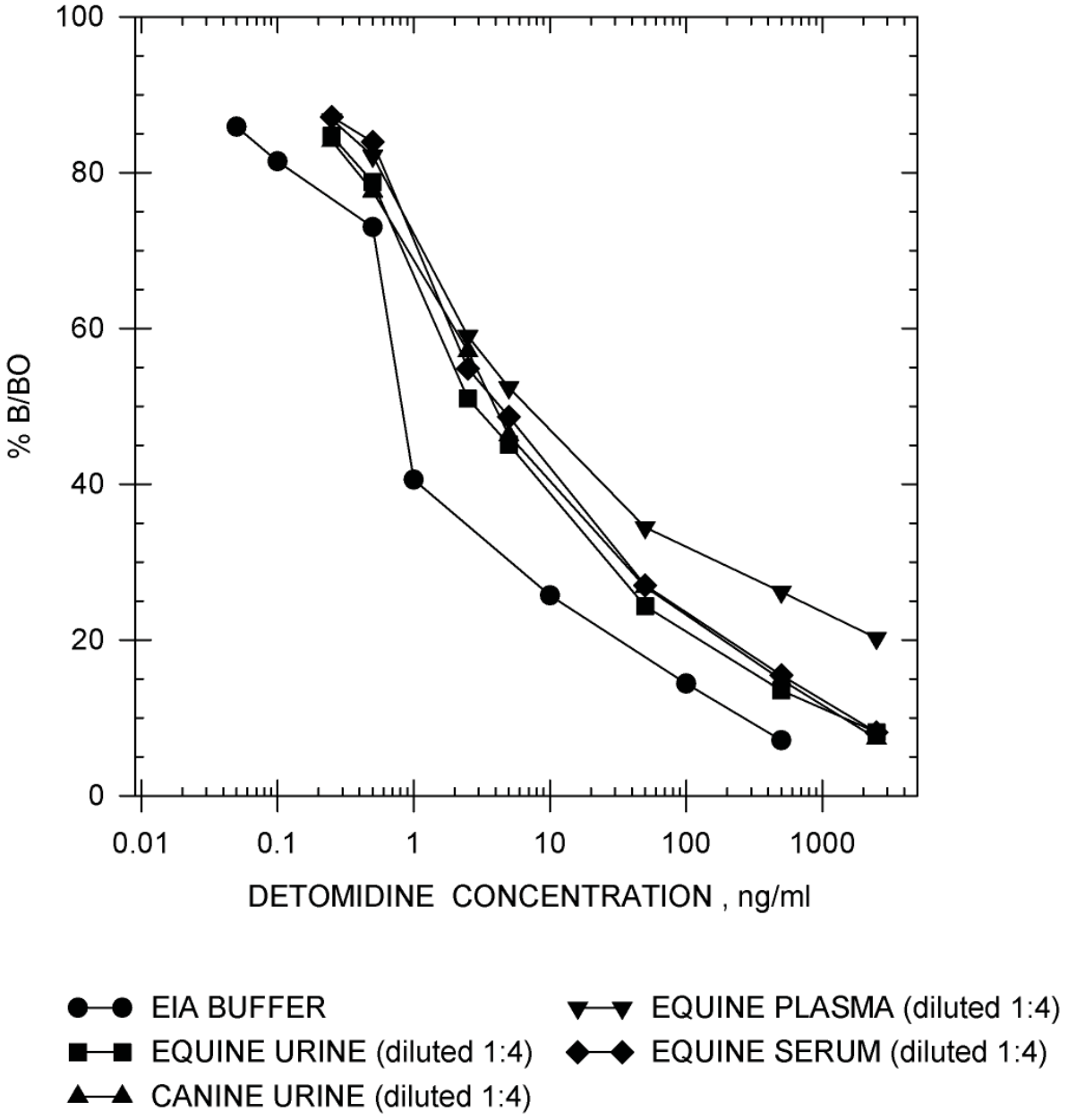
I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (Diluted 1:4)**	
Detomidine	6.0 ng/ml	Detomidine	6.7 ng/ml
Carboxydetomidine	25 ng/ml	Carboxydetomidine	31 ng/ml
Medetomidine	48 ng/ml	Medetomidine	38 ng/ml
I-50 in Equine Plasma (Diluted 1:4)		**I-50 in Equine Serum (Diluted 1:4)**	
Detomidine	19 ng/ml	Detomidine	9.0 ng/ml
Carboxydetomidine	69 ng/ml	Carboxydetomidine	35 ng/ml
Medetomidine	108 ng/ml	Medetomidine	49 ng/ml

Precision:	Intra-assay	3.41 %
	Inter-assay	3.71 %

Note: Measuring wavelength was 650 nm**.**

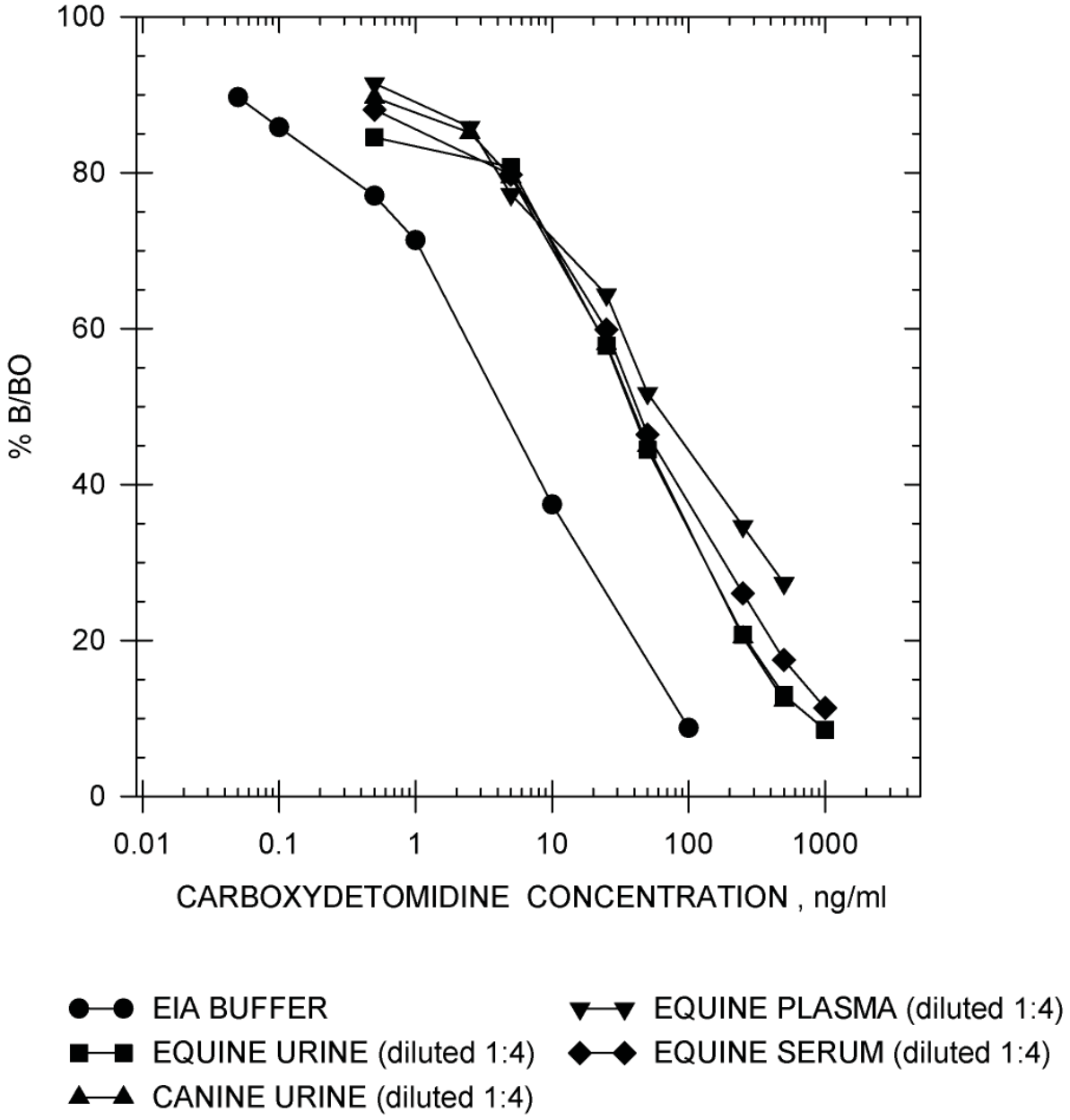
DETOMIDINE STANDARD CURVES

Detomidine



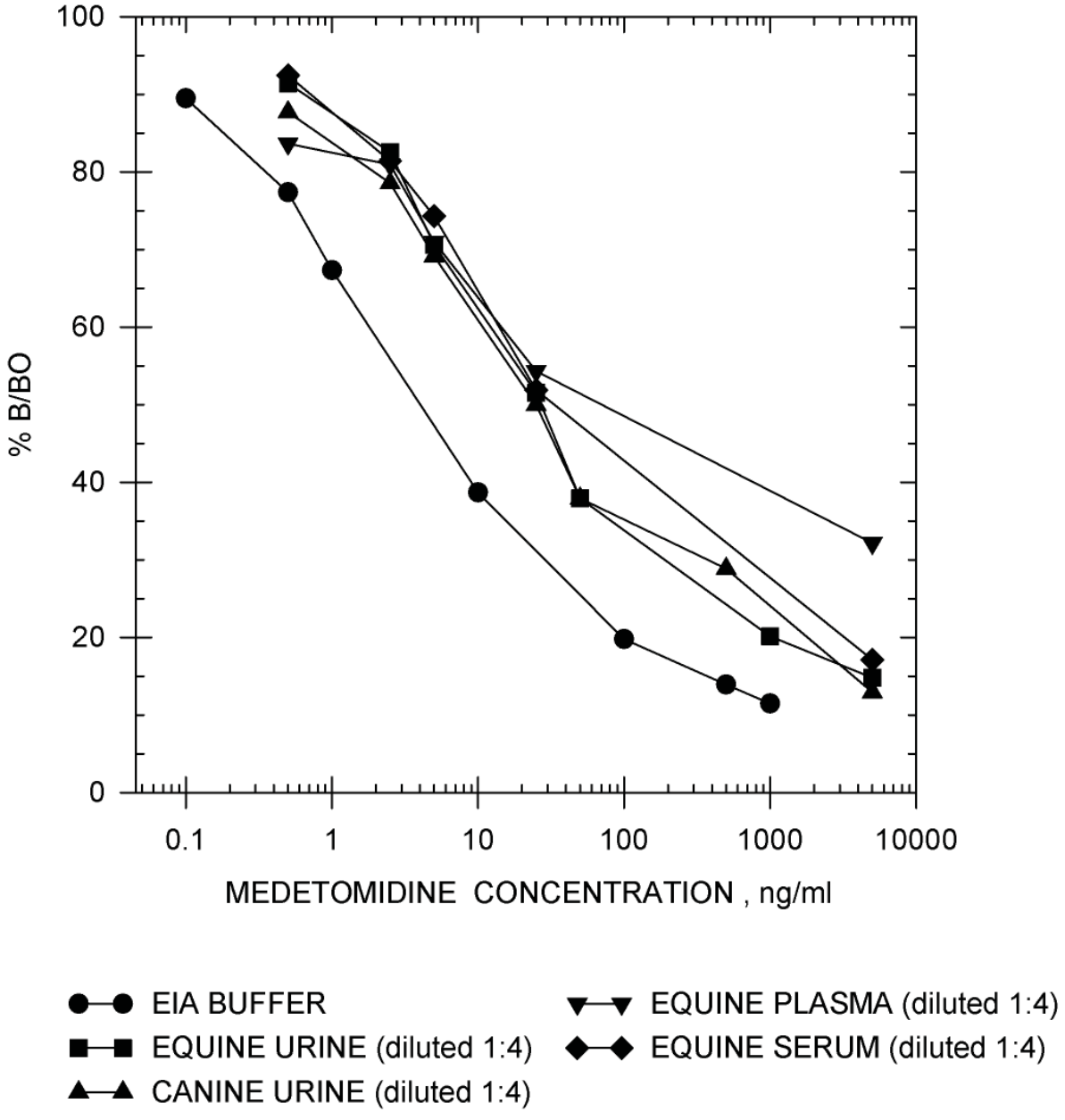
DETOMIDINE STANDARD CURVES

Carboxydetomidine



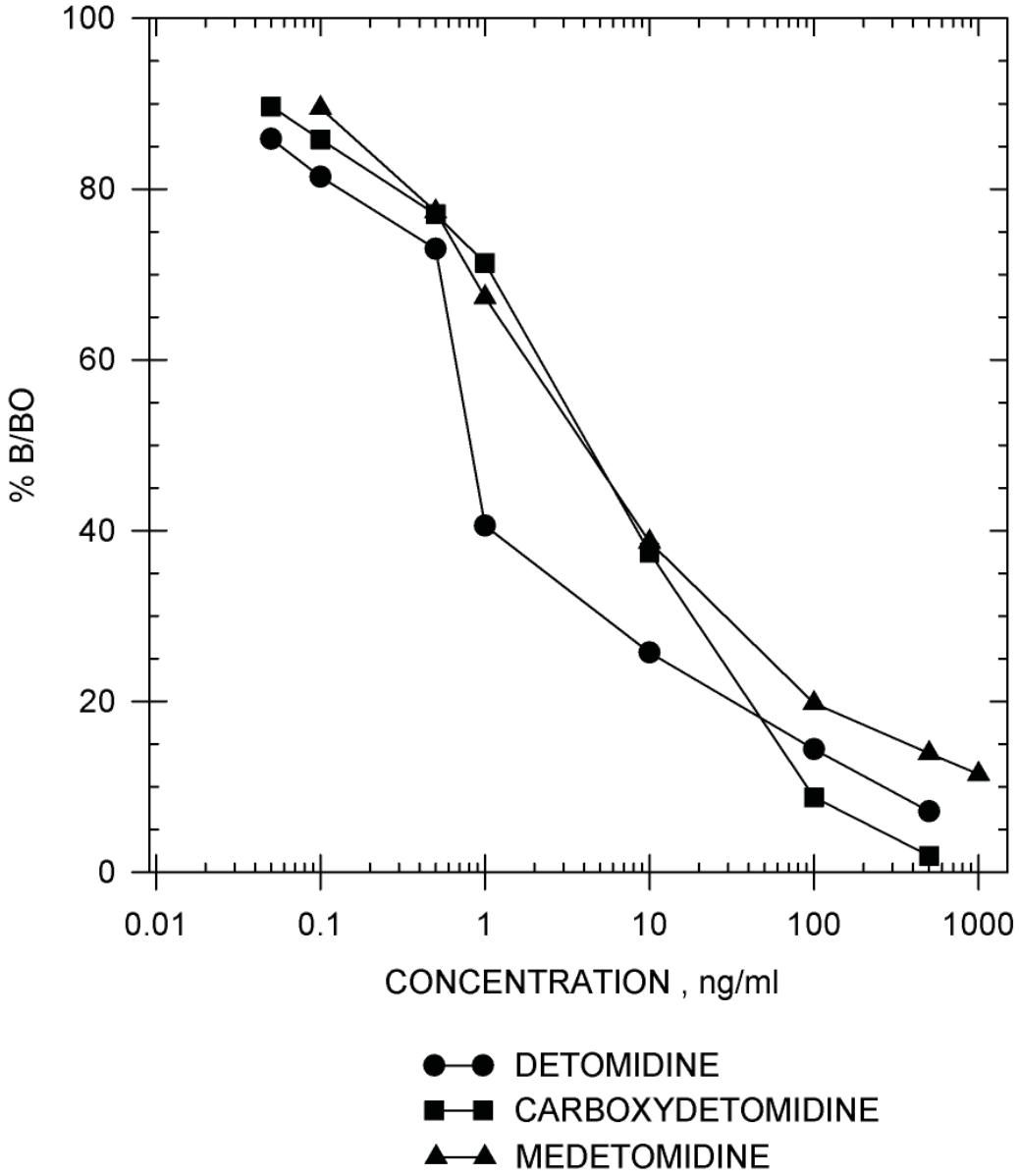
DETOMIDINE STANDARD CURVES

Medetomidine

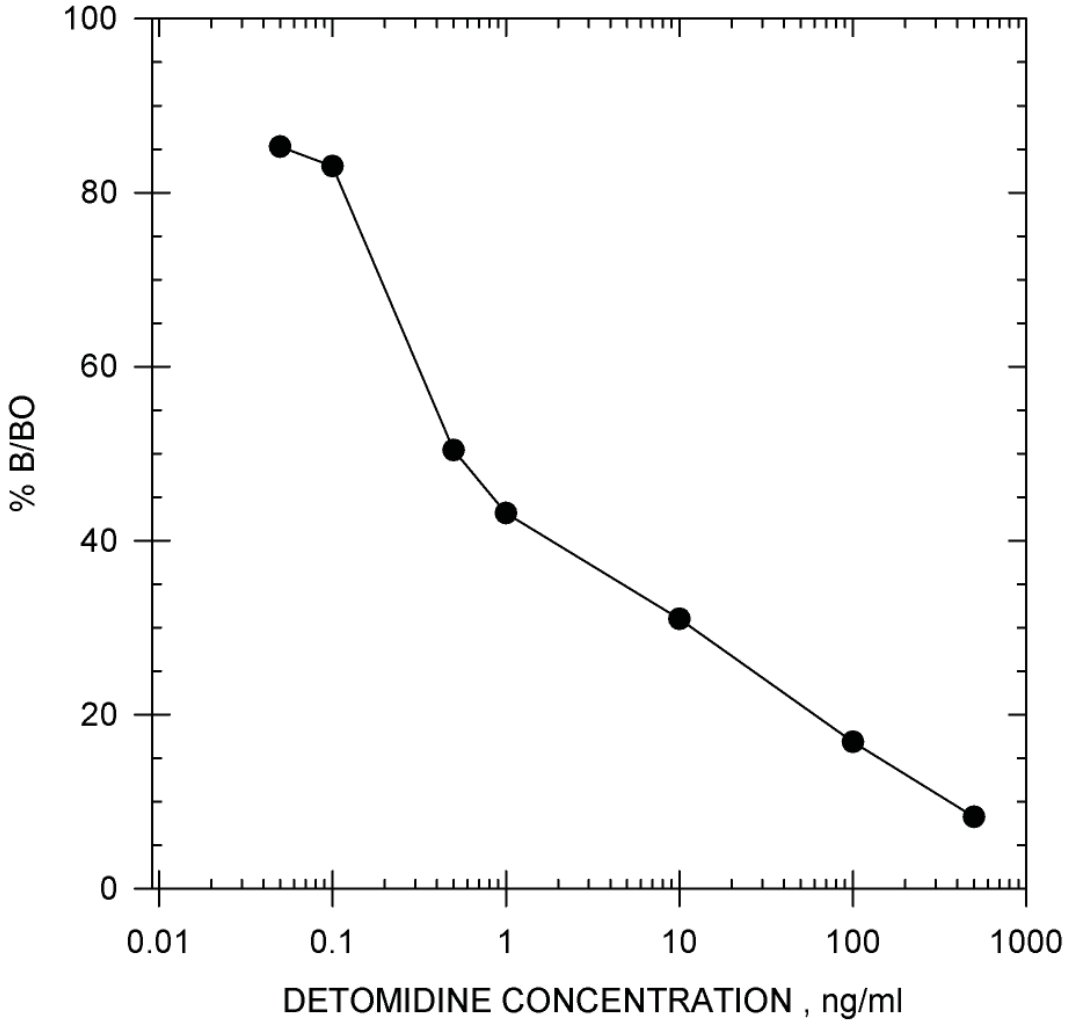


DETOMIDINE STANDARD CURVES

Drug Standard Curve in EIA Buffer



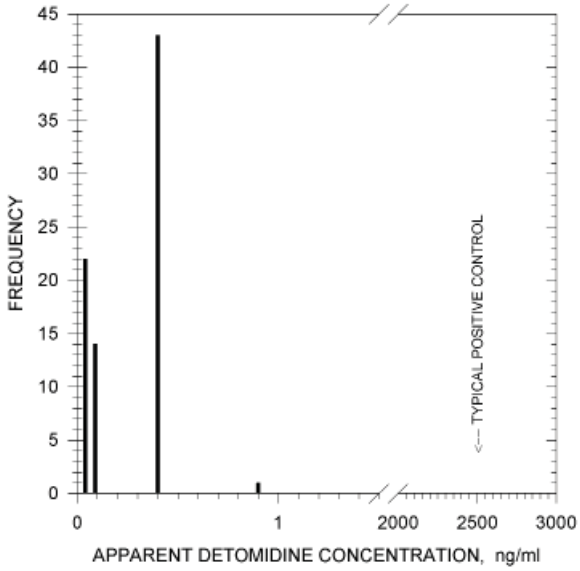
DETOMIDINE STANDARD CURVES



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:4, has shown no background levels above 0.55 ng/ml.

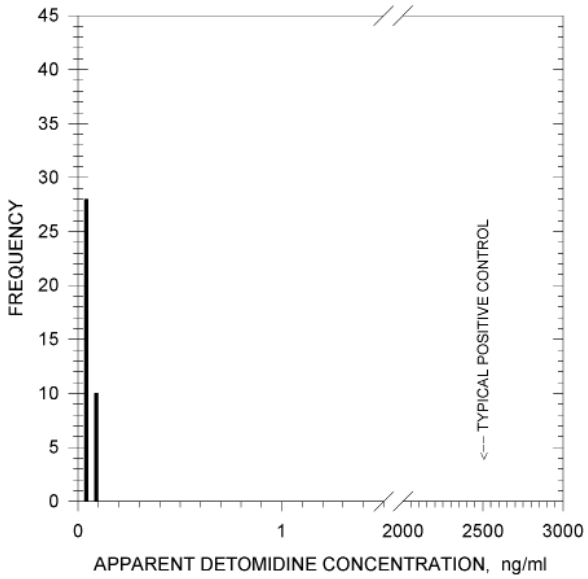
Sample Treatment: No sample treatment, or a 1:4 dilution (i.e. 1 part sample to 4 part EIA buffer) is recommended to reduce natural backgrounds. In some cases an extraction may be necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 38 post-race canine urine samples has shown no background levels above 0.06 ng/ml.

Sample Treatment: No sample treatment, or a 1:4 dilution (i.e. 1 part sample to 4 part EIA buffer) is recommended to reduce natural backgrounds.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Detomidine	100%
Carboxydetomidine	74%
Medetomidine	26%

Acepromazine	< 0.01%	Gentisic Acid	< 0.01%	Oxphenbutazone	< 0.01%
Acetaminophen	< 0.01%	Glipizide	< 0.01%	PCP	< 0.01%
Acetylsalicylic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glutethimide	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	Glycopyrrolate	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Heparin	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	Hippuric Acid	< 0.01%	Phenylbutazone	< 0.01%
Chlordiazepoxide	< 0.01%	Hordenine	< 0.01%	Polyethylene Glycol	< 0.01%
Chlorpromazine	< 0.01%	Hydrocortisone	< 0.01%	Prednisolone	< 0.01%
Clenbuterol	< 0.01%	Ibuprofen	< 0.01%	Primadone	< 0.01%
Codeine	< 0.01%	Imipramine	< 0.01%	Procainamide	< 0.01%
Cotinine	< 0.01%	Isoxsuprine	< 0.01%	Procaine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Promazine	< 0.01%
Dextromethorphan	< 0.01%	Meperidine	< 0.01%	Pseudoephedrine	< 0.01%
Diclofenac	< 0.01%	Metaproterenol	< 0.01%	Pyrantel	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methadone	< 0.01%	Pyrilamine	< 0.01%
Dipyrone	< 0.01%	Methaqualone	< 0.01%	Pyrimethamine	< 0.01%
Doxepin	< 0.01%	Methocarbamol	< 0.01%	Quinidine	< 0.01%
Ephedrine	< 0.01%	Methylene Blue	< 0.01%	Quinine	< 0.01%
Erythromycin	< 0.01%	Methylprednisolone	< 0.01%	Salbutamol	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Nalorphine	< 0.01%	Salicylamide	< 0.01%
Fenoprofen	< 0.01%	Naproxen	< 0.01%	Salicylic Acid	< 0.01%
Flunixin	< 0.01%	Niacinamide	< 0.01%	Theophylline	< 0.01%
Folic Acid	< 0.01%	Nicotine	< 0.01%	Thiamine	< 0.01%
Folinic Acid	< 0.01%	Nortriptyline	< 0.01%	Trimethoprim	< 0.01%
Furosemide	< 0.01%	Orphenadrine	< 0.01%	Trimipramine	< 0.01%
Gemfibrozil	< 0.01%	Oxymetazoline	< 0.01%	Uric Acid	< 0.01%

ENHANCED KIT

DEXAMETHASONE

Product# 101510 & 101515 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Dexamethasone	0.23 ng/ml
Flumethasone	0.47 ng/ml
Betamethasone	15 ng/ml
Beclomethasone	30 ng/ml
Prednisolone	100 ng/ml
Hydrocortisone	200 ng/ml

I-50 in Equine Urine

Dexamethasone	0.33 ng/ml
Flumethasone	2.83 ng/ml

I-50 in Canine Urine

Dexamethasone	0.45 ng/ml
Flumethasone	1.34 ng/ml

I-50 in Equine Plasma

Dexamethasone	0.22 ng/ml
Flumethasone	1.07 ng/ml

I-50 in Equine Serum

Dexamethasone	0.25 ng/ml
Flumethasone	0.45 ng/ml

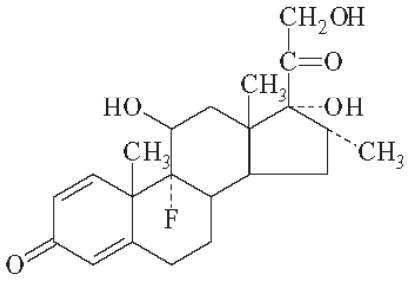
Precision:

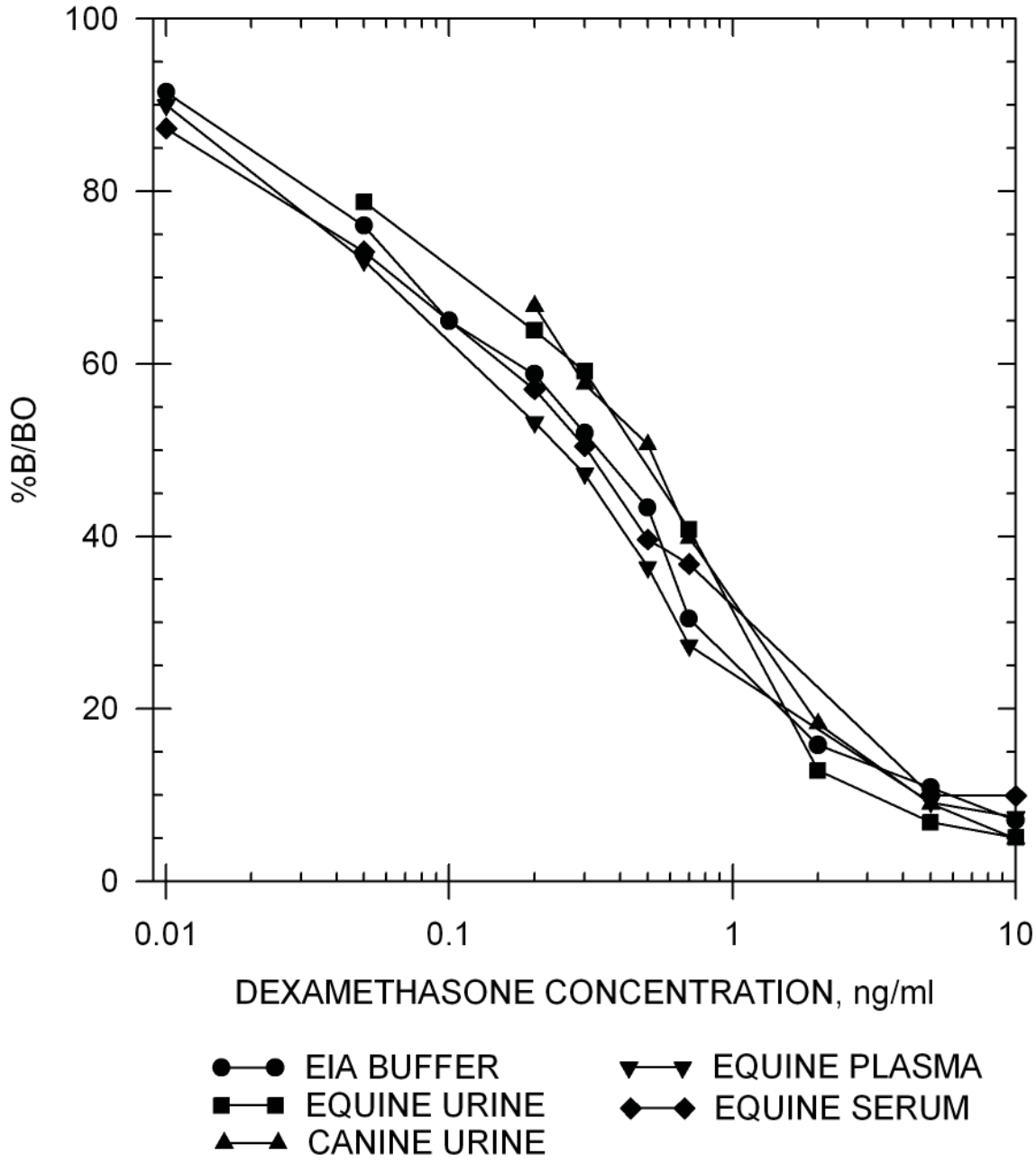
Intra-assay	4.61%
Inter-assay	4.92%

Note: Measuring wavelength was 650 nm**.**

DEXAMETHASONE STANDARD CURVES

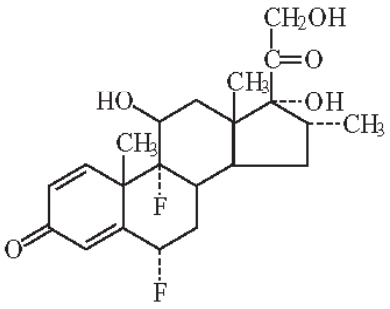
Dexamethasone

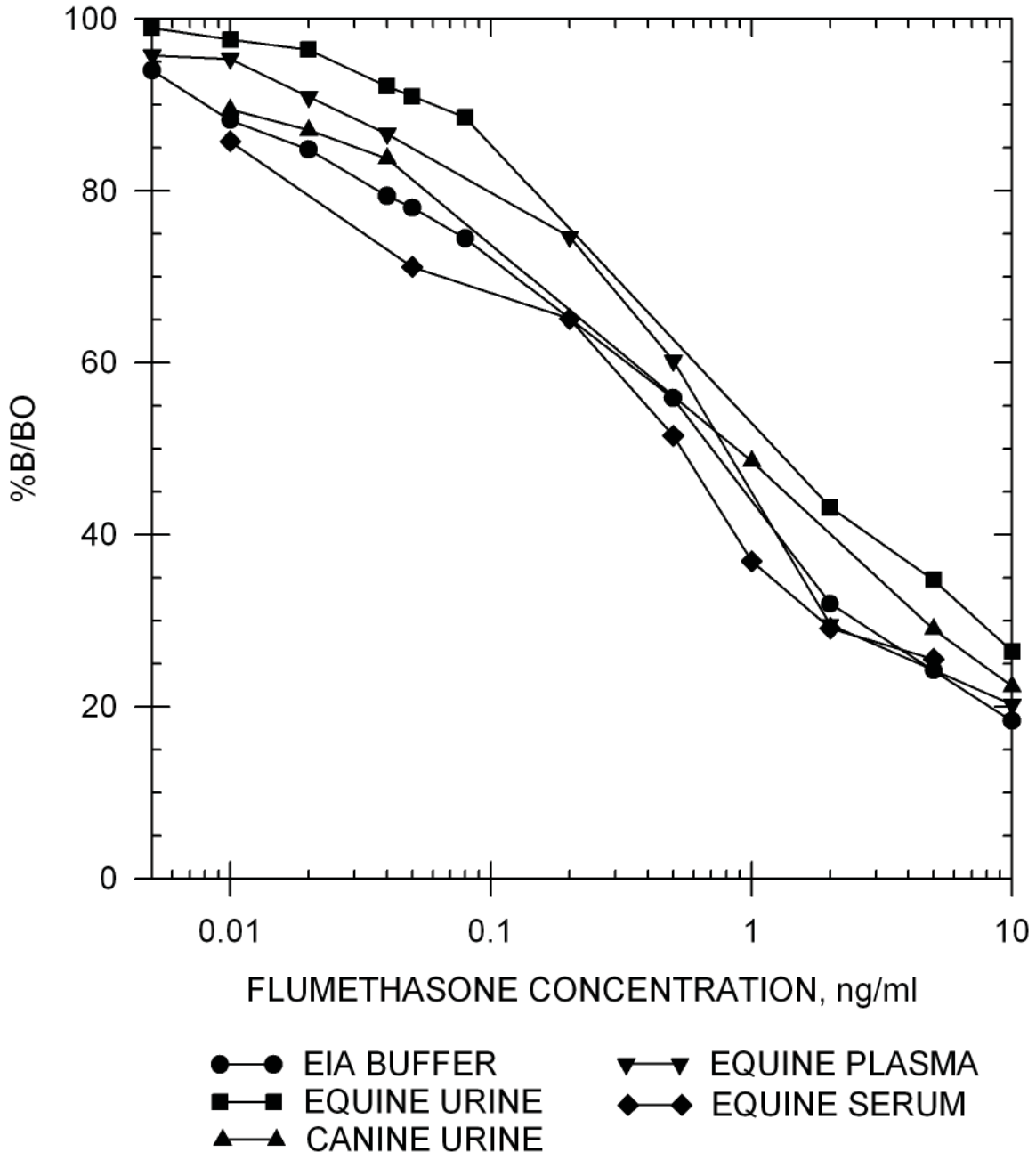




DEXAMETHASONE STANDARD CURVES

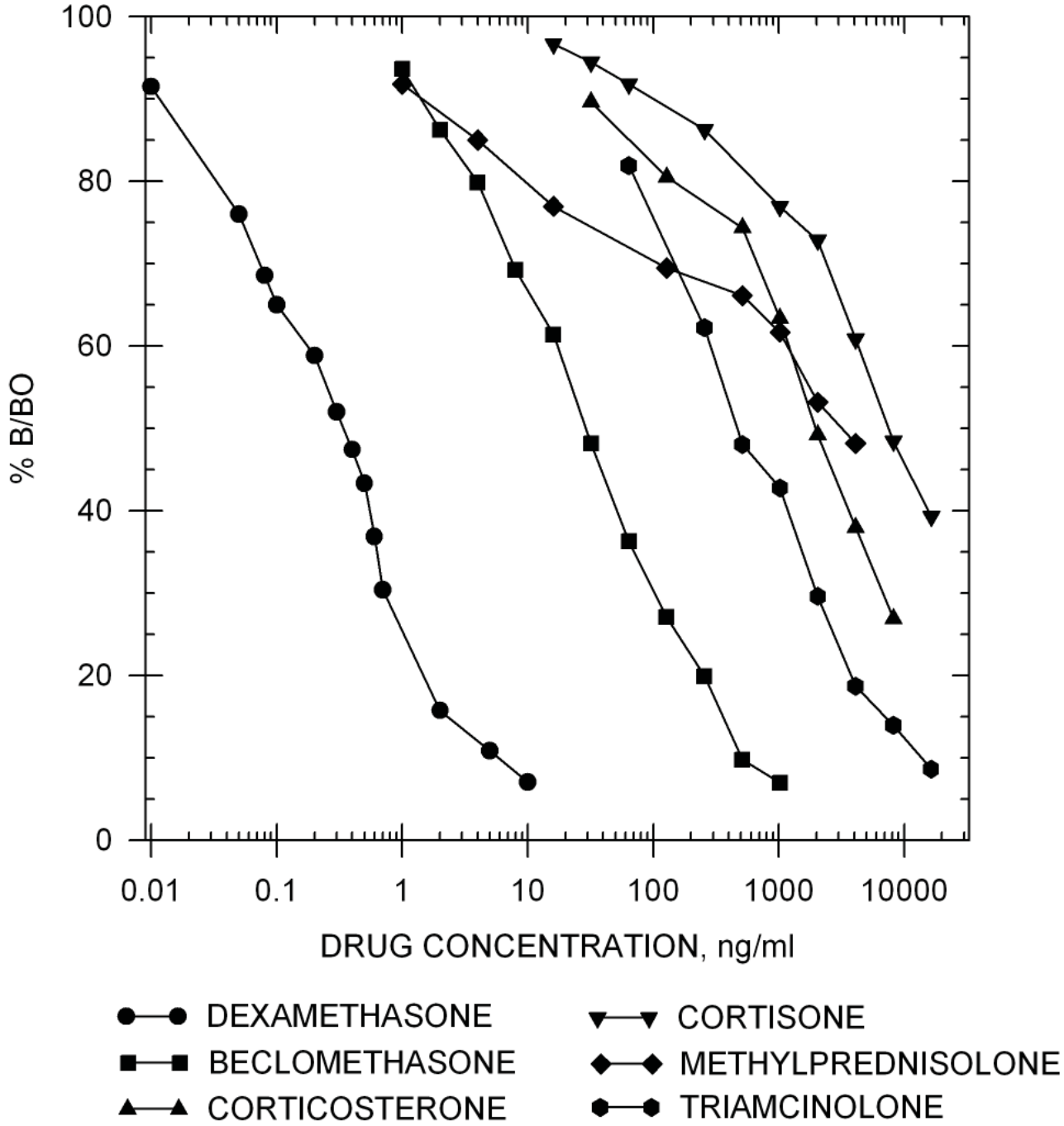
Flumethasone





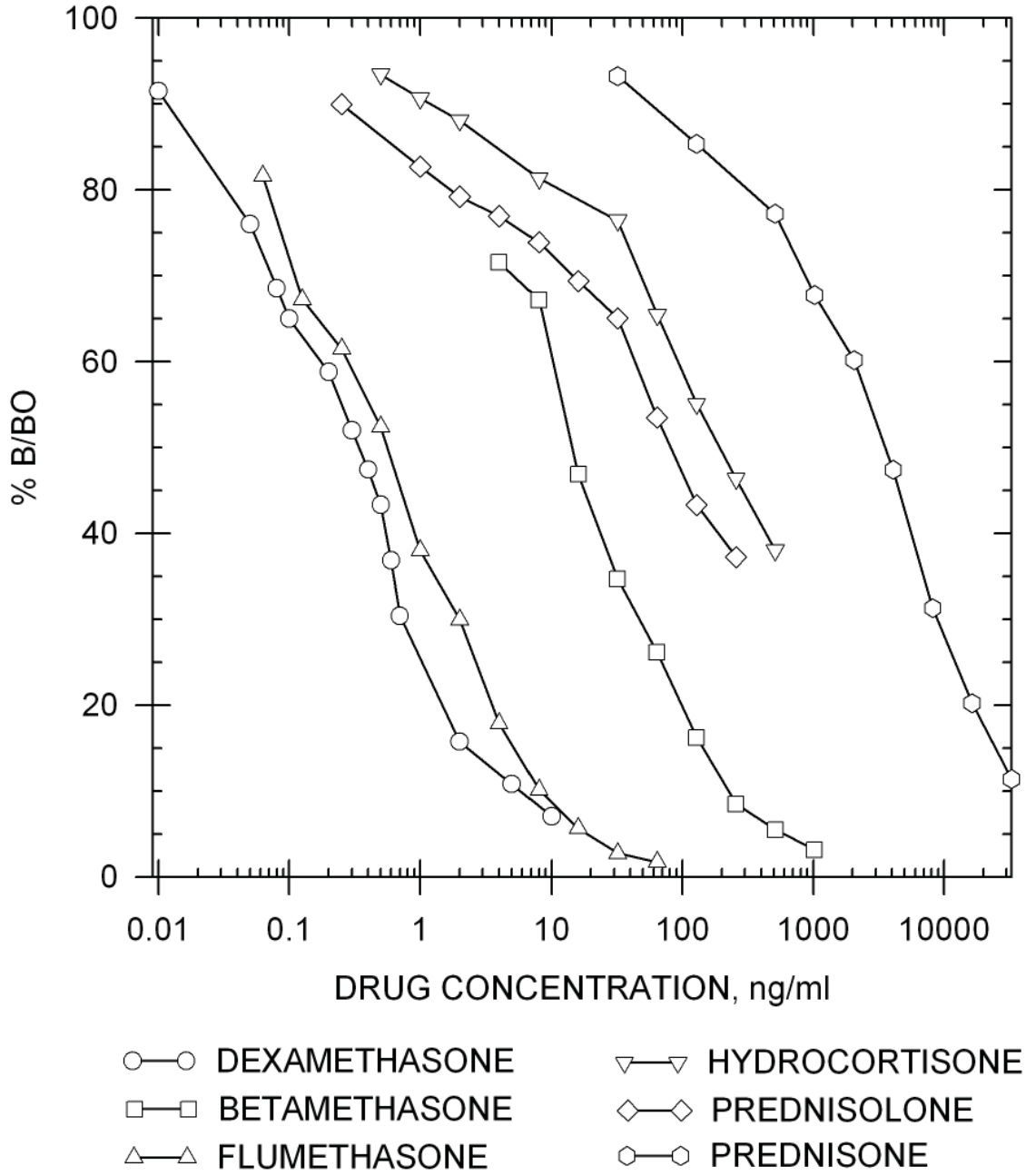
DEXAMETHASONE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



DEXAMETHASONE STANDARD CURVES

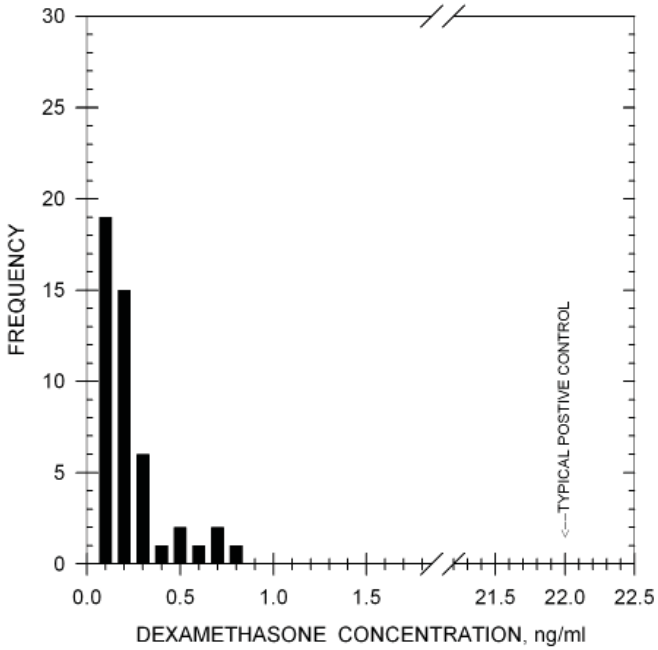
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 47 post-race equine urine samples has shown no background levels above 0.77 ng/ml.

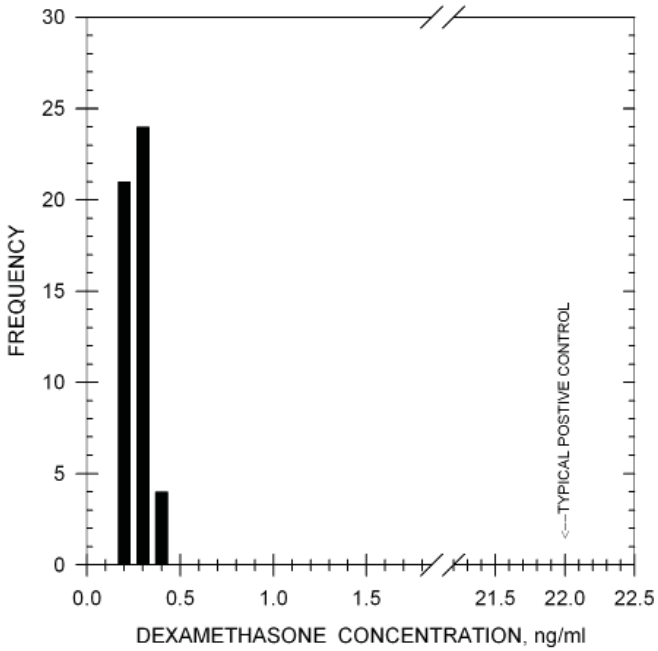
Sample Treatment: No sample dilution, or a 1:1 dilution (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 49 post-race canine urine samples has shown no background levels above 0.38 ng/ml.

Sample Treatment: No sample dilution is necessary.

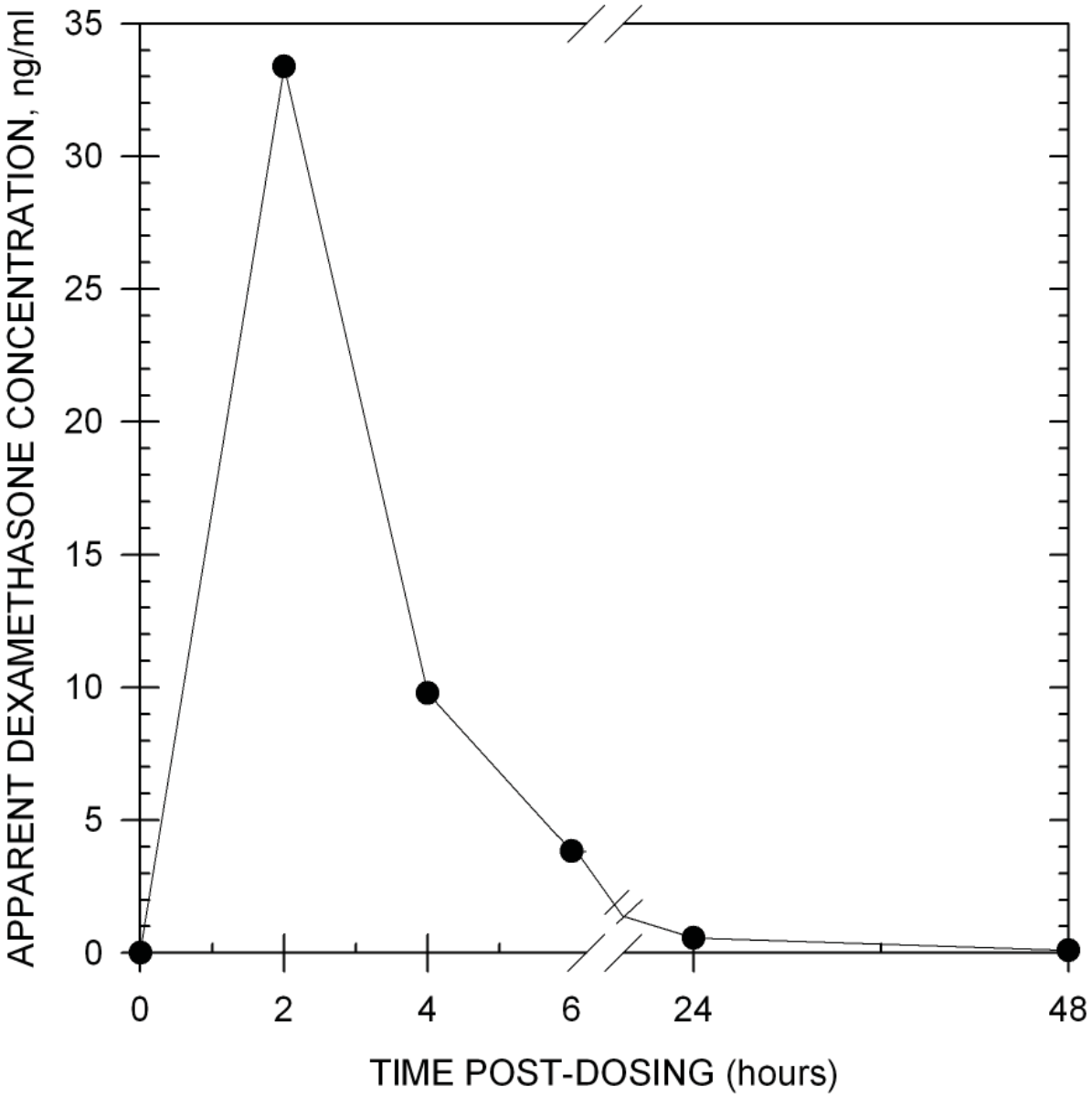


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 10 mg of dexamethasone by intravenous injection to one horse, the presence of this drug was detected for 5 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Dexamethasone	100%
Flumethasone	49%
Betamethasone	1.5%
Beclomethasone	0.78%
Prednisolone	0.25%
Hydrocortisone	0.11%
Dexamethasone 21-phosphate	0.07%
Triamcinolone	0.04%
Corticosterone	0.01%
Prednisone	0.01%

E-Amino-n-Caproic Acid	<0.01%	Methocarbamol	<0.01%
5-Androstene-3β-17β-diol	<0.01%	Methylene Blue	<0.01%
Androsterone	<0.01%	6α-Methylprednisolone	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	17 α-Methyltestosterone	<0.01%
Bolasterone	<0.01%	Nandrolone	<0.01%
Boldenone	<0.01%	Naproxen	<0.01%
4-Chlorotestosterone-17-Acetate	<0.01%	Niacinamide	<0.01%
Clenbuterol	<0.01%	Orphenadrine	<0.01%
Cortisone	<0.01%	Oxymetholone	<0.01%
Diclofenac	<0.01%	Oxyphenbutazone	<0.01%
Dimethyl Sulfoxide	<0.01%	Pentoxifylline	<0.01%
Dipyrone	<0.01%	Phenothiazine	<0.01%
Estradiol	<0.01%	Phenylbutazone	<0.01%
Estriol	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Procaine	<0.01%
		Progesterone	<0.01%
Flunixin	<0.01%	Pyrantel	<0.01%
Fluoxymesterone	<0.01%	Salbutamol	<0.01%
Furosemide	<0.01%	Salicylamide	<0.01%
Glycopyrrolate	<0.01%	Salicylic Acid	<0.01%
Hordenine	<0.01%	Stanozolol	<0.01%
Ibuprofen	<0.01%	Testosterone	<0.01%
Meclofenamic Acid	<0.01%	Thiamine	<0.01%
Mesterolone	<0.01%	Triamcinolone Acetonide	<0.01%
Metaproterenol	<0.01%	Zearalenone	<0.01%
Methandrostenolone	<0.01%		

DEXTROMETHORPHAN (RTU) Forensic Kit

Product #131419 & 131415

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Dextromethorphan	1.1 ng/ml

I-50 in Equine Urine (Neat)		**I-50 in Canine Urine (Diluted 1:2)**	
Dextromethorphan	2.29 ng/ml	Dextromethorphan	1.23 ng/ml

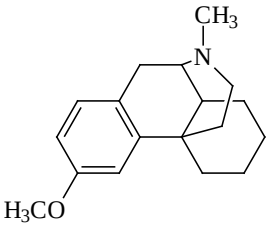
Precision:

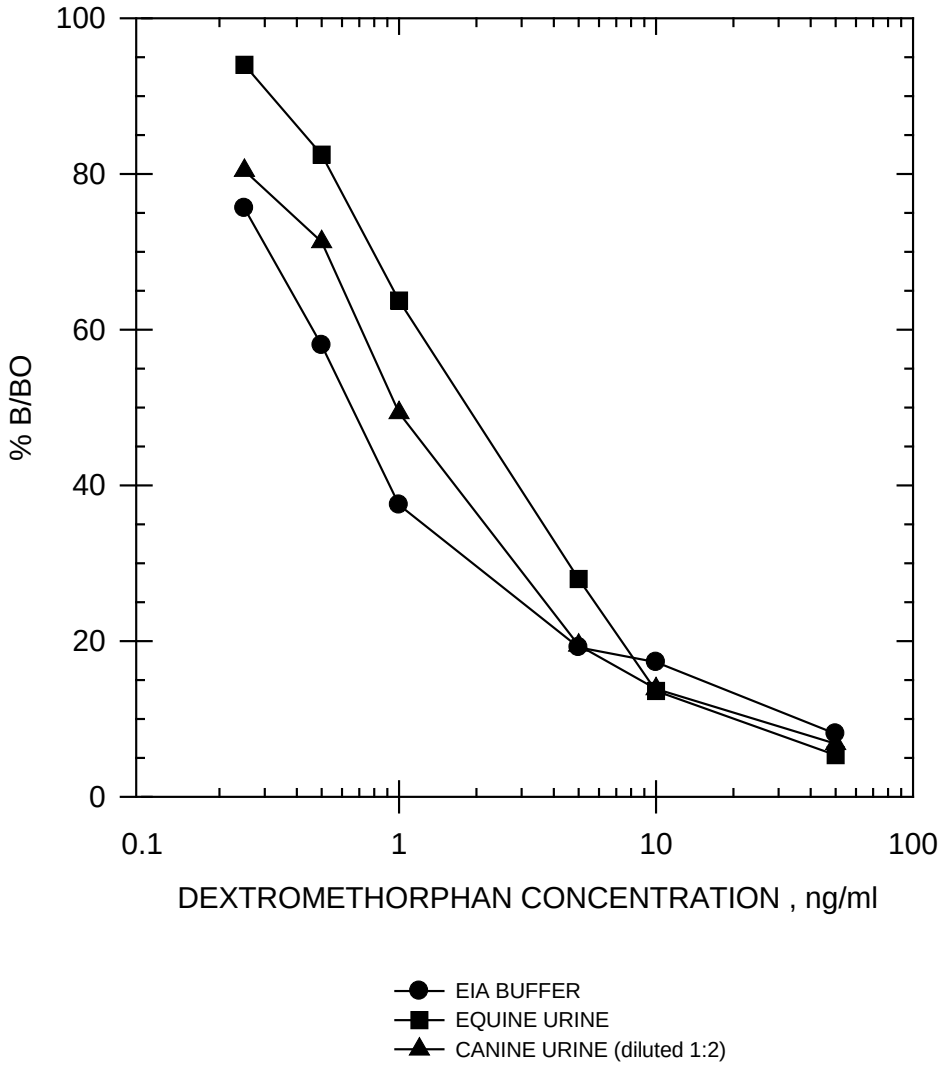
Intra-Assay	3.53%
Inter-Assay	4.35%

Note: Measuring wavelength was 650 nm.

DEXTROMETHORPHAN STANDARD CURVES

Dextromethorphan

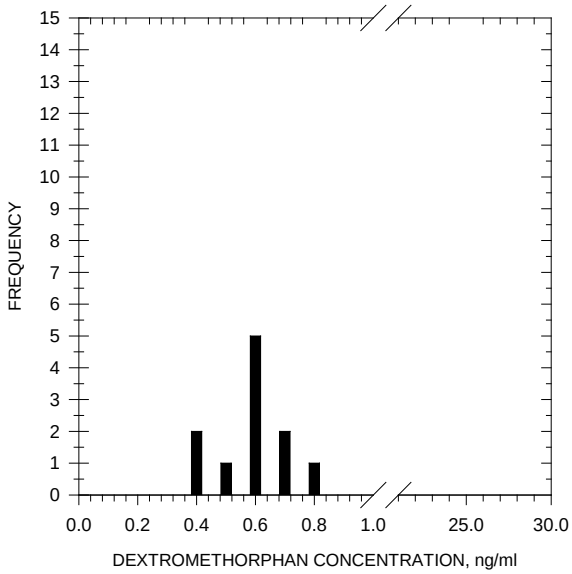




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, neat, has shown no background levels above 0.85 ng/ml.

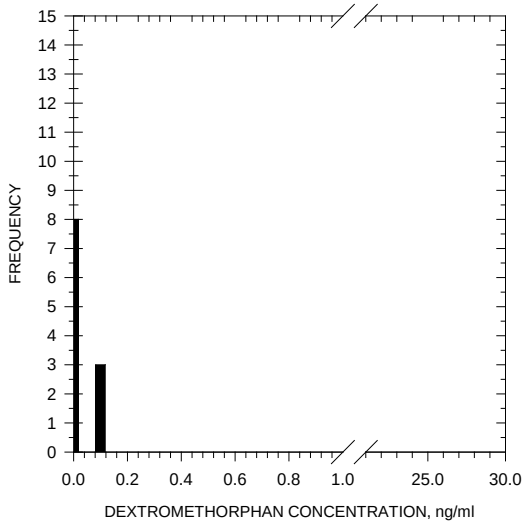
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples, diluted 1:2, has shown no background levels above 0.19 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part urine to 2 parts EIA buffer) will reduce natural backgrounds.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

DIPRENORPHINE

Product #106110 & 106115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

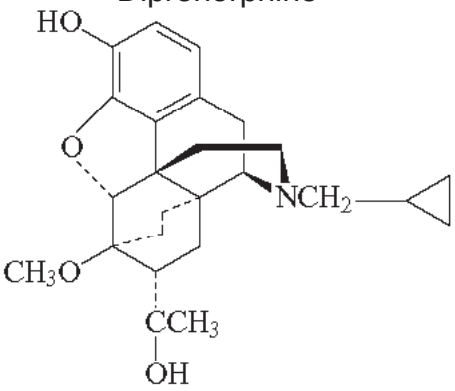
Diprenorphine	0.6 ng/ml
Cyprenorphine	3.5 ng/ml
Buprenorphine	9 ng/ml

Precision:	Intra-assay	4.12 %
	Inter-assay	3.11 %

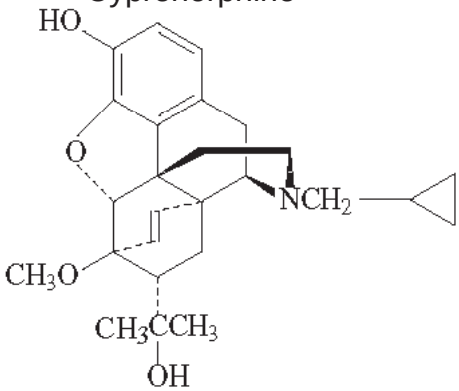
Note: Measuring wavelength was 650 nm**.**

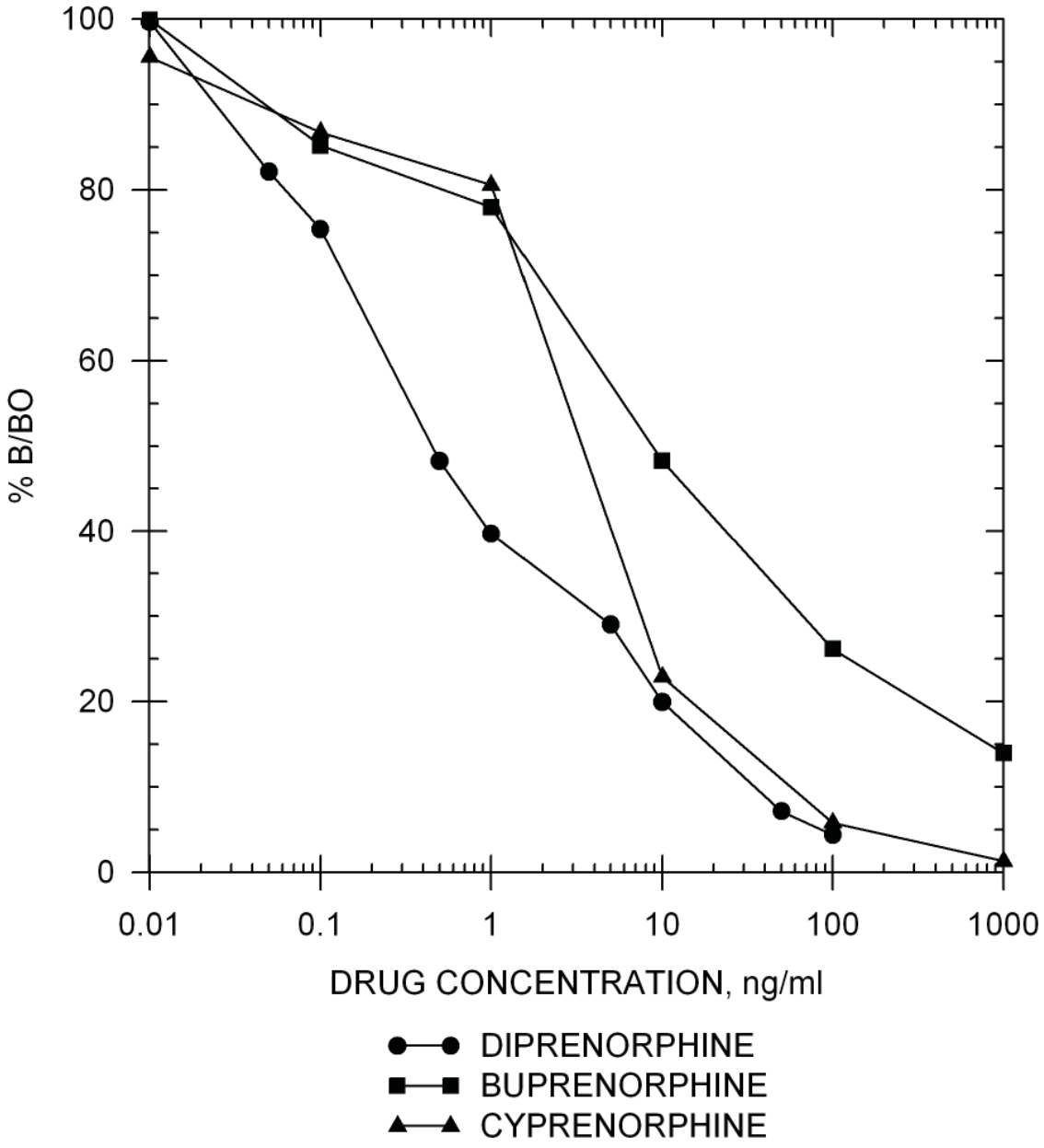
DIPRENORPHINE STANDARD CURVES

Diprenorphine



Cyprenorphine



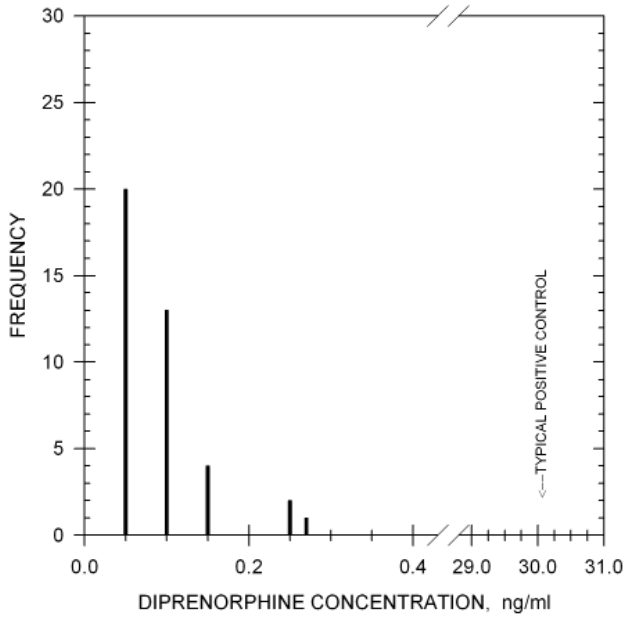


Rev 12/2009

TYPICAL EQUINE URINE BACKGROUND LEVELS

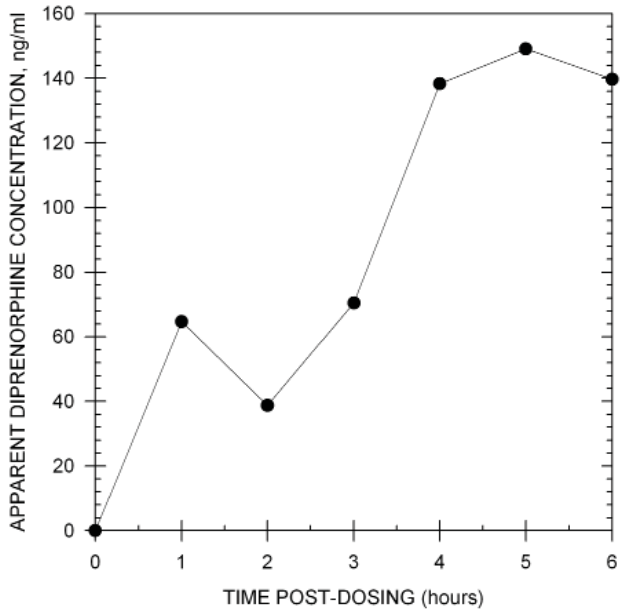
Backgrounds: Analysis of 40 post-race equine urine samples have shown no background levels above 0.27 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 3 mg of diprenorphine by intravenous injection to one horse, this drug was detected for 6 hours in equine urine. Because post-dose samples exceeded the range of the assay, samples were diluted 1:50 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Diprenorphine	100%
Cyprenorphine	17%
Buprenorphine	7%
Nalorphine	0.08%
Butorphanol	<0.05%
Levallorphan	<0.05%
Nalbuphine	<0.05%
Oxycodone	<0.05%
Pentazocine	<0.05%
Etorphine	<0.05%

Acepromazine	< 0.01%	L-Glutamic Acid	< 0.01%	Oxymorphone	< 0.01%
Acetaminophen	< 0.01%	Glutethimide	< 0.01%	Oxphenbutazone	< 0.01%
Acetylsalicylic Acid	< 0.01%	Glycopyrrolate	< 0.01%	PCP	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Heparin	< 0.01%	Penicillin G-Potassium	< 0.01%
Amitriptyline	< 0.01%	Heroin	< 0.01%	Penicillin G-Procaine	< 0.01%
Apomorphine	< 0.01%	Hippuric Acid	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Hordenine	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	Hydrocortisone	< 0.01%	Phenylbutazone	< 0.01%
Chlordiazepoxide	< 0.01%	Hydromorphone	< 0.01%	Polyethylene Glycol	< 0.01%
Chlorpromazine	< 0.01%	Ibuprofen	< 0.01%	Prednisolone	< 0.01%
Clenbuterol	< 0.01%	Imipramine	< 0.01%	Primadone	< 0.01%
Codeine	< 0.01%	Isoxsuprine	< 0.01%	Procainamide	< 0.01%
Cotinine	< 0.01%	Levorphanol	< 0.01%	Procaine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Promazine	< 0.01%
Dextromethorphan	< 0.01%	Loperamide	< 0.01%	Propoxyphene	< 0.01%
Diclofenac	< 0.01%	Meperidine	< 0.01%	Pseudoephedrine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaproterenol	< 0.01%	Pyrantel	< 0.01%
Diphenoxylate	< 0.01%	Methadone	< 0.01%	Pyrilamine	< 0.01%
Dipyrone	< 0.01%	Methaqualone	< 0.01%	Pyrimethamine	< 0.01%
Doxepin	< 0.01%	Methocarbamol	< 0.01%	Quinidine	< 0.01%
Ephedrine	< 0.01%	Methylene Blue	< 0.01%	Quinine	< 0.01%
Erythromycin	< 0.01%	Methylprednisolone	< 0.01%	Salbutamol	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Morphine	< 0.01%	Salicylamide	< 0.01%
Fenoprofen	< 0.01%	Nalmefene	< 0.01%	Salicylic Acid	< 0.01%
Fentanyl	< 0.01%	Nalorphine	< 0.01%	Theophylline	< 0.01%
Flunixin	< 0.01%	Naloxone	< 0.01%	Thiamine	< 0.01%
Folic Acid	< 0.01%	Naltrexone	< 0.01%	Tramadol	< 0.01%
Folinic Acid	< 0.01%	Naproxen	< 0.01%	Trimethoprim	< 0.01%
Furosemide	< 0.01%	Niacinamide	< 0.01%	Trimipramine	< 0.01%
Gemfibrozil	< 0.01%	Nicotine	< 0.01%	Uric Acid	< 0.01%
Gentisic Acid	< 0.01%	Nortriptyline	< 0.01%		
Glipizide	< 0.01%	Orphenadrine	< 0.01%		

DOXAPRAM

Product #106210 & 106215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Doxapram	1.5 ng/ml

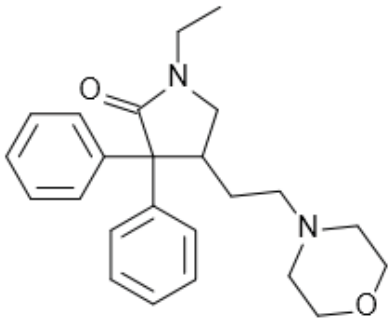
Precision:

Intra-assay	3.56 %
Inter-assay	4.61 %

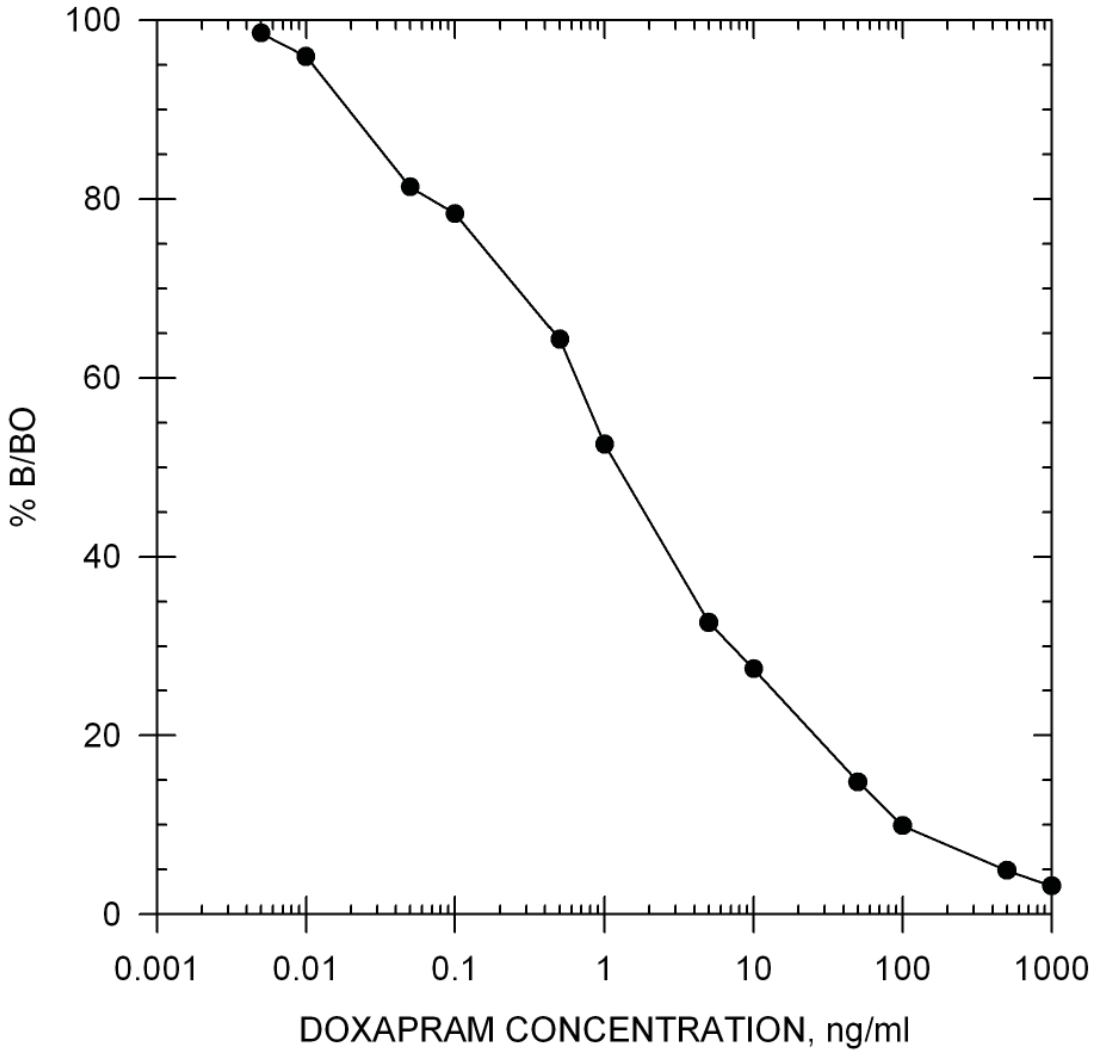
Note: Measuring wavelength was 650 nm**.**

DOXAPRAM STANDARD CURVE

Doxapram



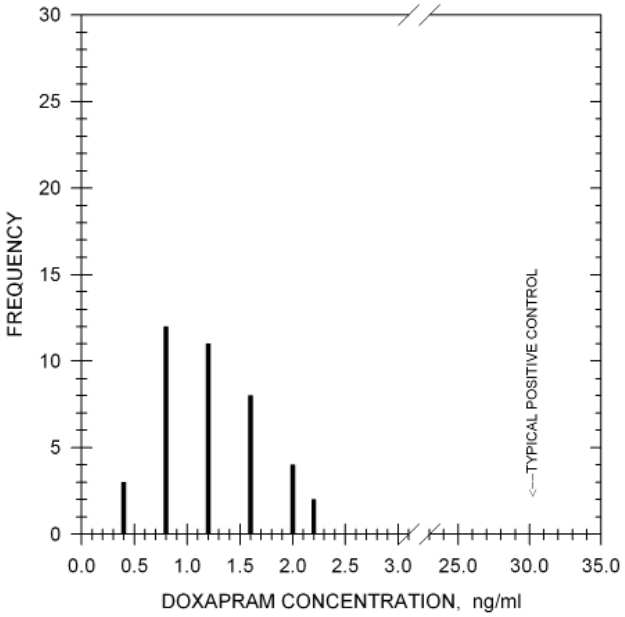
Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

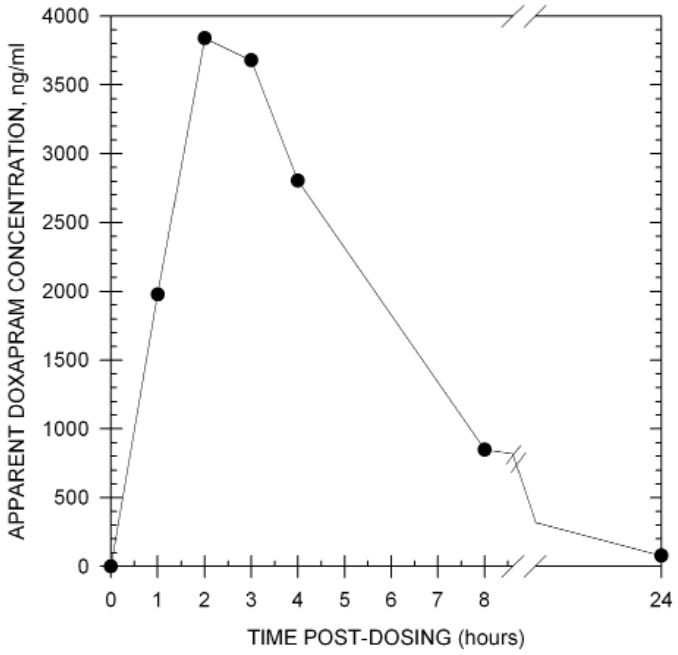
Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:2, has shown no background levels above 2.2 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

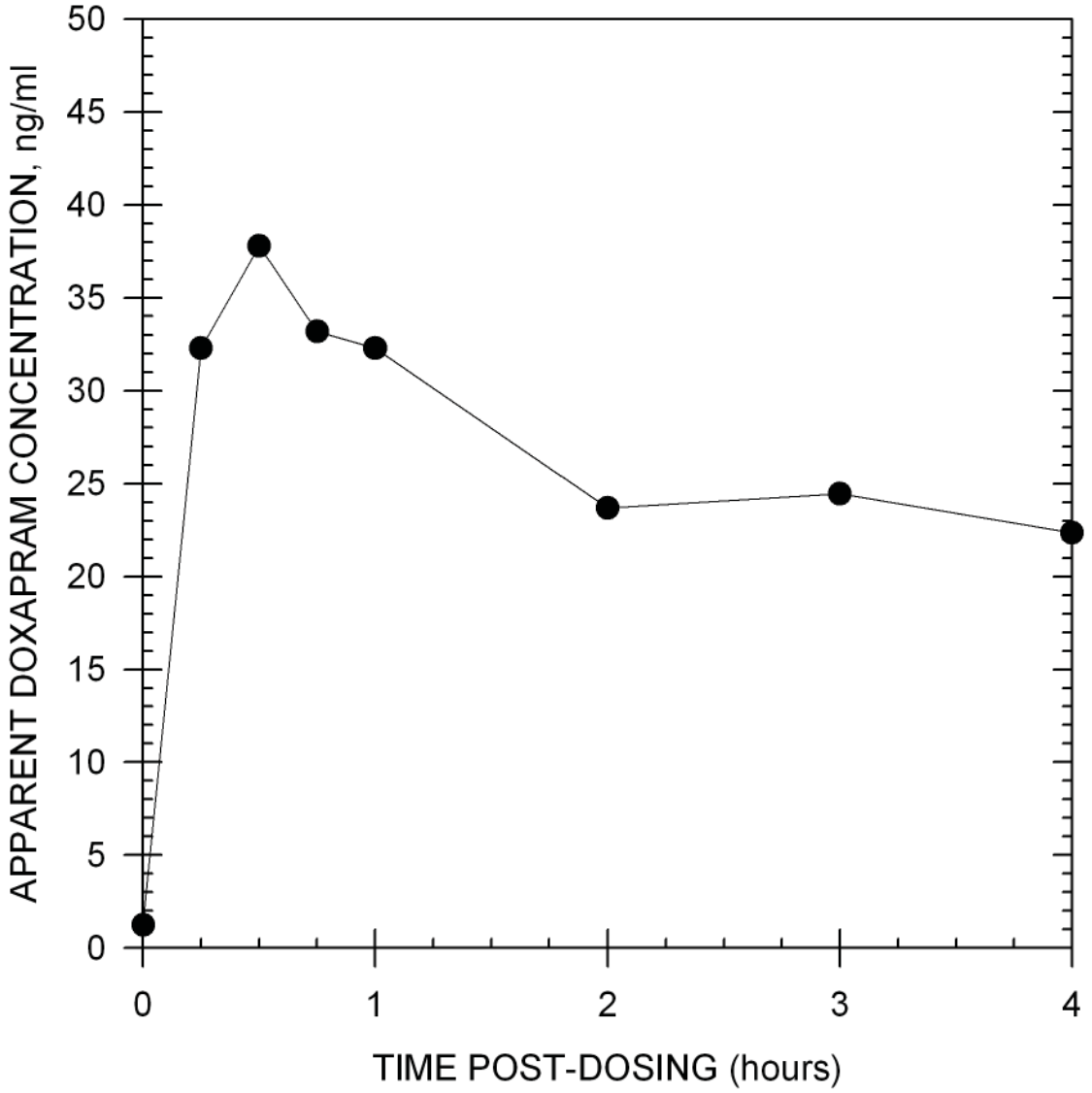
Duration of Detection: After administration of 87 mg of doxapram by intravenous injection to one horse, the presence of this drug was detected for 24 hours in equine urine. Because all post-dose samples exceeded the range of the assay when diluted 1:2, the samples were diluted 1:100 with EIA buffer and backcalculated to reflect the recommended 1:2 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 87 mg of doxapram by intravenous injection to one horse, the presence of this drug was detected for 4 hours in equine serum.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Doxapram	100%
Phenytoin	0.08%

Acepromazine	< 0.01%	Glipizide	< 0.01%	Penicillin G-Potassium	< 0.01%
Acetaminophen	< 0.01%	L-Glutamic Acid	< 0.01%	Penicillin G-Procaine	< 0.01%
Acetylsalicylic Acid	< 0.01%	Glutethimide	< 0.01%	Pentoxifylline	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Pentylenetetrazol	< 0.01%
Amitriptyline	< 0.01%	Heparin	< 0.01%	Phenothiazine	< 0.01%
Ascorbic Acid	< 0.01%	Hippuric Acid	< 0.01%	Phenylbutazone	< 0.01%
Benzoic Acid	< 0.01%	Hordenine	< 0.01%	Picrotoxin	< 0.01%
Bemegride	< 0.01%	Hydrocortisone	< 0.01%	Polyethylene Glycol	< 0.01%
Chlordiazepoxide	< 0.01%	Ibuprofen	< 0.01%	Prednisolone	< 0.01%
Chlorpromazine	< 0.01%	Imipramine	< 0.01%	Primadone	< 0.01%
Clenbuterol	< 0.01%	Isoxsuprine	< 0.01%	Procainamide	< 0.01%
Codeine	< 0.01%	Lidocaine	< 0.01%	Procaine	< 0.01%
Cotinine	< 0.01%	Meperidine	< 0.01%	Promazine	< 0.01%
Dexamethasone	< 0.01%	Mephenytoin	< 0.01%	Pseudoephedrine	< 0.01%
Dextromethorphan	< 0.01%	Metaproterenol	< 0.01%	Pyrantel	< 0.01%
Diclofenac	< 0.01%	Methadone	< 0.01%	Pyrilamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methaqualone	< 0.01%	Pyrimethamine	< 0.01%
Dipyrone	< 0.01%	Methocarbamol	< 0.01%	Quinidine	< 0.01%
Doxepin	< 0.01%	Methylene Blue	< 0.01%	Quinine	< 0.01%
Ephedrine	< 0.01%	Methylprednisolone	< 0.01%	Salbutamol	< 0.01%
Erythromycin	< 0.01%	Morpholine	< 0.01%	Salicylamide	< 0.01%
Ethamivan	< 0.01%	Nalorphine	< 0.01%	Salicylic Acid	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Naproxen	< 0.01%	Theobromine	< 0.01%
Fenoprofen	< 0.01%	Niacinamide	< 0.01%	Theophylline	< 0.01%
Flunixin	< 0.01%	Nicotine	< 0.01%	Thiamine	< 0.01%
Folic Acid	< 0.01%	Nikethamide	< 0.01%	Trimethoprim	< 0.01%
Folinic Acid	< 0.01%	Nortriptyline	< 0.01%	Trimipramine	< 0.01%
Furosemide	< 0.01%	Orphenadrine	< 0.01%	Uric Acid	< 0.01%
Gemfibrozil	< 0.01%	Oxphenbutazone	< 0.01%		
Gentisic Acid	< 0.01%	PCP	< 0.01%		

ENHANCED KIT
DROPERIDOL

Product# 101610 &
101615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

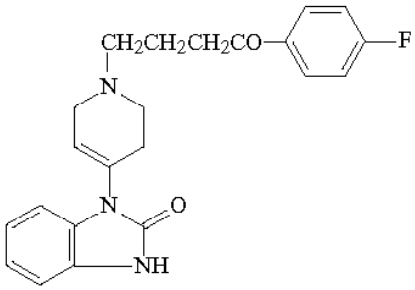
I-50 in EIA Buffer

Droperidol	8 ng/ml
Benperidol	17 ng/ml
Pimozide	20 ng/ml

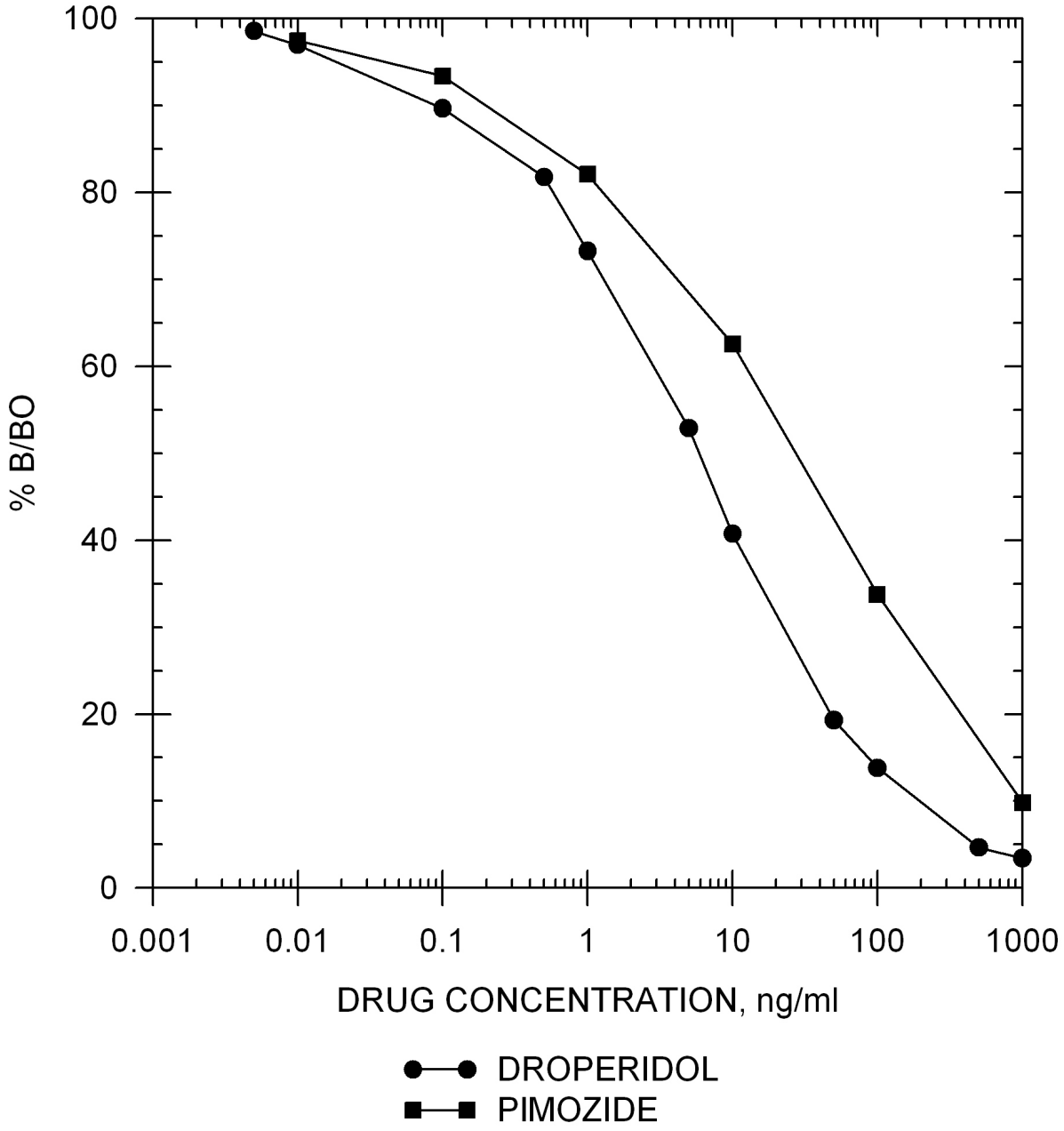
Precision:	Intra-assay	6.00 %
	Inter-assay	4.82 %

Note: Measuring wavelength was 650 nm**.**

DROPERIDOL STANDARD CURVES



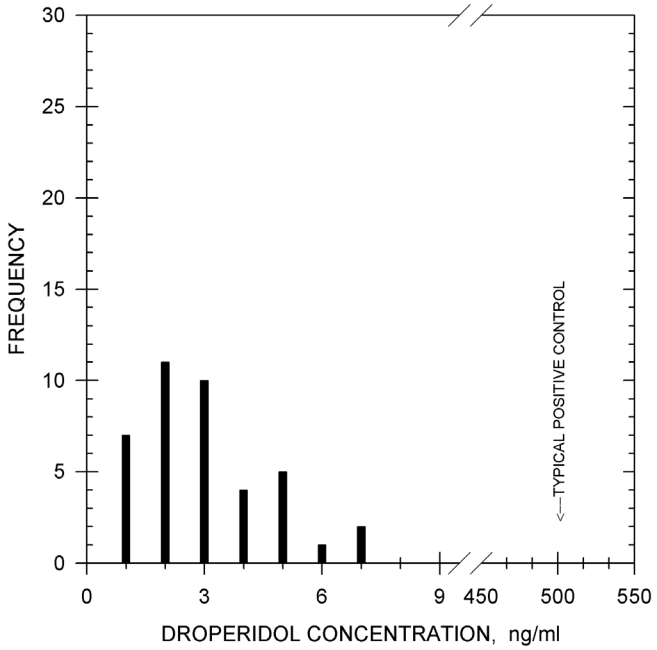
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

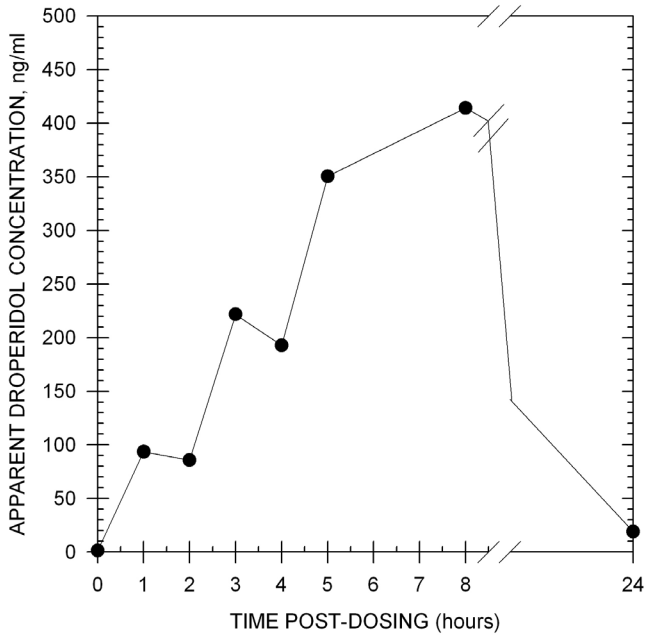
Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:3, has shown no background levels above 7 ng/ml.

Sample Treatment: A dilution of 1:3 (i.e. 1 part sample to 3 parts EIA buffer) is recommended to reduce natural backgrounds in equine urine.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 10 mg of droperidol by intramuscular injection to one horse, the presence of this drug was detected for 8 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description.

Droperidol	100%
Benperidol	40.7%
Pimozide	40%
Bromperidol	0.05%
Risperidone	0.03%
Trifluperidol	0.03%
Acepromazine	<0.01%
Azaperone	<0.01%
Detomidine	<0.01%
Metaclopramide	<0.01%
Spiperone	<0.01%

ETHACRYNIC ACID

Product #101710-1 & 101715-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

Ethacrynic Acid

I-50 in EIA Buffer	30 ng/ml
I-50 in Equine Urine (Diluted 1:9)	180 ng/ml
I-50 in Canine Urine (Diluted 1:1)	45 ng/ml
I-50 in Equine Plasma	45 ng/ml
I-50 in Equine Serum	90 ng/ml

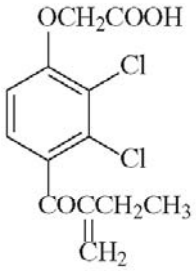
Precision:

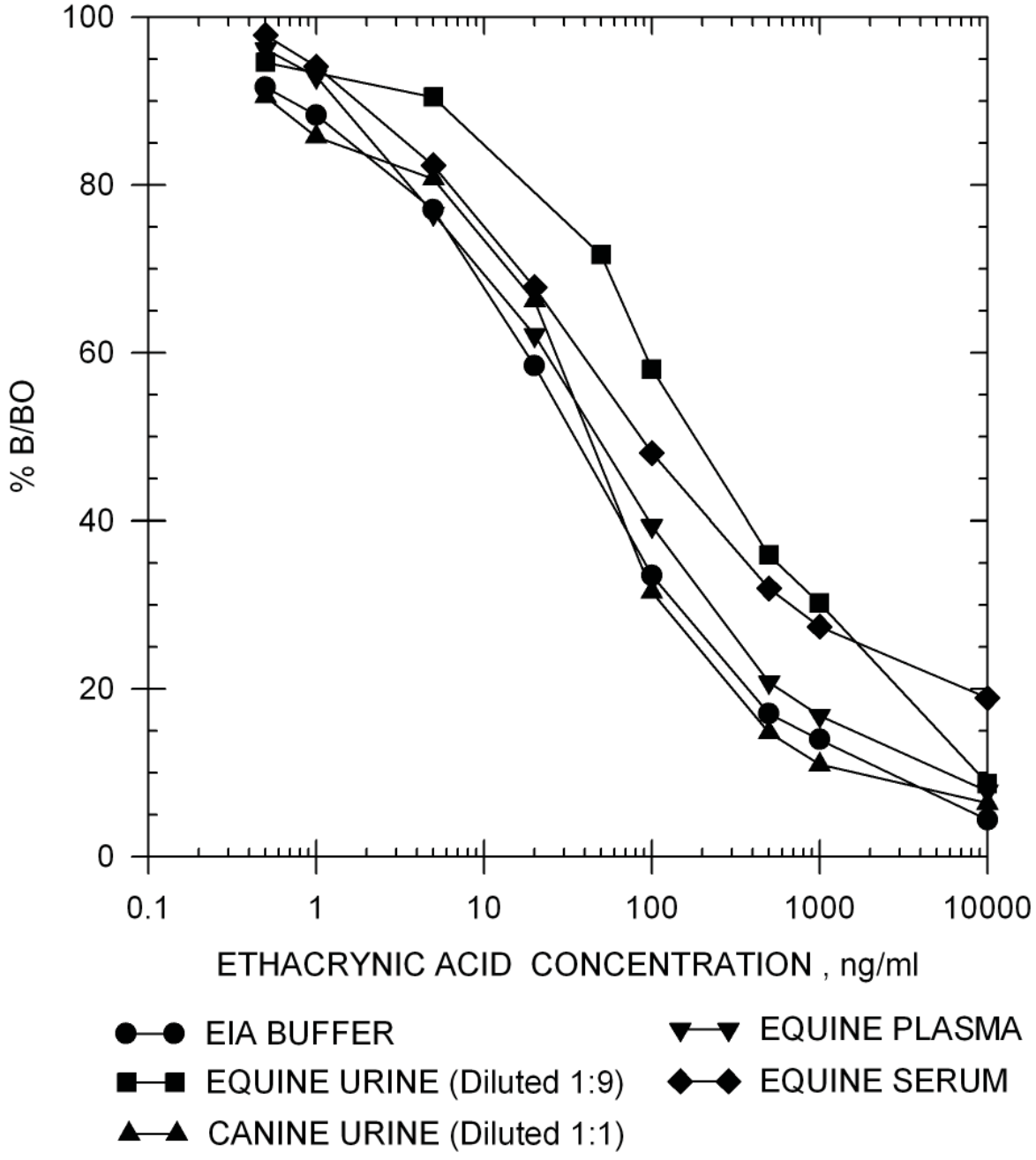
Intra-assay	7.56 %
Inter-assay	6.94 %

Note: Measuring wavelength was 650 nm**.**

ETHACRYNIC ACID STANDARD CURVE

Ethacrynic Acid

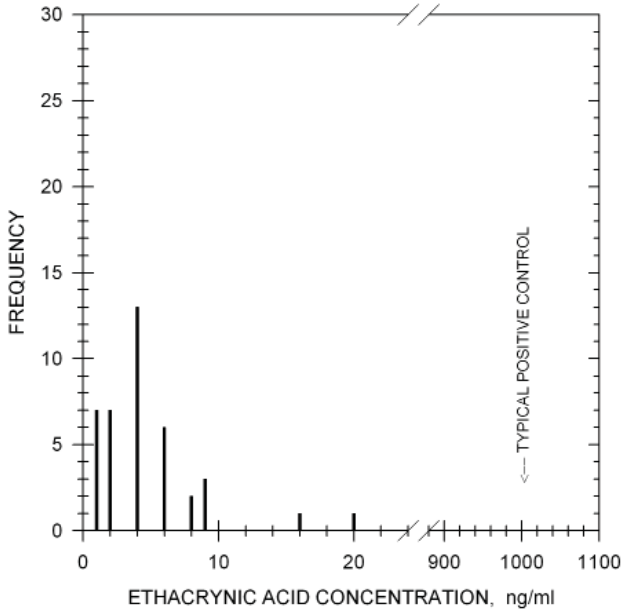




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:9, has shown no background levels above 20 ng/mL.

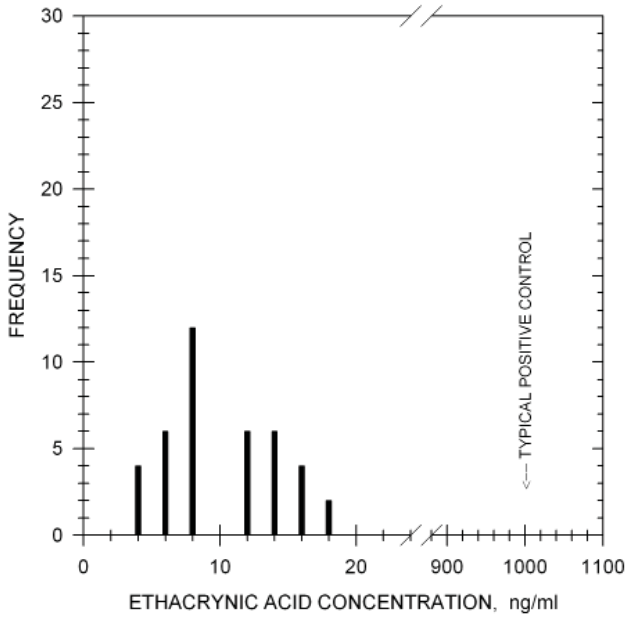
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:1, has shown no background levels above 18 ng/mL.

Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.

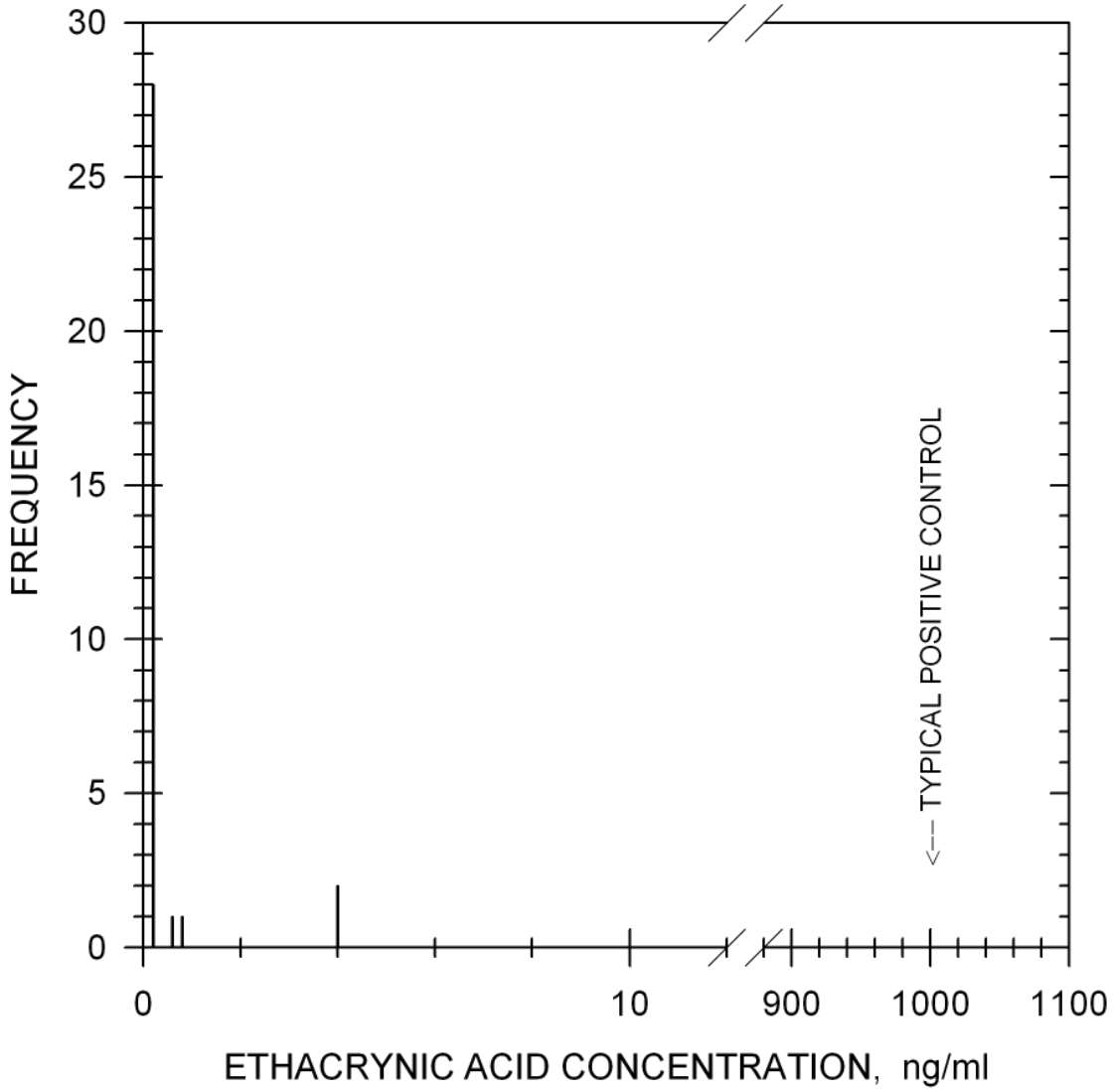


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 32 post-race equine plasma samples has shown no background levels above 4 ng/ml.

Sample Treatment: No sample dilution is necessary.

Note: Serum samples have not been evaluated. Standard curves in serum have indicated that a small dilution (1:1) or sample extraction may be necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: Data not currently available.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Ethacrynic Acid	100%
Methylene Blue	8%

Acepromazine	<0.01%	Meclofenamic Acid	<0.01%
Acetazolamide	<0.01%	Mefenamic Acid	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Metaproterenol	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methocarbamol	<0.01%
Bumetanide	<0.01%	6α-Methylprednisolone	<0.01%
Buprenorphine	<0.01%	Naproxen	<0.01%
Caffeine	<0.01%	Niacinamide	<0.01%
Chlorprothixene	<0.01%	Orphenadrine	<0.01%
Clenbuterol	<0.01%	Oxyphenbutazone	<0.01%
Dexamethasone	<0.01%	Pentoxifylline	<0.01%
Diclofenac	<0.01%	Phenothiazine	<0.01%
Dimethyl Sulfoxide	<0.01%	Phenylbutazone	<0.01%
Dipyrone	<0.01%	Polyethylene Glycol	<0.01%
Droperidol	<0.01%	Prednisolone	<0.01%
Ethyl -p-Amino-Benzoate		Procaine	<0.01%
(Benzocaine)	<0.01%	Promazine	<0.01%
Flunixin	<0.01%	Pyrantel	<0.01%
Furosemide	<0.01%	Pyrilamine	<0.01%
Glycopyrrolate	<0.01%	Salbutamol	<0.01%
Haloperidol	<0.01%	Salicylamide	<0.01%
Hordenine	<0.01%	Salicylic Acid	<0.01%
Hydrocortisone	<0.01%	Theobromine	<0.01%
Hydrochlorothiazide	<0.01%	Theophylline	<0.01%
Ibuprofen	<0.01%	Thiamine	<0.01%
Isoxsuprine	<0.01%	Trichlormethiazide	<0.01%
Lidocaine	<0.01%		

ENHANCED KIT

ETORPHINE

Product #101810 & 101815 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

Etorphine

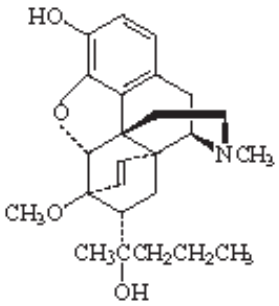
I-50 in EIA Buffer	0.05 ng/ml
I-50 in Equine Urine	0.14 ng/ml
I-50 in Canine Urine	0.16 ng/ml
I-50 in Equine Plasma	0.15 ng/ml
I-50 in Equine Serum	0.13 ng/ml

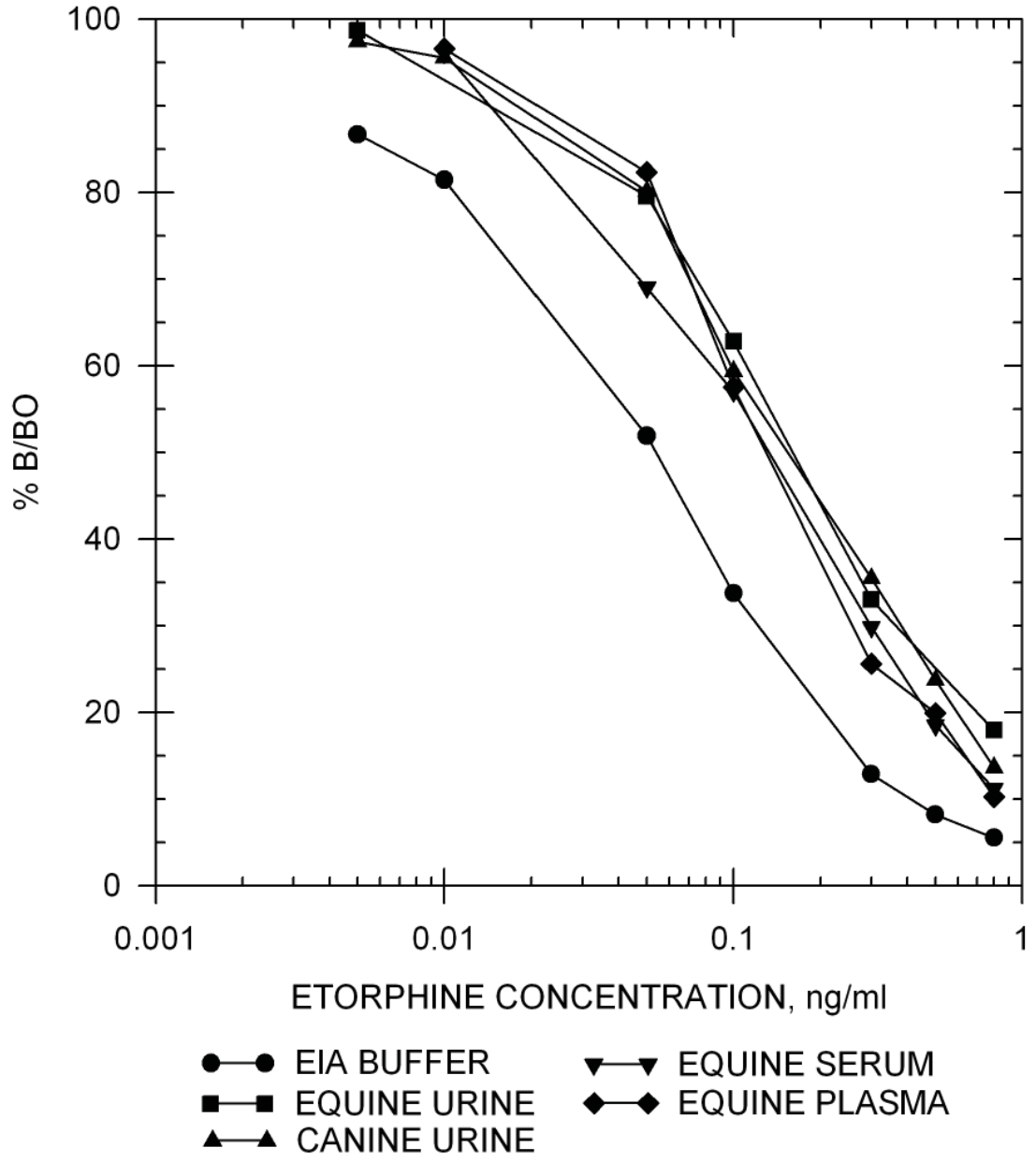
Precision:	Intra-assay	7.72%
	Inter-assay	6.68%

Note: Measuring wavelength was 650 nm.

ETORPHINE STANDARD CURVES

Etorphine

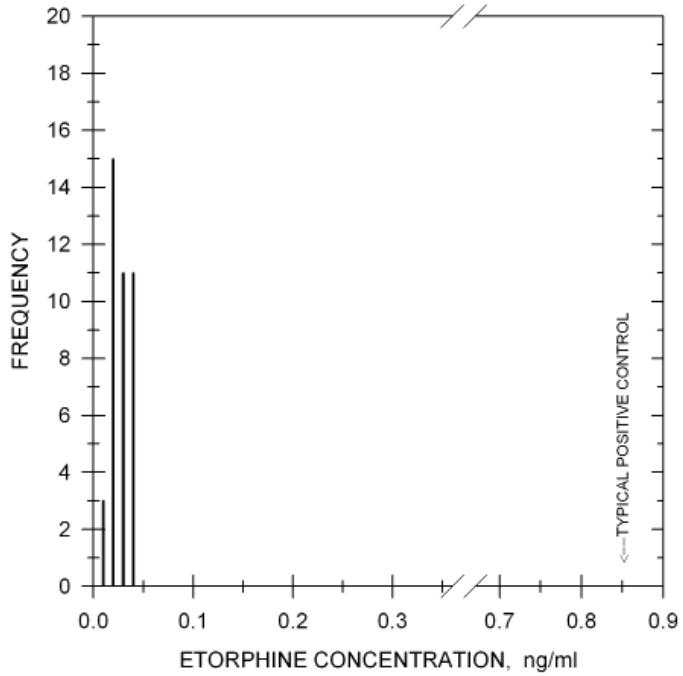




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.04 ng/ml.

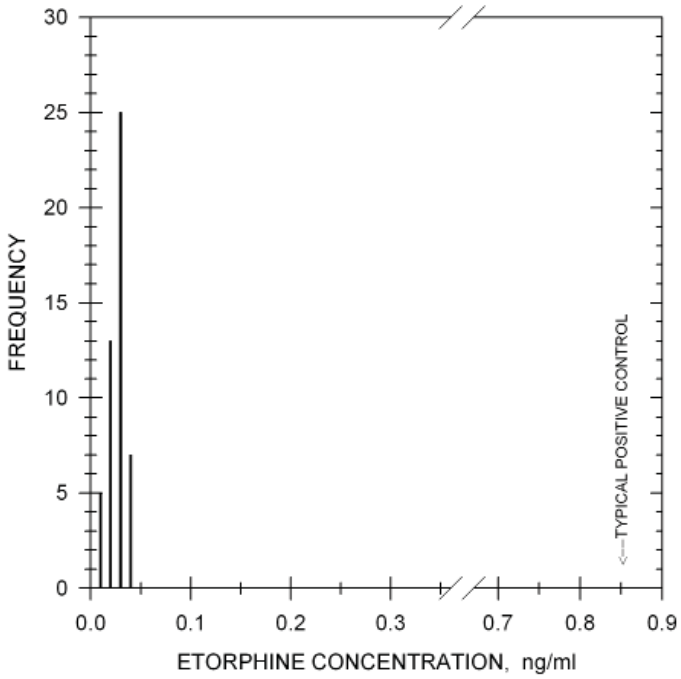
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples has shown no background levels above 0.04 ng/ml.

Sample Treatment: No sample dilution is necessary.

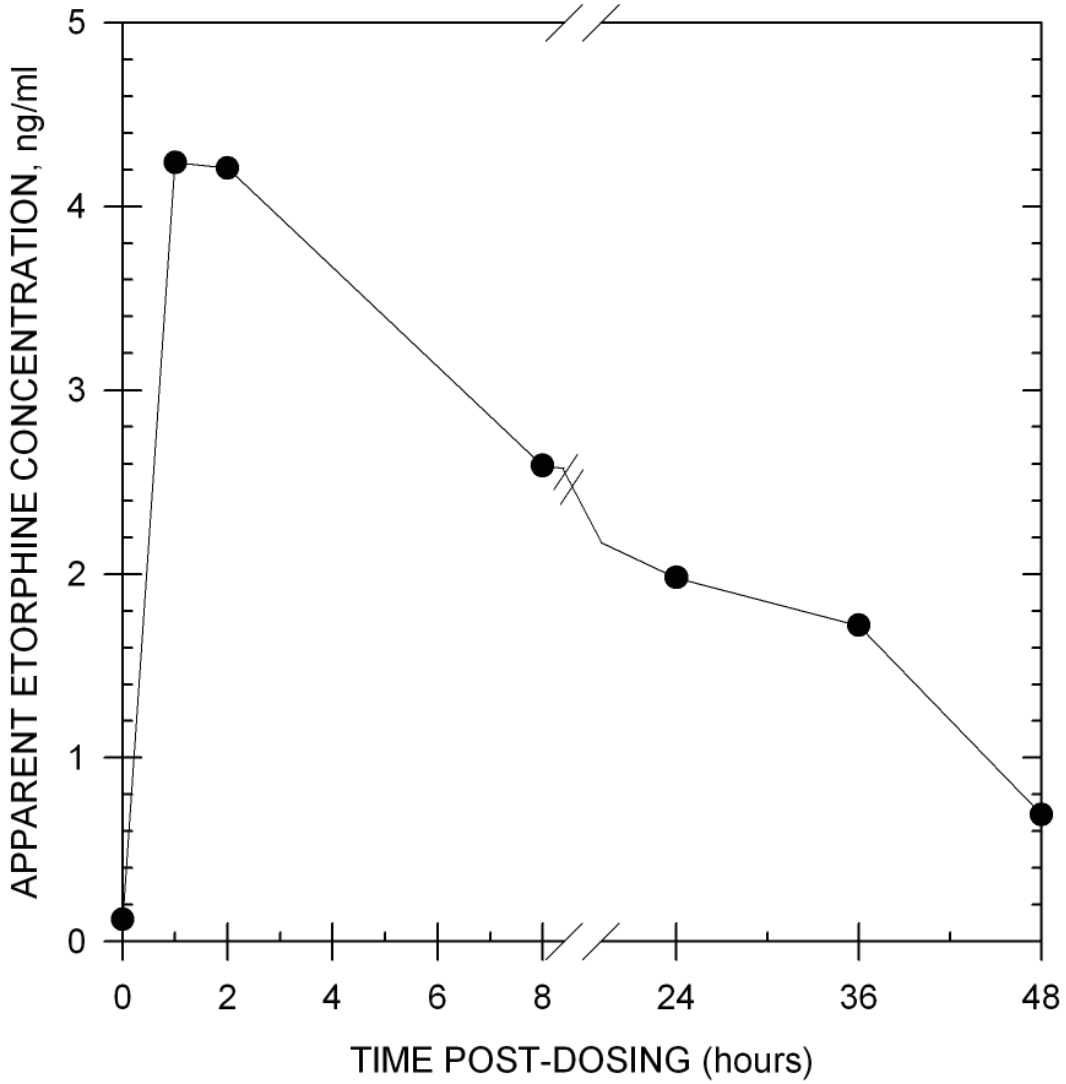


TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 100 μg of etorphine by intravenous injection to one horse, the presence of this drug was detected for at least 36 hours in equine urine.

ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Etorphine	100%

Alfentanil	<0.01%	Meperidine	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Metaproterenol	<0.01%
Anileridine	<0.01%	Methadone	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methocarbamol	<0.01%
Buprenorphine	<0.01%	Methylene Blue	<0.01%
Butorphanol	<0.01%	6α-Methylprednisolone	<0.01%
Carfentanil	<0.01%	Morphine	<0.01%
Clenbuterol	<0.01%	Nalbuphine	<0.01%
Codeine	<0.01%	Nalorphine	<0.01%
Dextromoramide	<0.01%	Naloxone	<0.01%
Dezocine	<0.01%	Naproxen	<0.01%
Diclofenac	<0.01%	Niacinamide	<0.01%
Dimethyl Sulfoxide	<0.01%	Orphenadrine	<0.01%
Diprenorphine	<0.01%	Oxymorphone	<0.01%
Dipyrone	<0.01%	Oxyphenbutazone	<0.01%
Ethyl p-Amino-Benzoate		Pentazocine	<0.01%
(Benzocaine)	<0.01%	Pentoxifylline	<0.01%
Fentanyl	<0.01%	Phenazocine	<0.01%
Flunixin	<0.01%	Phenothiazine	<0.01%
Furosemide	<0.01%	Phenylbutazone	<0.01%
Glycopyrrolate	<0.01%	Polyethylene Glycol	<0.01%
Hordenine	<0.01%	Prednisolone	<0.01%
Hydrocodone	<0.01%	Procaine	<0.01%
Hydrocortisone	<0.01%	Pyrantel	<0.01%
Hydromorphone	<0.01%	Salbutamol	<0.01%
Ibuprofen	<0.01%	Salicylamide	<0.01%
Levallorphan	<0.01%	Salicylic Acid	<0.01%
Levorphanol	<0.01%	Sufentanil	<0.01%
Lofentanil	<0.01%	Thiamine	<0.01%

ENHANCED KIT
FENTANIL GROUP

Product #100510 &
100515 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Sufentanil	0.3 ng/ml
Norsufentanil	0.7 ng/ml
Alfentanil	0.8 ng/ml
Carfentanil	0.9 ng/ml
Remifentanil	1.1 ng/ml
Fentanyl	41 ng/ml
α-Methylfentanil	92 ng/ml
Thienylfentanil	62 ng/ml

I-50 in Equine Urine (Diluted 1:1)

Sufentanil	0.9 ng/ml
Carfentanil	2.4 ng/ml
Alfentanil	2.5 ng/ml
Remifentanil	4.4 ng/ml

I-50 in Canine Urine

Sufentanil	0.3 ng/ml
Carfentanil	0.7 ng/ml
Alfentanil	1.2 ng/ml
Remifentanil	1.8 ng/ml

I-50 in Equine Plasma

Sufentanil	1.1 ng/ml
Carfentanil	5.9 ng/ml
Alfentanil	2.0 ng/ml
Remifentanil	3.9 ng/ml

I-50 in Equine Serum

Sufentanil	1.1 ng/ml
Carfentanil	8.7 ng/ml
Alfentanil	2.3 ng/ml
Remifentanil	6.1 ng/ml

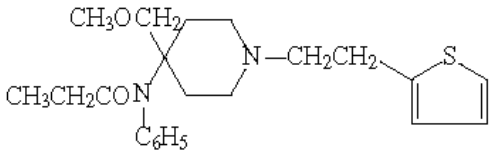
Precision:

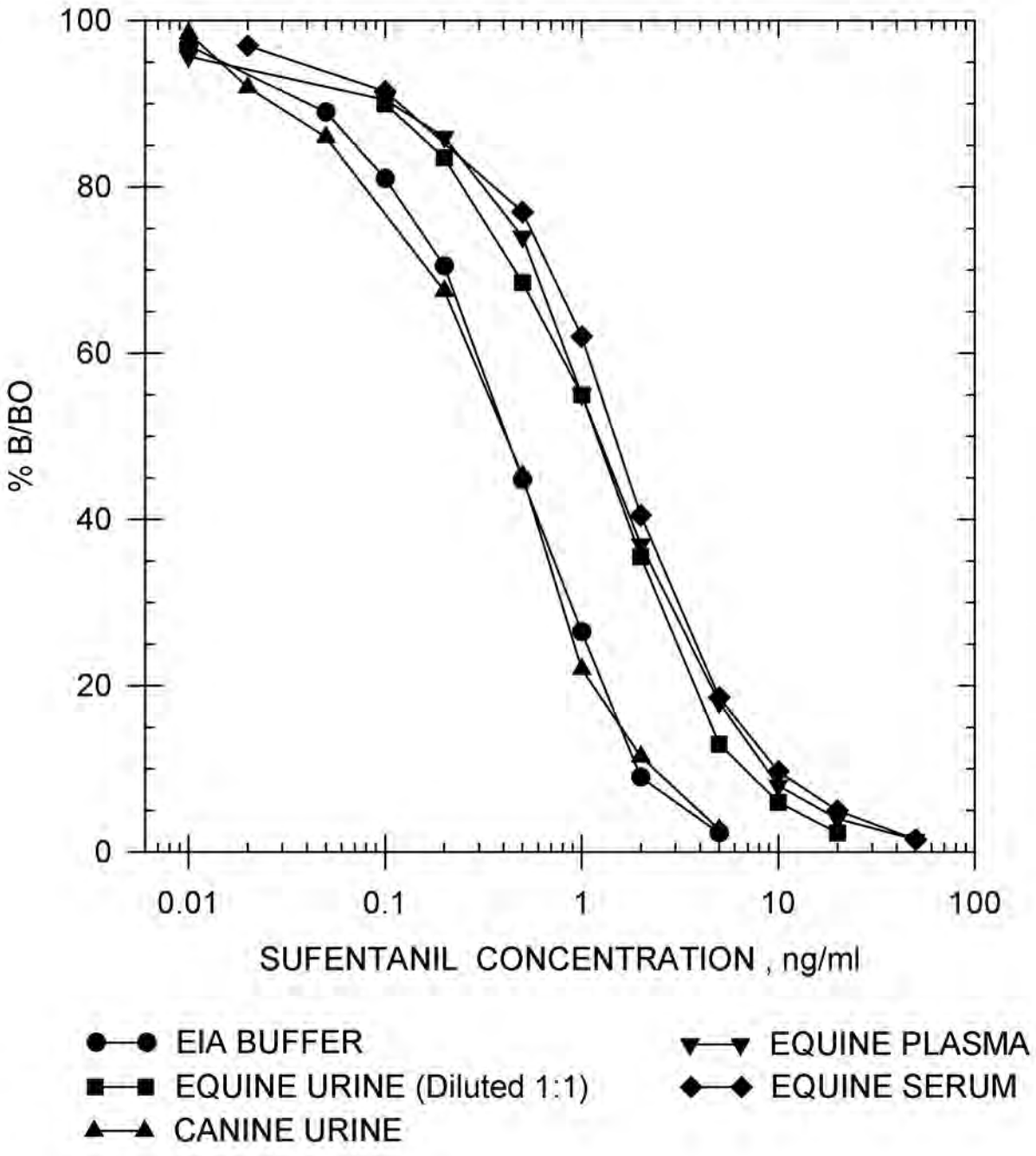
Intra-assay	4.00%
Inter-assay	5.36%

Note: Measuring wavelength was 650 nm.

FENTANIL GROUP STANDARD CURVES

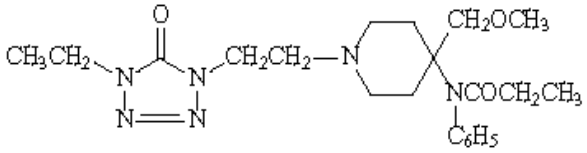
Sufentanil

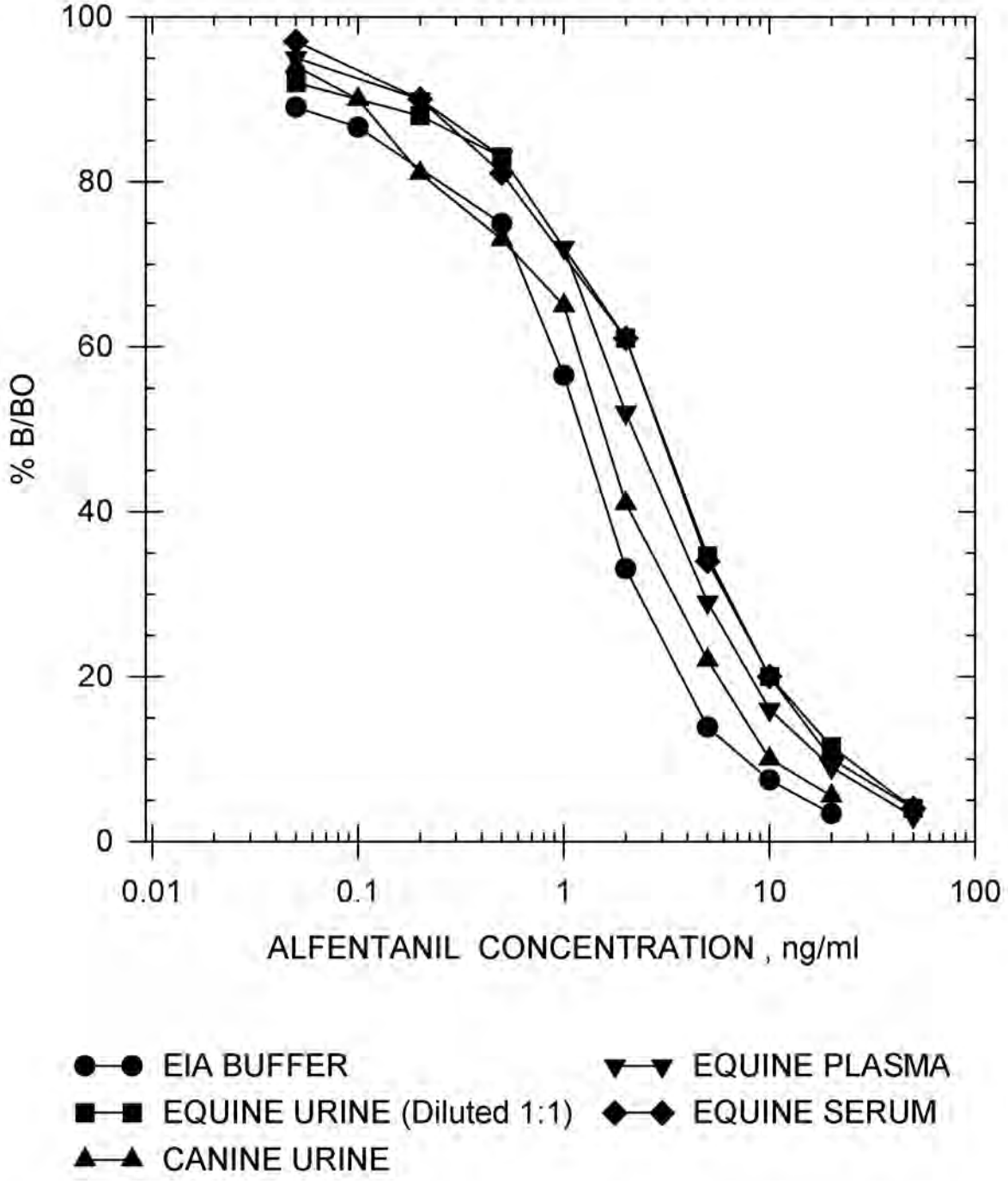




FENTANIL GROUP STANDARD CURVES

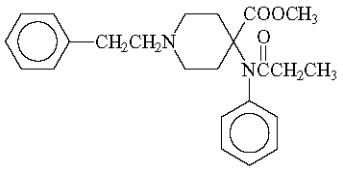
Alfentanil

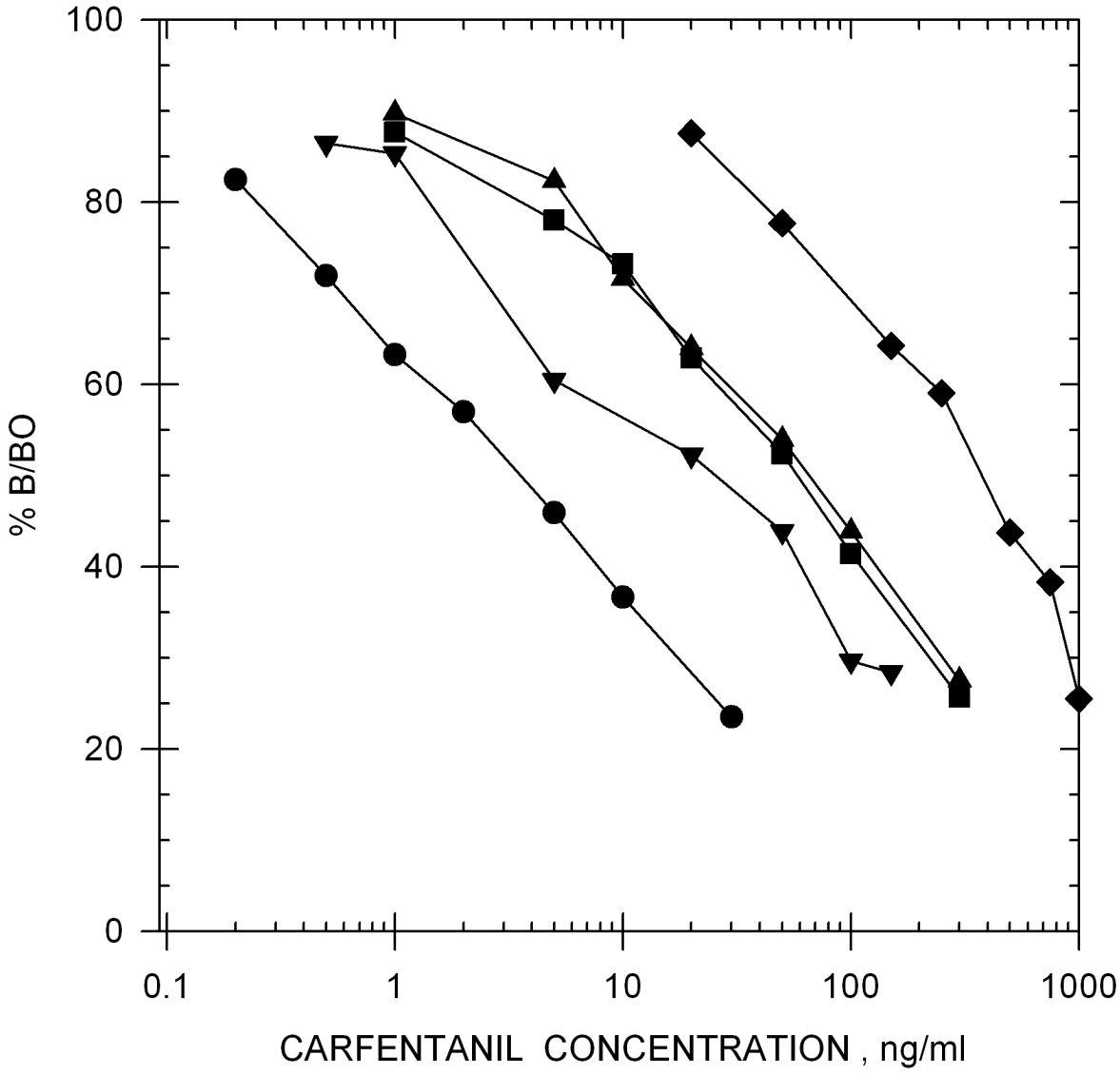




FENTANIL GROUP STANDARD CURVES

Carfentanil

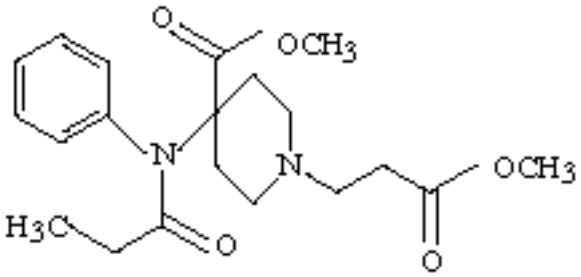


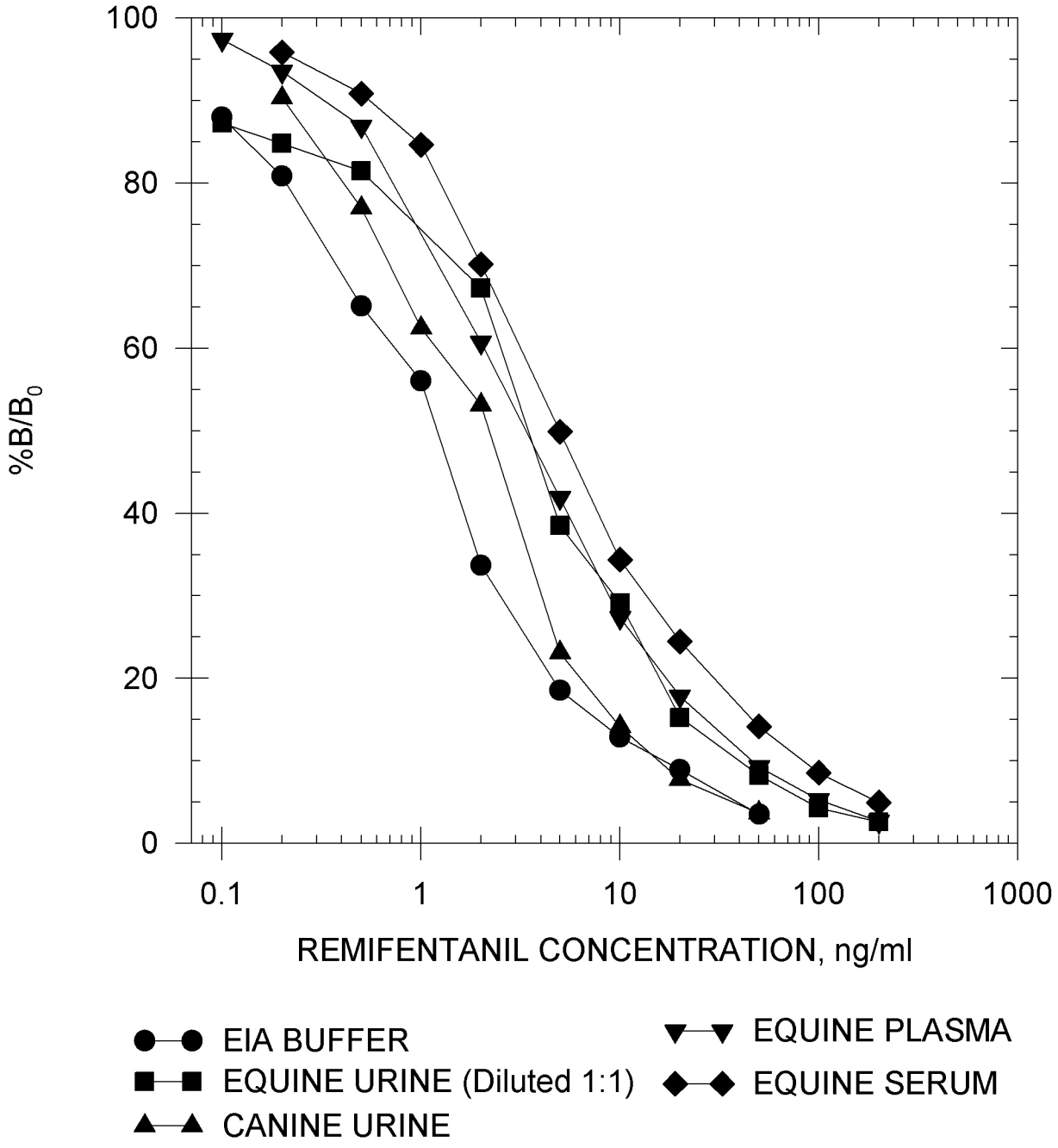


EIA BUFFER
EQUINE URINE (diluted 1:9)
CANINE URINE (diluted 1:9)
EQUINE PLASMA (diluted 1:4)
EQUINE SERUM (diluted 1:4)

FENTANIL GROUP STANDARD CURVES

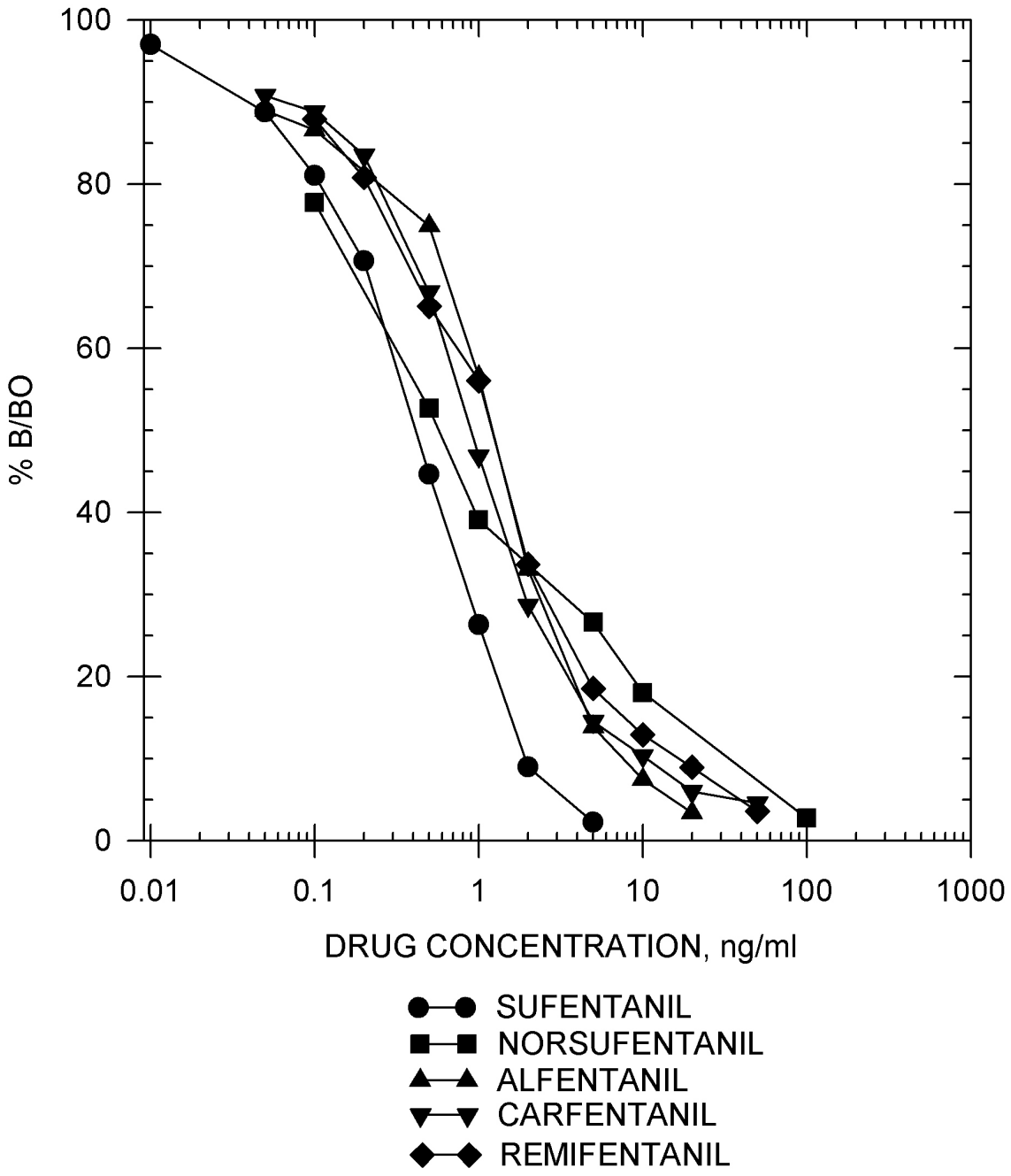
Remifentanil





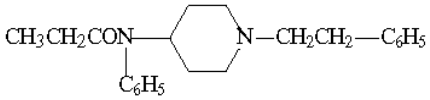
FENTANIL GROUP STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer

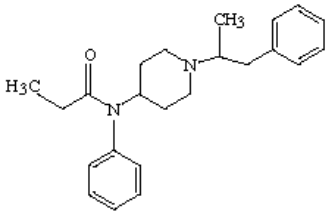


FENTANIL GROUP STANDARD CURVES

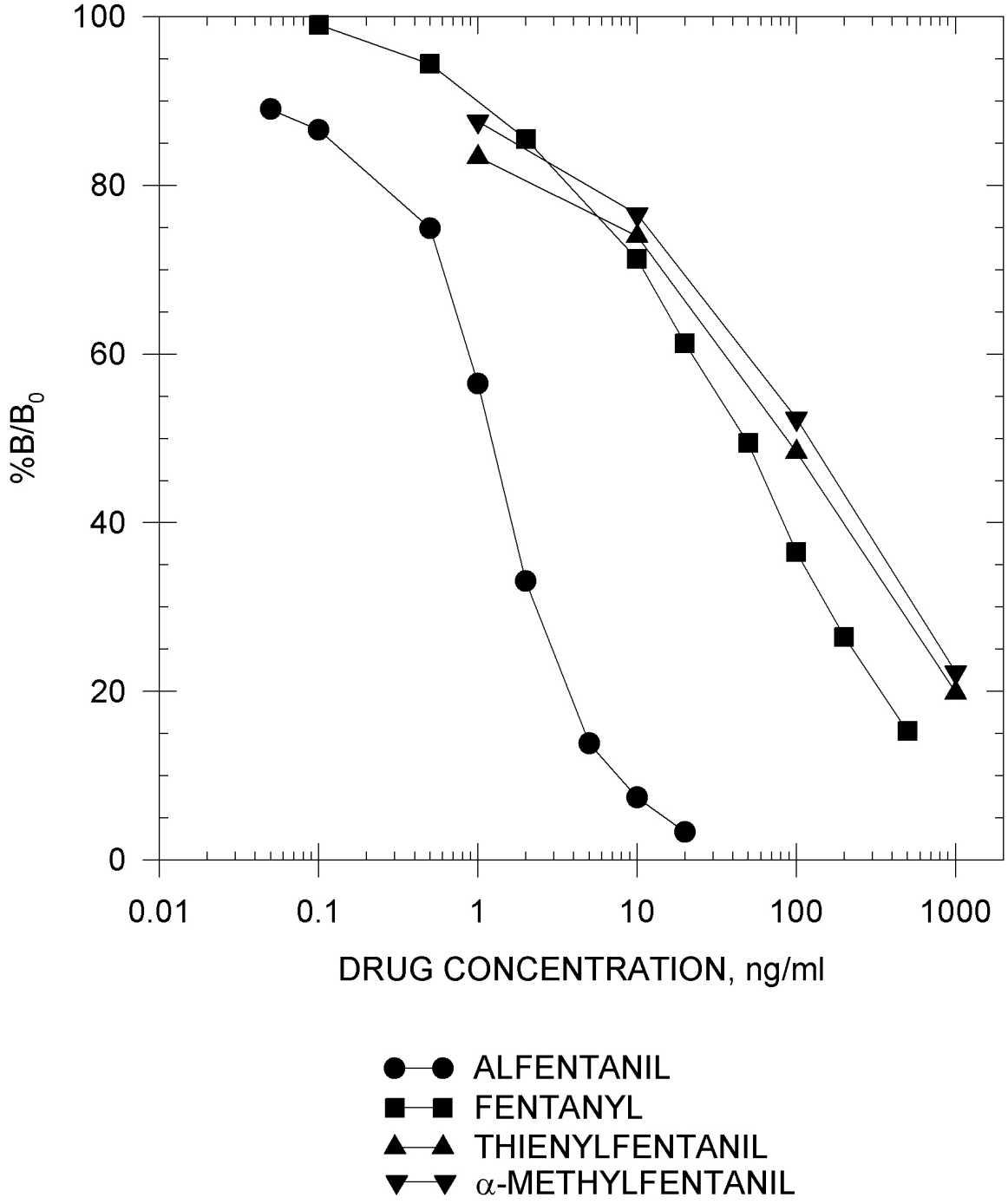
Fentanyl



α–Methylfentanyl



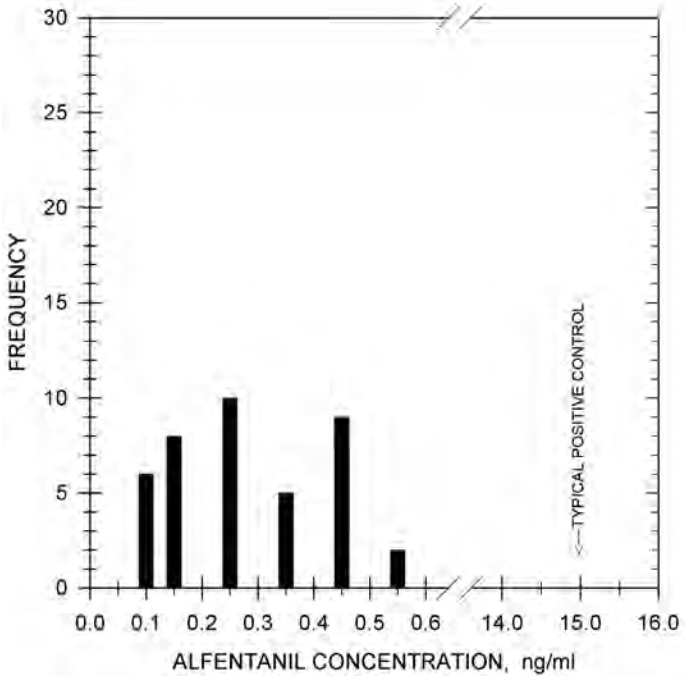
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.52 ng/ml.

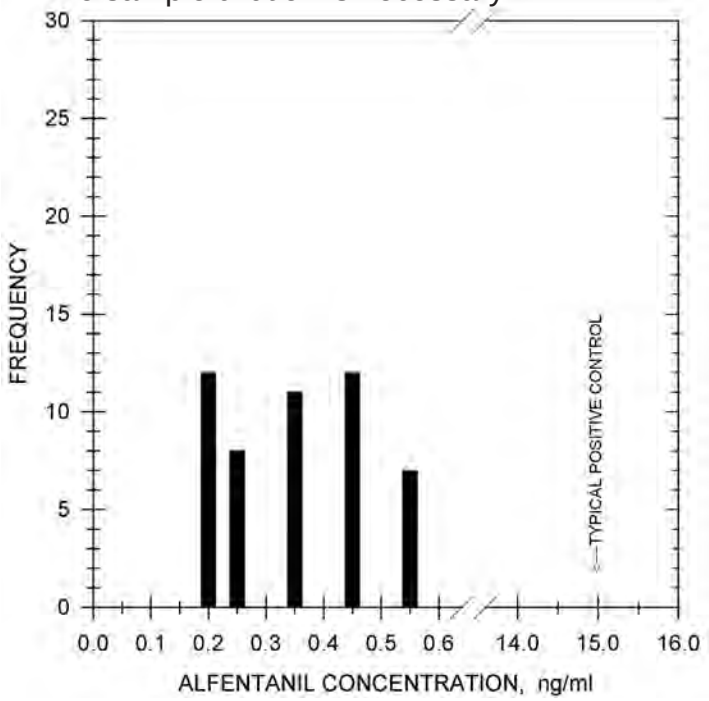
Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.55 ng/ml.

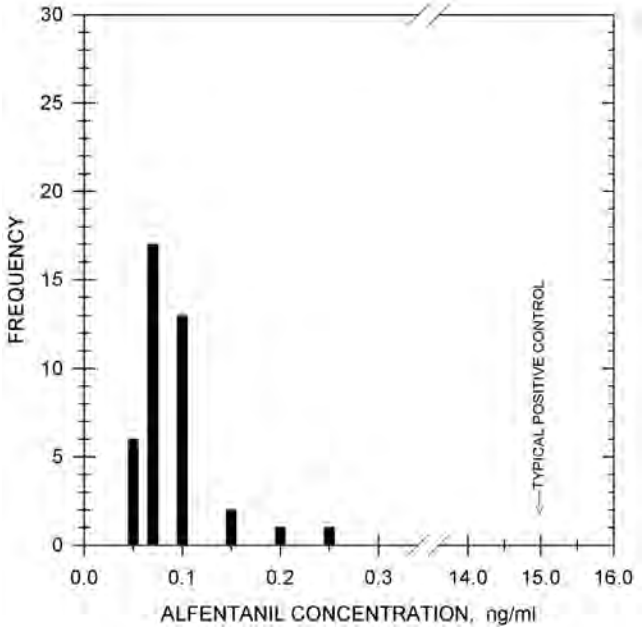
Sample Treatment: No sample dilution is necessary.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 0.22 ng/ml.

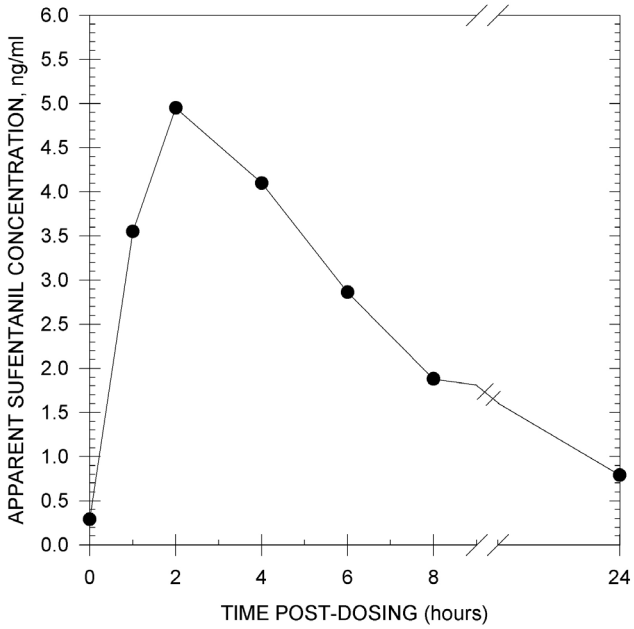
Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 0.66 mg of Sufentanil by intravenous injection to one horse, the presence of this drug was detected for at least 6 hours in equine urine. All samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.

Because the post-dose time points 1 through 4 hours exceeded the range of the assay, samples were diluted 1:10 with EIA buffer and backcalculated to the recommended 1:1 dilution.

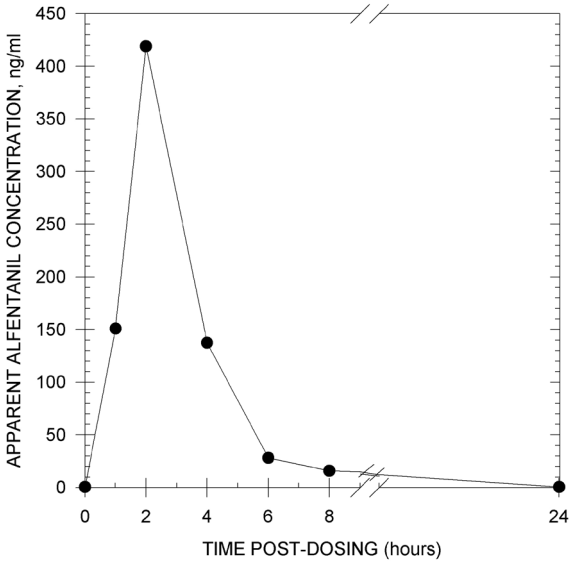


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 20 mg of Alfentanil by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine urine. All samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.

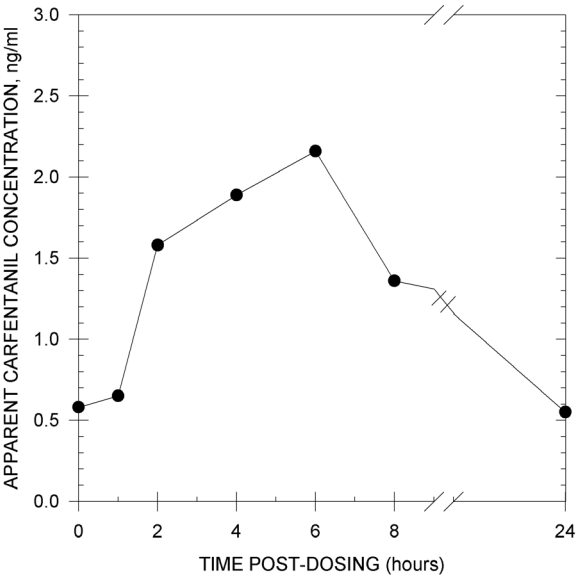
Because the post-dose time points 1 through 8 hours exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated to the recommended 1:1 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 0.3 mg of Carfentanil by intravenous injection to one horse, the presence of this drug was detected at the 6 hour time point in equine urine. All samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.

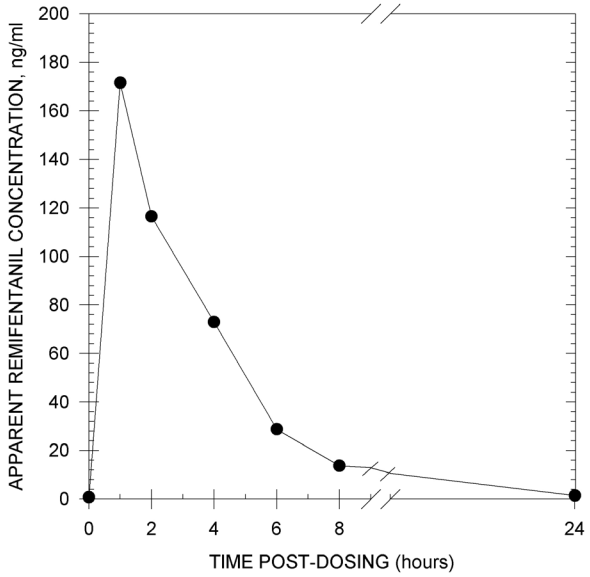


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 1 mg of Remifentanil by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine urine. All samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.

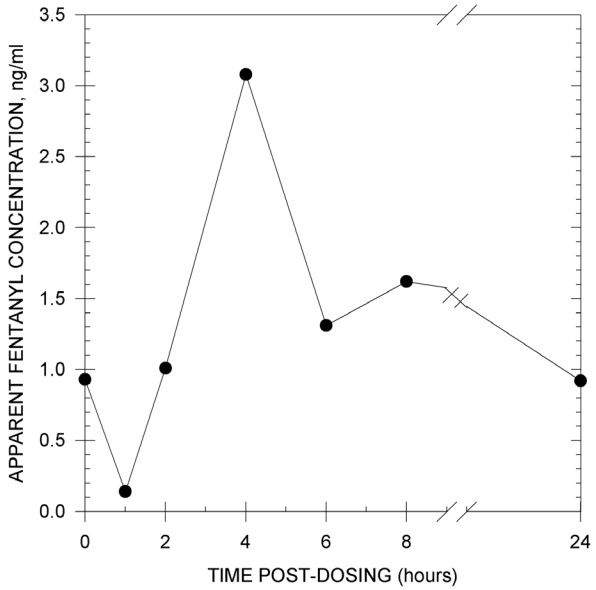
Because the post-dose time points 1 through 8 hours exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated to the recommended 1:1 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 20 mg of Fentanyl by intravenous injection to one horse, the presence of this drug was detected at the 4 hour time point in equine urine. All samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Sufentanil	270%	B-Hydroxythiofentanyl	0.29%
Norsufentanil	119%	Butyrfentanyl	0.27%
Alfentanil	100%	p-Fluorofentanyl	0.19%
Carfentanil	88%	Benzylfentanyl	0.18%
Remifentanil	76%	Furanylfentanyl	0.09%
Fentanyl	2.0%	3-Methylfentanyl	0.08%
Acrylfentanyl	1.8%	p-Chlorisobutyrylfentanyl	0.06%
Thiofentanyl	1.1%	4-Fluorobutyrfentanyl	0.06%
α–Methylthiofentanyl	0.83%	Norfentanyl	0.04%
α–Methylfentanyl	0.77%	Methoxyacetylfentanyl	0.03%
Acetylfentanyl	0.75%	Valerylfentanyl	0.03%
Cyclopropylfentanyl	0.53%	Cyclopentylfentanyl	0.02%
B-Hydroxyfentanyl	0.41%	Furanylethylfentanyl	0.02%
B-Methylfentanyl	0.35%	Ocfentanyl	0.02%

Acepromazine	<0.01%	Fluoroisobutyrfentanyl	<0.01%	Nortriptyline	<0.01%
Acetaminophen	<0.01%	Furosemide	<0.01%	Orphenadrine	<0.01%
AH-7921	<0.01%	Gemfibrozil	<0.01%	Oxycodone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Gentisic Acid	<0.01%	Oxymorphone	<0.01%
Amitriptyline	<0.01%	Glipizide	<0.01%	Oxyphenbutazone	<0.01%
Anileridine	<0.01%	Glutethimide	<0.01%	Penicillin G-Potassium	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Glycopyrrolate	<0.01%	Penicillin G-Procaine	<0.01%
Aspirin	<0.01%	Heparin	<0.01%	Pentazocine	<0.01%
Benzoylecgonine	<0.01%	Hordenine	<0.01%	Pentoxifylline	<0.01%
Buprenorphine	<0.01%	Hydrocodone	<0.01%	Phenazocine	<0.01%
Butorphanol	<0.01%	Hydrocortisone	<0.01%	Phencyclidine	<0.01%
Chlordiazepoxide	<0.01%	Hydromorphone	<0.01%	Phenothiazine	<0.01%
Chlorpromazine	<0.01%	Ibuprofen	<0.01%	Phenylbutazone	<0.01%
Clenbuterol	<0.01%	Imipramine	<0.01%	Polyethylene Glycol	<0.01%
Codeine	<0.01%	Isobutryfentanyl	<0.01%	Prednisolone	<0.01%
Cotinine	<0.01%	Isoxsuprine	<0.01%	Primadone	<0.01%
Despropionylfentanyl	<0.01%	Levorphanol	<0.01%	Procainamide	<0.01%
Dexamethasone	<0.01%	Lidocaine	<0.01%	Procaine	<0.01%
Dextromethorphan	<0.01%	Lofentanil	<0.01%	Promazine	<0.01%
Dextromoramide	<0.01%	Mazindol	<0.01%	Propofol	<0.01%
Dezocine	<0.01%	Meperidine	<0.01%	Pyrantel	<0.01%
Diclofenac	<0.01%	Metaproterenol	<0.01%	Pyrilamine	<0.01%
Dihydrocodeine	<0.01%	Methadone	<0.01%	Quinidine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methaqualone	<0.01%	Quinine	<0.01%
Dipyrone	<0.01%	Methocarbamol	<0.01%	Risperidone	<0.01%
Doxepin	<0.01%	Methylene Blue	<0.01%	Salbutamol (Albuterol)	<0.01%
Erythromycin	<0.01%	Methylphenidate	<0.01%	Salicylamide	<0.01%
Ethyl p-Amino-Benzoate		6α-Methylprednisolone	<0.01%	Salicylic Acid	<0.01%
(Benzocaine)	<0.01%	Morphine	<0.01%	Theophylline	<0.01%
Ethylmorphine	<0.01%	Nalbuphine	<0.01%	Thiamine	<0.01%
Etorphine	<0.01%	Nalorphine	<0.01%	Trimipramine	<0.01%
Fenoprofen	<0.01%	Naproxen	<0.01%	U-47700	<0.01%
Flunixin	<0.01%	Niacinamide	<0.01%		

ENHANCED KIT
FENTANYL

Product #104010 &
104015 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Despropionyl-3-Methylfentanyl	0.10 ng/ml
Acetyl Fentanyl	0.24 ng/ml
Fentanyl	0.25 ng/ml
Thienylfentanyl	0.28 ng/ml
p-Fluorofentanyl	0.46 ng/ml
3-Methylfentanyl	0.48 ng/ml
α-Methylfentanyl	2.1 ng/ml
Carfentanil	8.6 ng/ml
Despropionylfentanyl	44 ng/ml
Sufentanil	100 ng/ml

I-50 in Equine Urine (Diluted 1:2)

Despropionyl-3-Methylfentanyl	0.93 ng/ml
Fentanyl	0.77 ng/ml
Thienylfentanyl	2.2 ng/ml
p-Fluorofentanyl	2.4 ng/ml
3-Methylfentanyl	1.7 ng/ml
α-Methylfentanyl	10 ng/ml

I-50 in Canine Urine (Diluted 1:2)

Despropionyl-3-Methylfentanyl	0.67 ng/ml
Fentanyl	0.84 ng/ml
Thienylfentanyl	2.0 ng/ml
p-Fluorofentanyl	1.8 ng/ml
3-Methylfentanyl	2.6 ng/ml
α-Methylfentanyl	10 ng/ml

I-50 in Equine Plasma

Despropionyl-3-Methylfentanyl	0.27 ng/ml
Fentanyl	0.77 ng/ml
Thienylfentanyl	1.5 ng/ml
p-Fluorofentanyl	1.4 ng/ml
3-Methylfentanyl	1.1 ng/ml
α-Methylfentanyl	22 ng/ml

I-50 in Equine Serum

Despropionyl-3-Methylfentanyl	0.28 ng/ml
Fentanyl	1.0 ng/ml
Thienylfentanyl	1.8 ng/ml
p-Fluorofentanyl	1.9 ng/ml
3-Methylfentanyl	2.5 ng/ml
α-Methylfentanyl	26 ng/ml

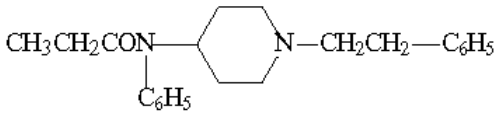
Precision:

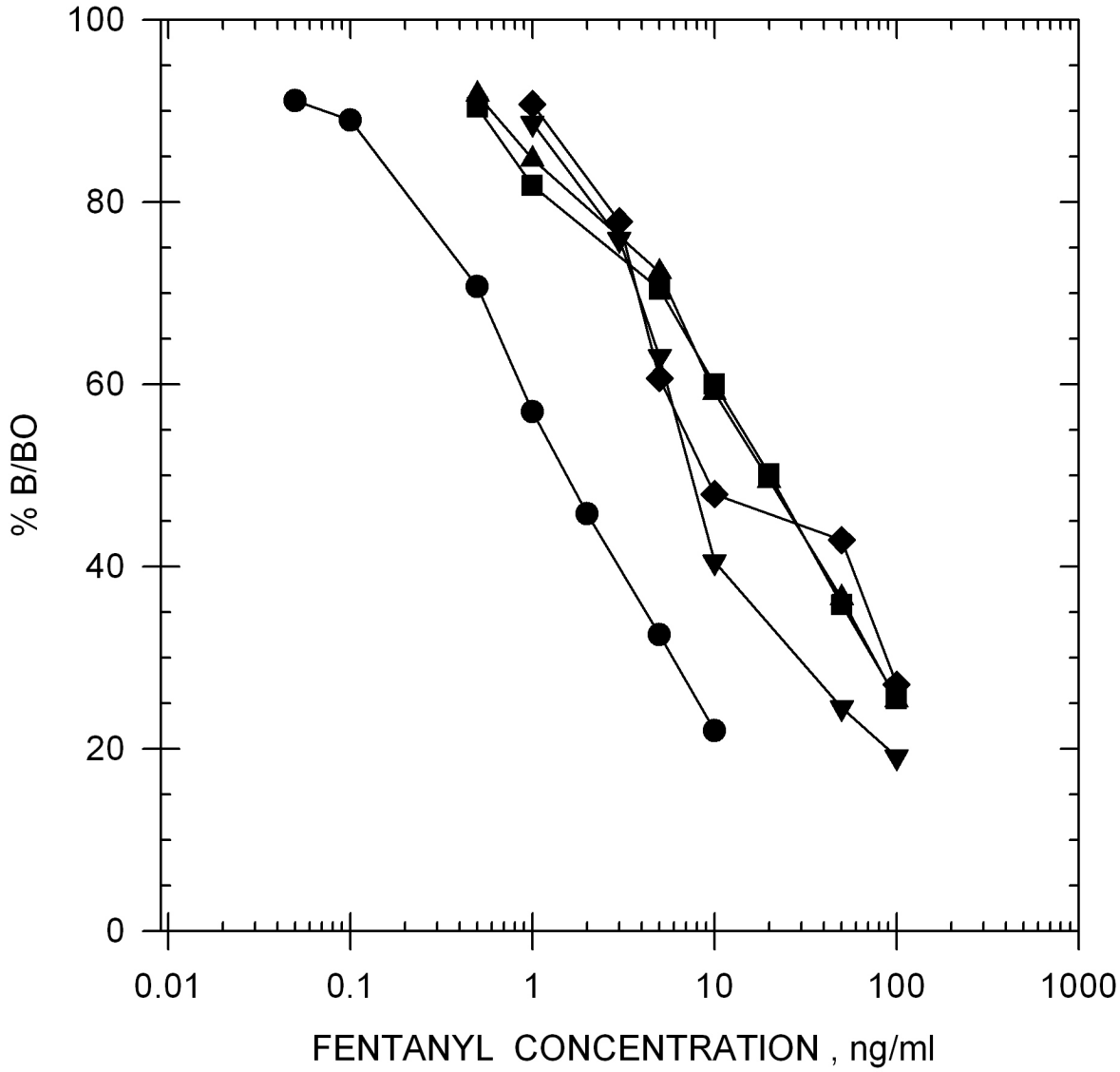
Intra-assay	4.04 %
Inter-assay	6.91 %

Note: Measuring wavelength was 650 nm**.**

FENTANYL STANDARD CURVES

Fentanyl

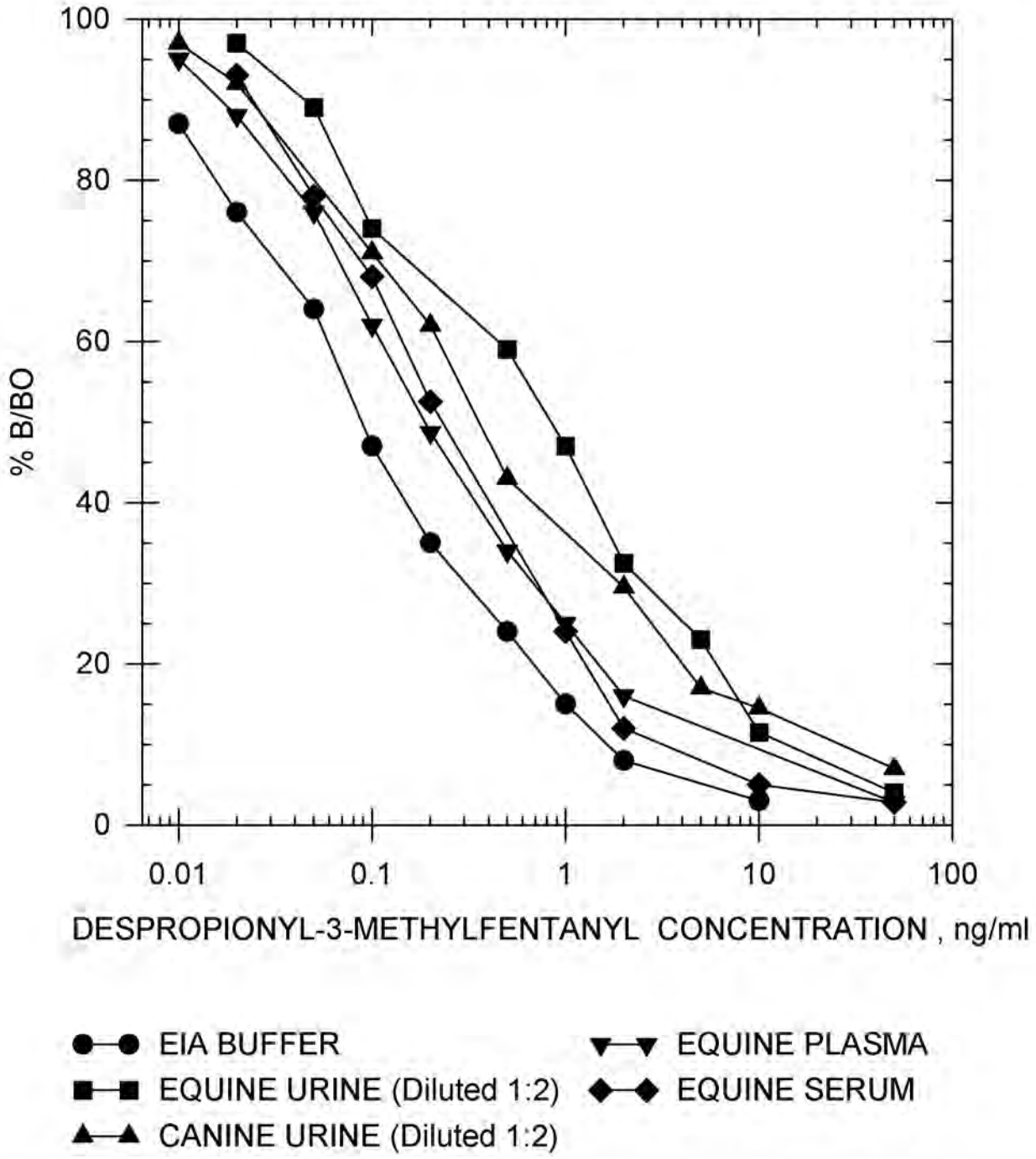




EIA BUFFER
EQUINE URINE (diluted 1:9)
CANINE URINE (diluted 1:9)
EQUINE PLASMA (diluted 1:4)
EQUINE SERUM (diluted 1:4)

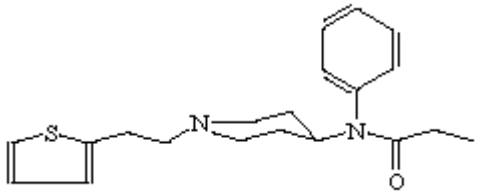
FENTANYL STANDARD CURVES

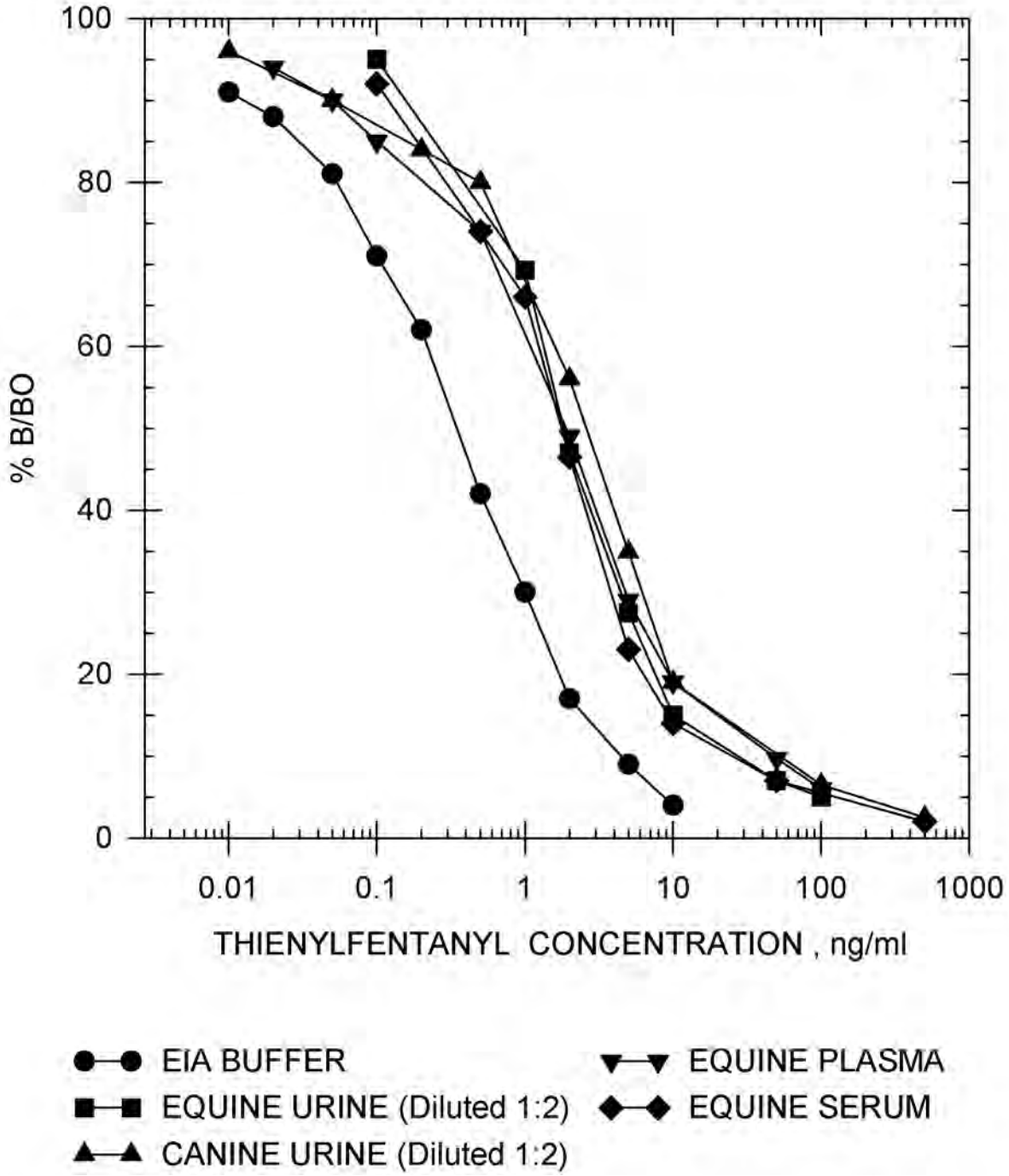
Despropionyl-3-methylfentanyl



FENTANYL STANDARD CURVES

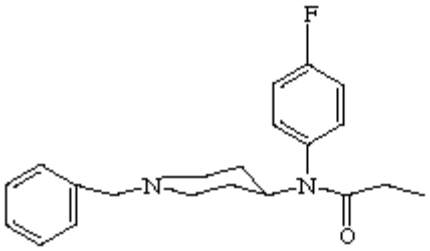
Thienylfentanyl

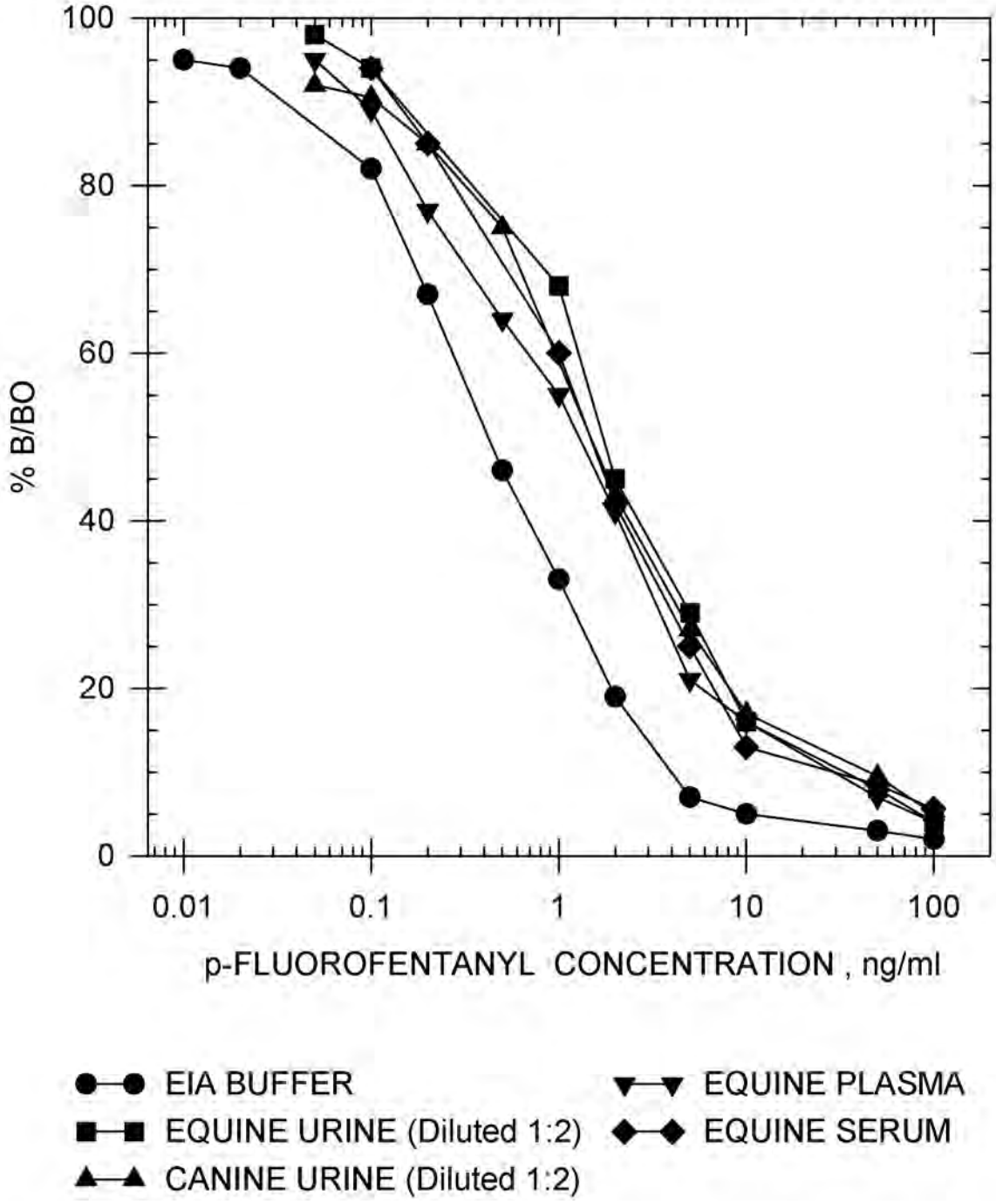




FENTANYL STANDARD CURVES

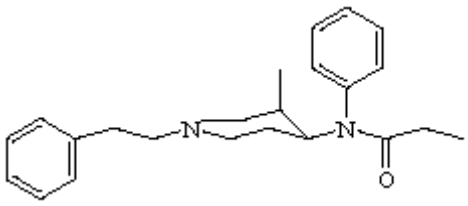
p-Fluorofentanyl

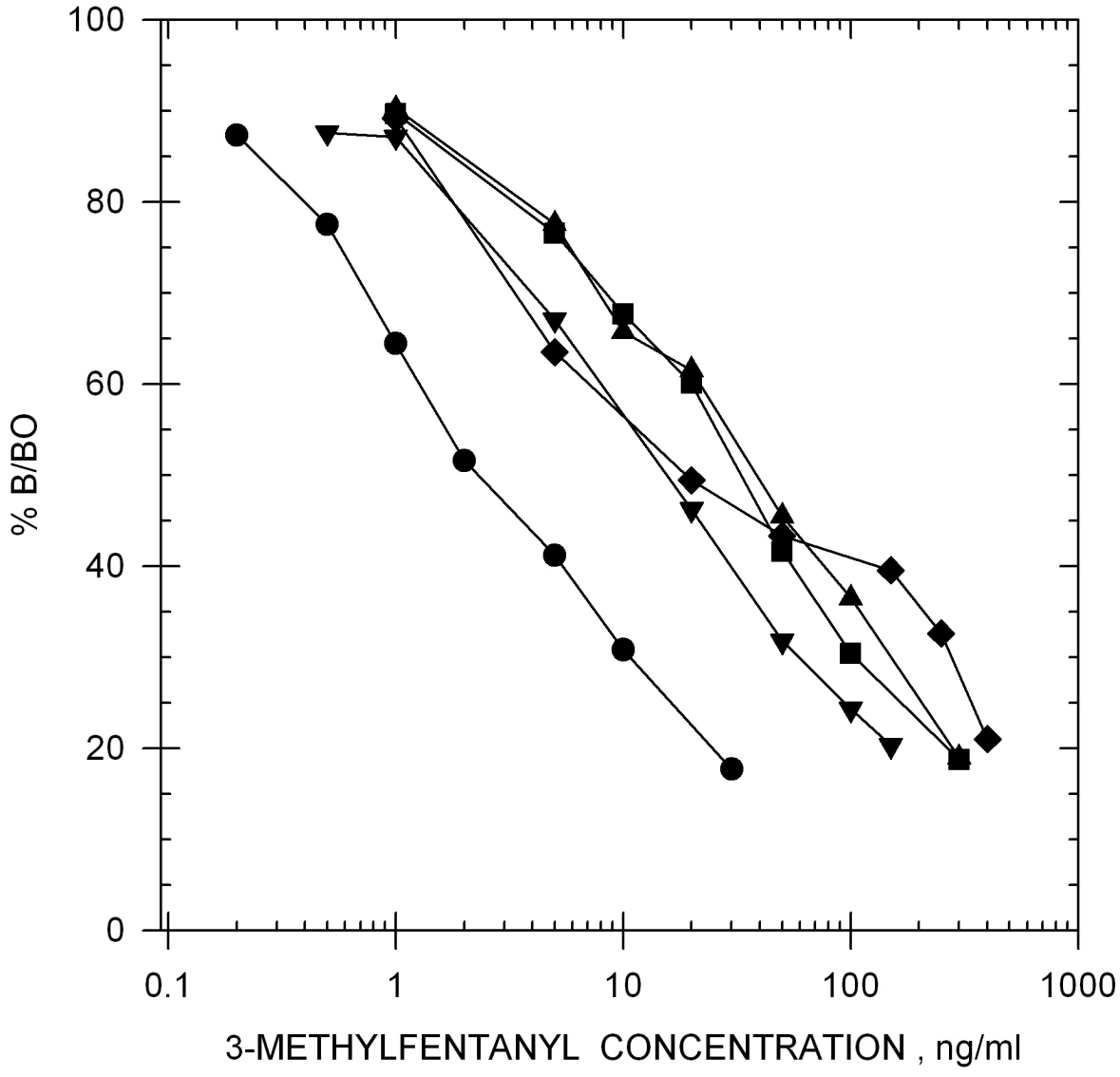




FENTANYL STANDARD CURVES

3-Methylfentanyl



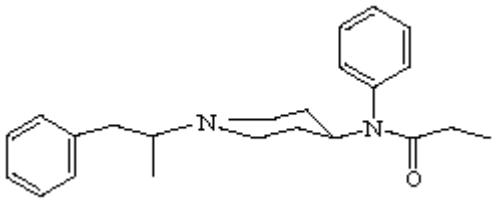


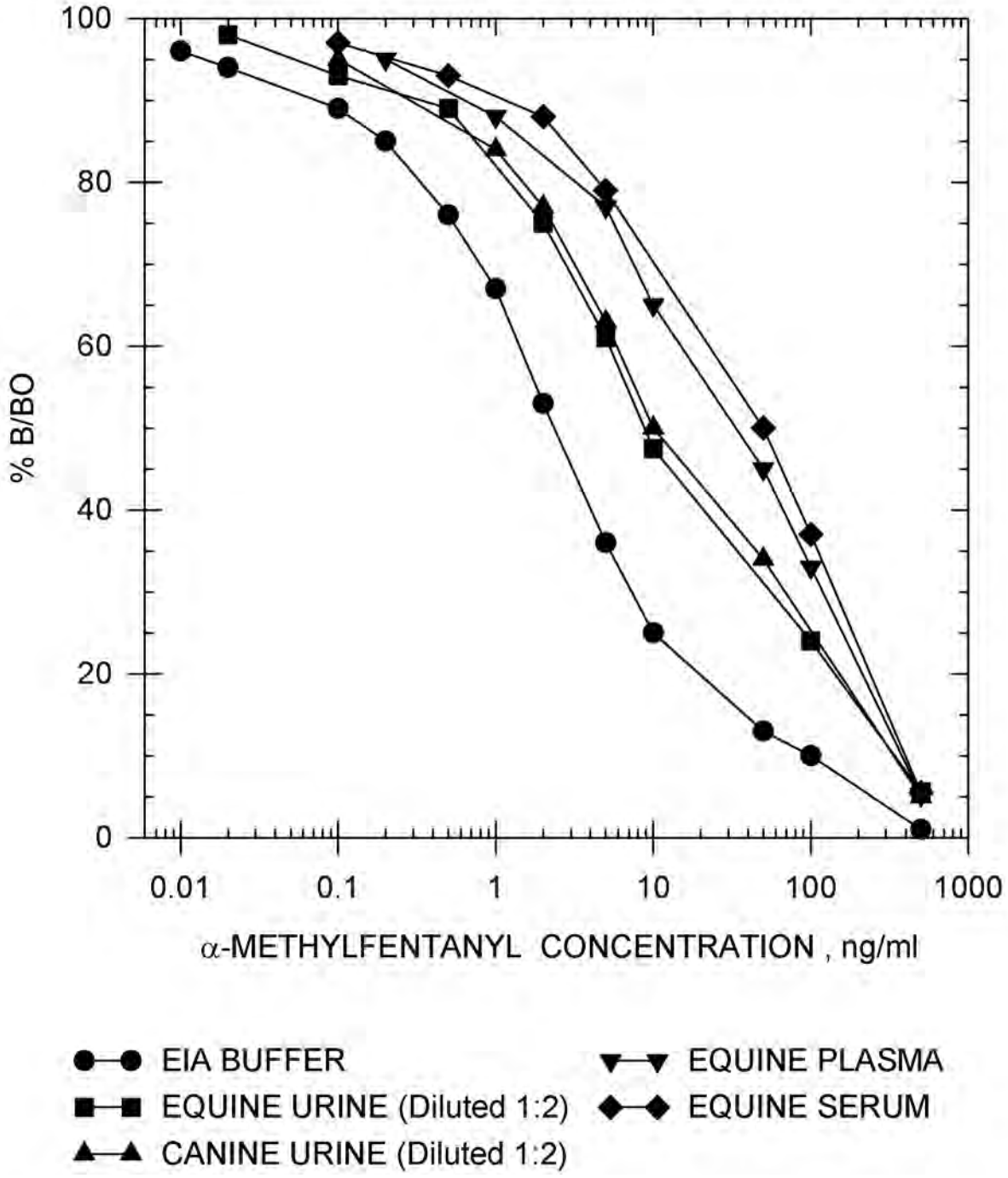
EIA BUFFER
EQUINE URINE (diluted 1:9)
CANINE URINE (diluted 1:9)
EQUINE PLASMA (diluted 1:4)
EQUINE SERUM (diluted 1:4)

Rev 05/2011

FENTANYL STANDARD CURVES

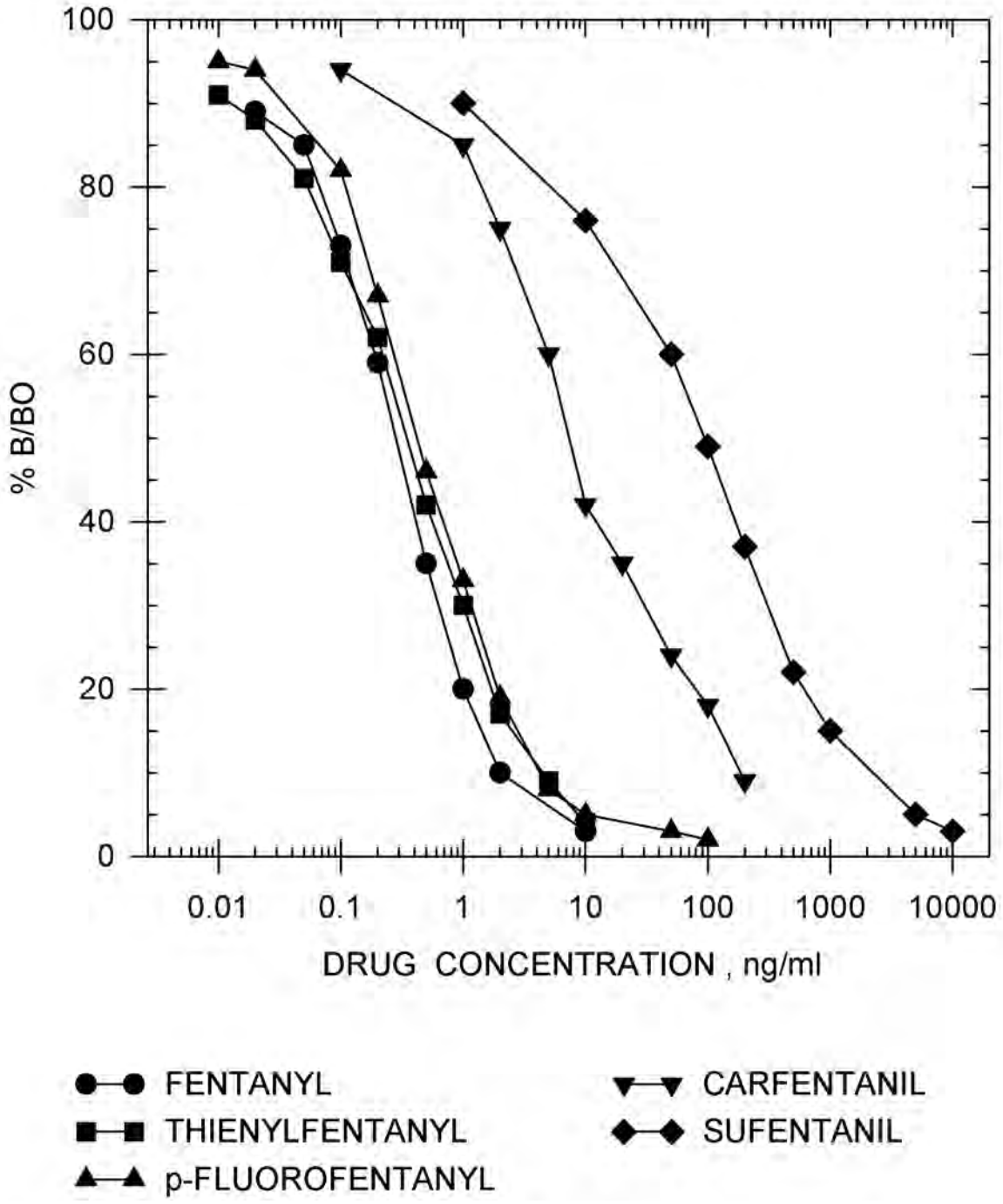
α-Methylfentanyl





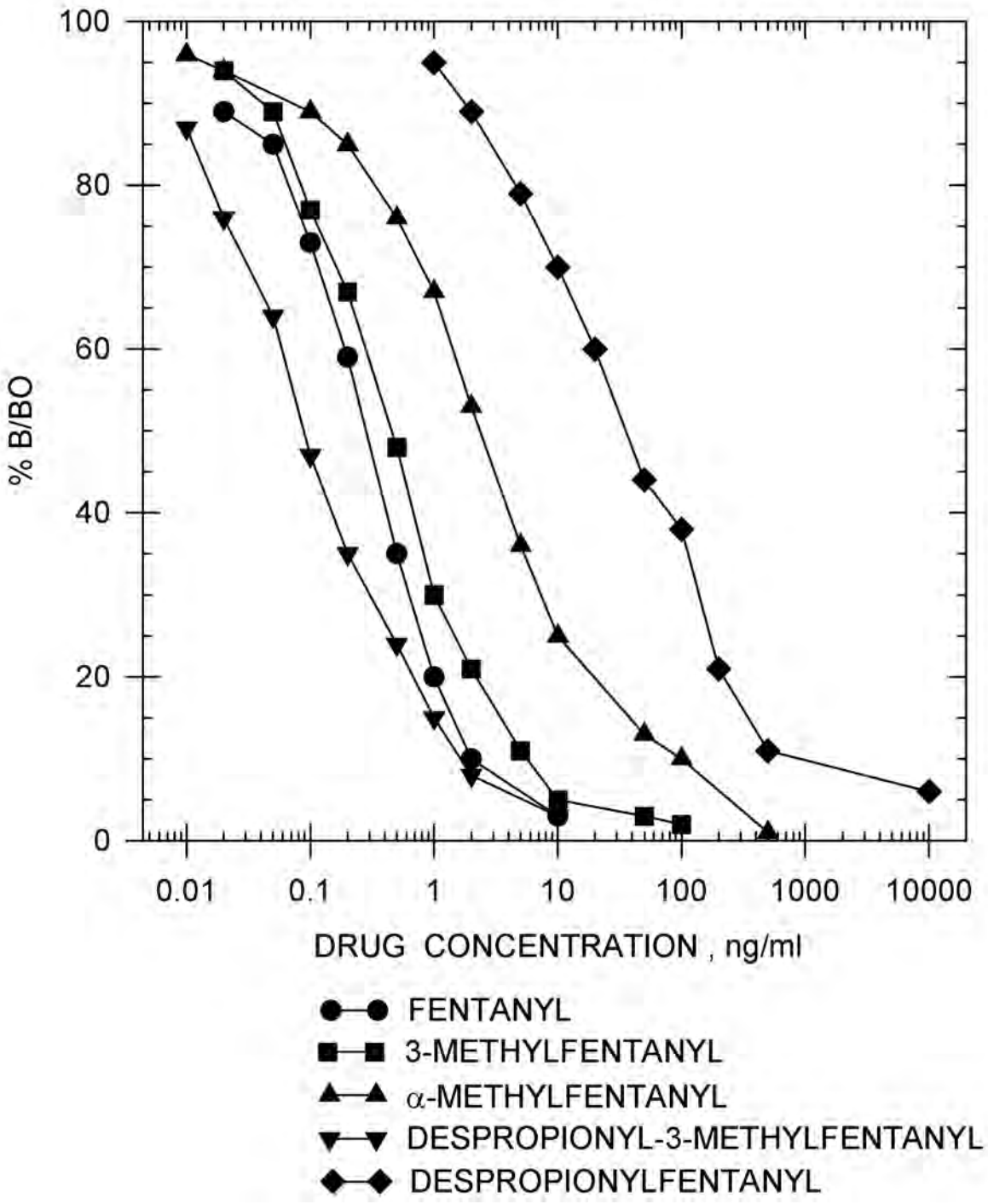
FENTANYL STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



FENTANYL STANDARD CURVES

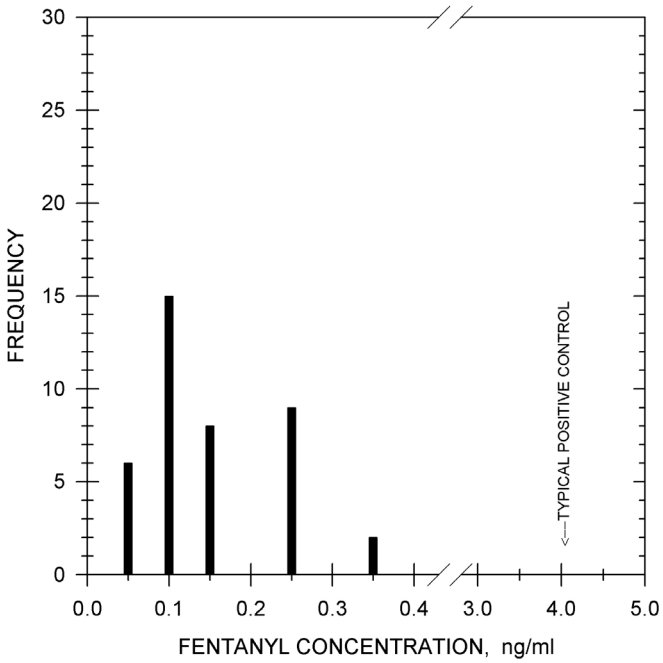
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:2, has shown no background levels above 0.34 ng/ml.

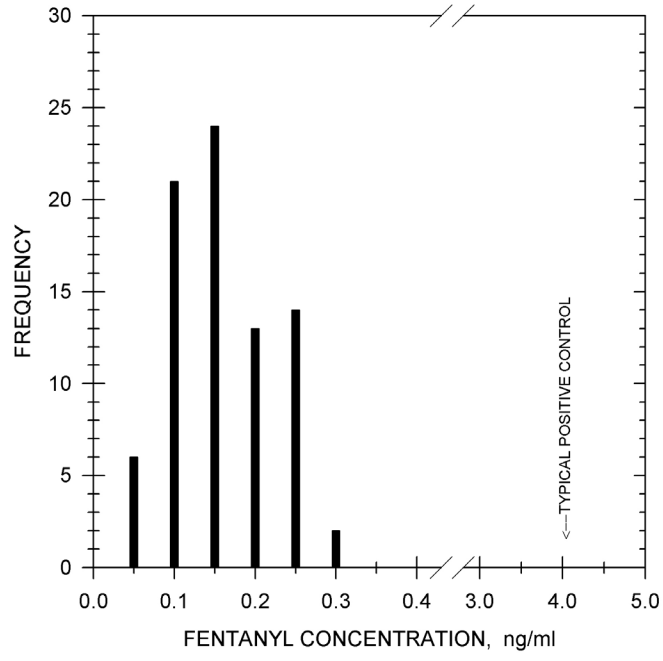
Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:2, has shown no background levels above 0.27 ng/ml.

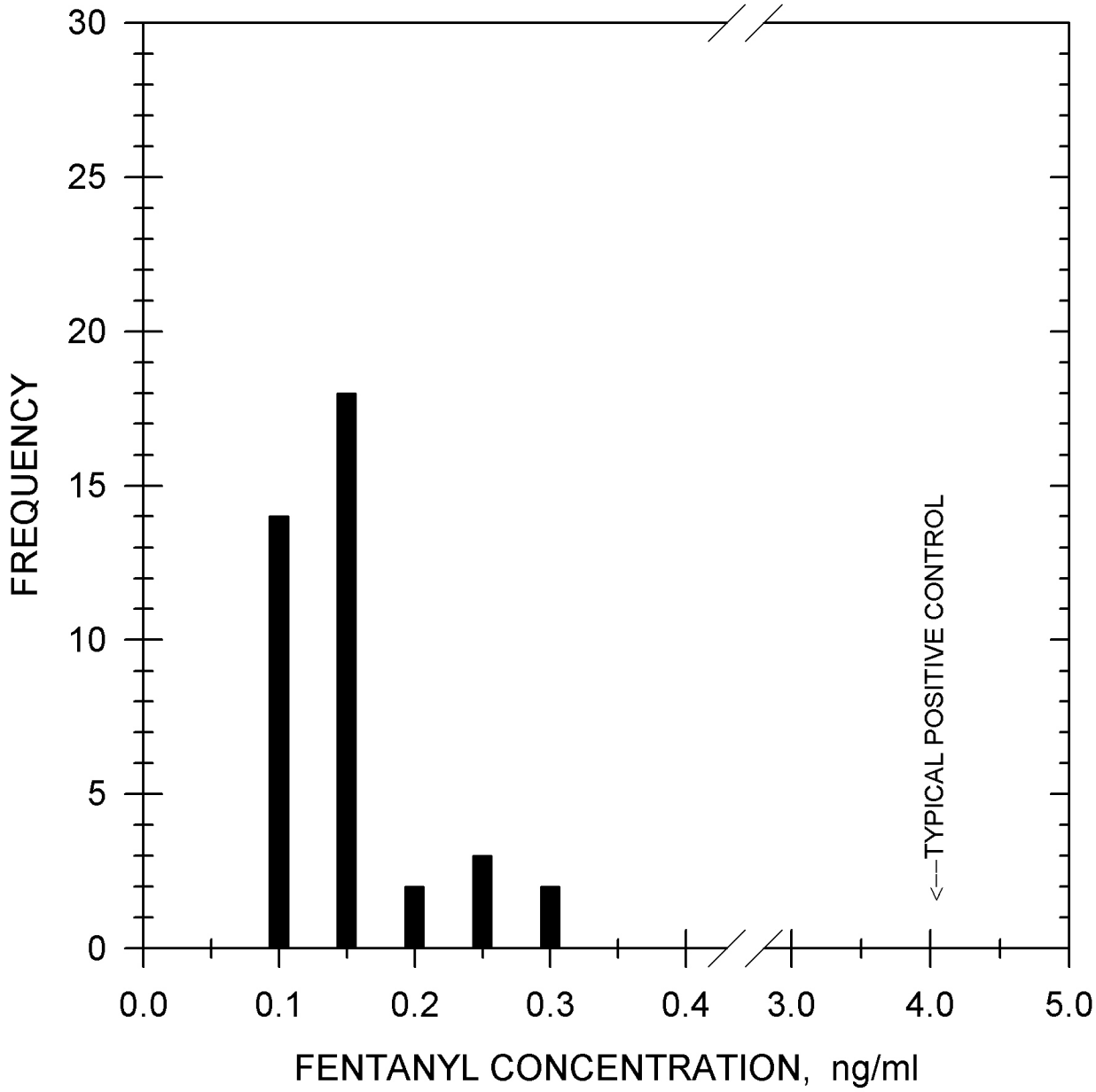
Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recomended to reduce natural backgrounds.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race equine plasma samples, undiluted, has shown no background levels above 0.29 ng/ml.

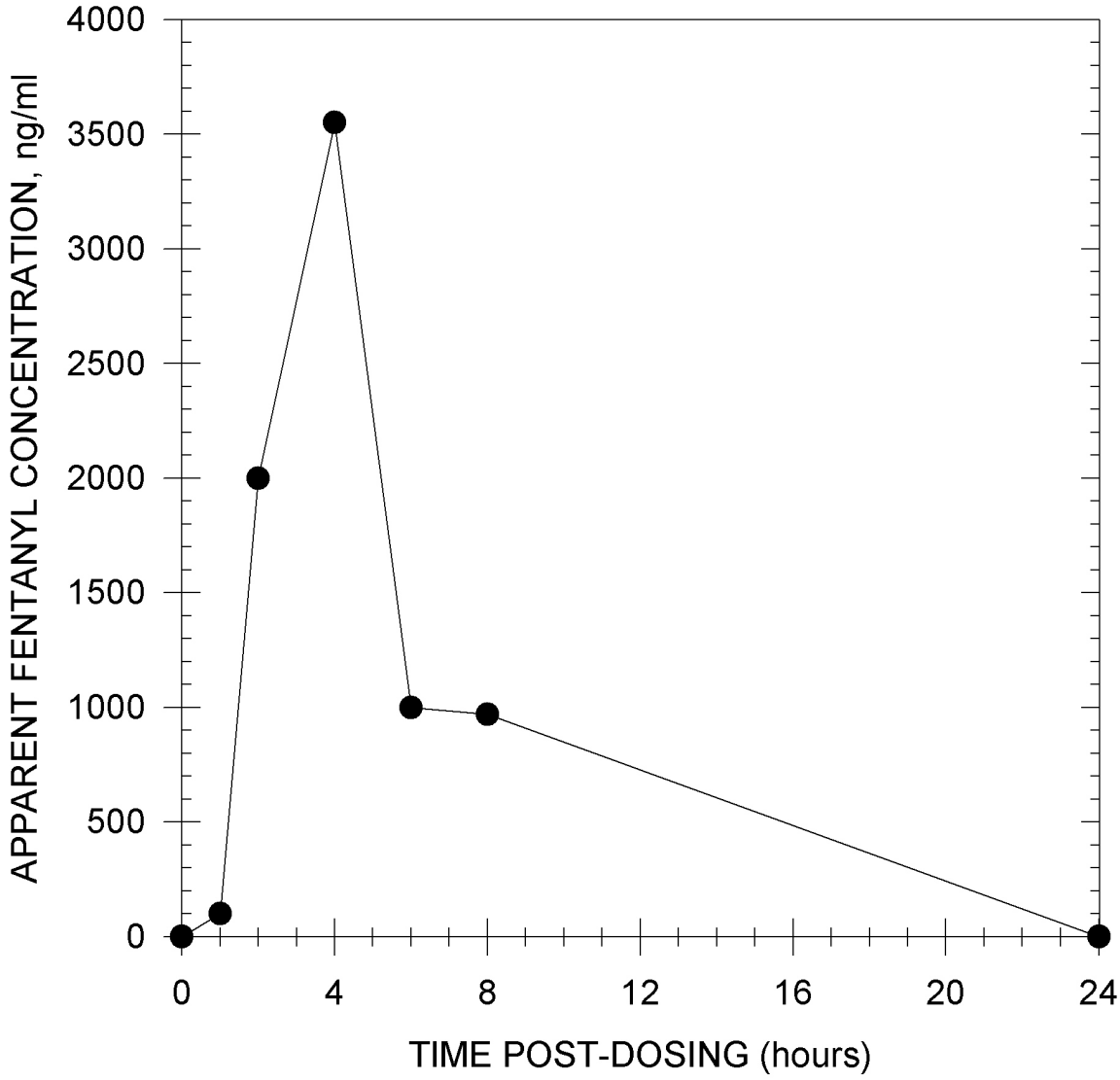
Sample Treatment: No sample treatment necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection:

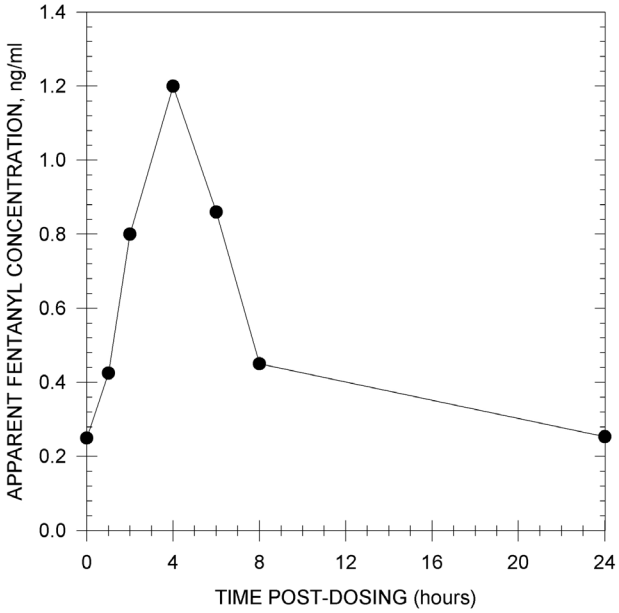
After administration of 20 mg of fentanyl by intravenous injection to one horse, the presence of this drug was detected for at least 24 hours in equine urine. Because post-dose time points exceeded the range of the assay, samples were diluted up to 1:6000 with EIA buffer and back calculated to the recommended 1:2 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

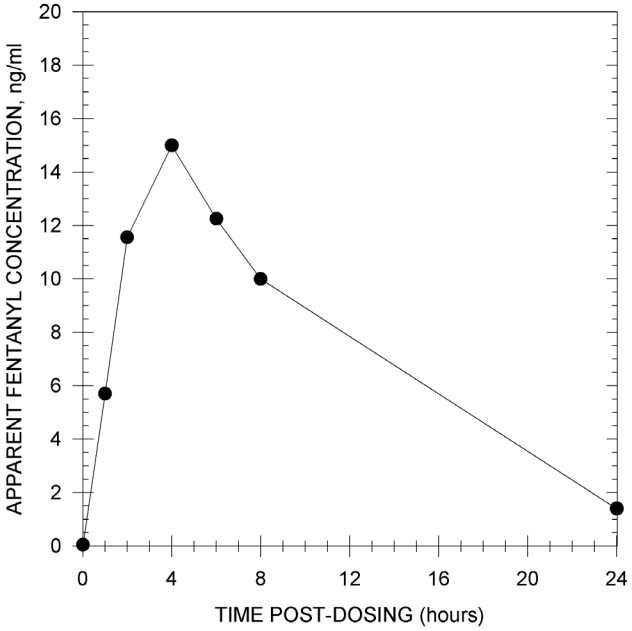
After administration of 0.5 mg of 3-Methylfentanyl by intravenous injection to one horse, the presence of this drug was detectable for at least 6 hours in equine urine. All samples were diluted 1:2 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection:

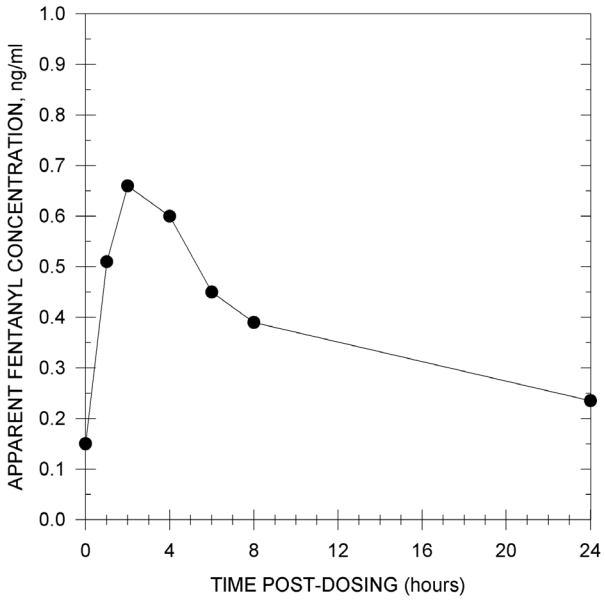
After administration of 6.5 mg of α-Methylfentanyl by intravenous injection to one horse, the presence of this drug was detectable for at least 8 hours in equine urine. Because the post-dose time points exceeded the range of the assay, samples were diluted up to 1:50 with EIA buffer and back calculated to the recommended 1:2 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

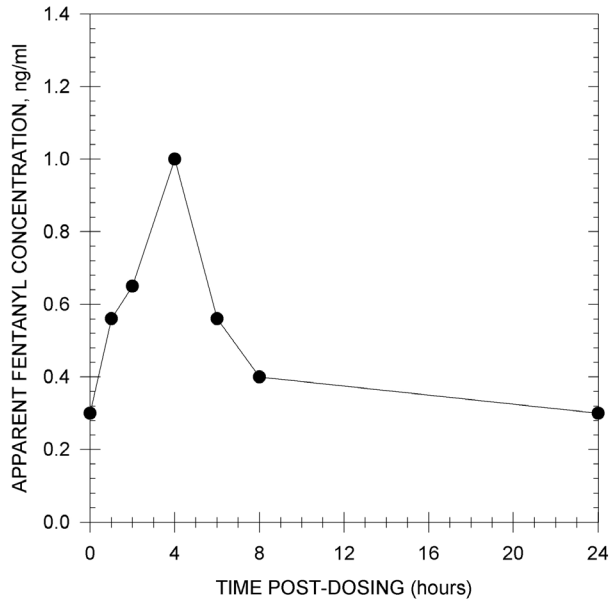
After administration of 0.66 mg of Sufentanil by intravenous injection to one horse, the presence of this drug was slightly detectable at the 4 hour time point in equine urine. All samples were diluted 1:2 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 1 mg of Remifentanil by intravenous injection to one horse, the presence of this drug was detectable for at least 6 hours in equine urine. All samples were diluted 1:2 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Acrylfentanyl	215%	p-Fluorofentanyl	46%
Despropionyl-3-Methylfentanyl	210%	Furanylethylfentanyl	45%
Valerylfentanyl	208%	α-Methylfentanyl	9.6%
Methoxyacetylfentanyl	184%	B-Methylfentanyl	4%
Furanylfentanyl	180%	α-Methylthiofentanyl	4%
Cyclopropylfentanyl	125%	B-Hydroxyfentanyl	3%
Ocfentanyl	112%	Carfentanil	2.4%
Fentanyl	100%	B-Hydroxythiofentanyl	2%
Butyrylfentanyl	96%	Despropionylfentanyl	0.4%
Acetyl Fentanyl	95%	Sufentanil	0.2%
p-Fluorobutyrfentanyl	76%	Thienylfentanyl	0.2%
Isobutyrfentanyl	66%	Benzylfentanyl	0.04%
Fluoroisobutyrylfentanyl	59%	Lofentanil	0.02%
p-Chlorisobutyrylfentanyl	53%	Phenazocine	0.02%
Cyclopentylfentanyl	46%	Risperidone	0.02%
3-Methylfentanyl	46%	Trazodone	0.02%

4-ANPP	<0.01%	Fenoprofen	<0.01%	Niacinamide	<0.01%
Acepromazine	<0.01%	Flunixin	<0.01%	Norfentanyl	<0.01%
Acetaminophen	<0.01%	Furosemide	<0.01%	Norsufentanil	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Gemfibrozil	<0.01%	Nortriptyline	<0.01%
Alfentanil	<0.01%	Gentisic Acid	<0.01%	Orphenadrine	<0.01%
Amitriptyline	<0.01%	Glipizide	<0.01%	Oxycodone	<0.01%
Anileridine	<0.01%	Glutethimide	<0.01%	Oxymorphone	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Glycopyrrolate	<0.01%	Oxyphenbutazone	<0.01%
Aspirin	<0.01%	Heparin	<0.01%	Penicillin G-Potassium	<0.01%
Benzoylecgonine	<0.01%	Hordenine	<0.01%	Penicillin G-Procaine	<0.01%
Buprenorphine	<0.01%	Hydrocodone	<0.01%	Pentazocine	<0.01%
Butorphanol	<0.01%	Hydrocortisone	<0.01%	Pentoxifylline	<0.01%
Caffeine	<0.01%	Hydromorphone	<0.01%	Phencyclidine	<0.01%
Chlordiazepoxide	<0.01%	Ibuprofen	<0.01%	Phenothiazine	<0.01%
Chlorpromazine	<0.01%	Imipramine	<0.01%	Phenylbutazone	<0.01%
Clenbuterol	<0.01%	Isoxsuprine	<0.01%	Polyethylene Glycol	<0.01%
Cocaine	<0.01%	Levorphanol	<0.01%	Prednisolone	<0.01%
Codeine	<0.01%	Lidocaine	<0.01%	Primadone	<0.01%
Cotinine	<0.01%	Mazindol	<0.01%	Procainamide	<0.01%
Dexamethasone	<0.01%	Meperidine	<0.01%	Procaine	<0.01%
Dextromethorphan	<0.01%	Mesalamine	<0.01%	Promazine	<0.01%
Dextromoramide	<0.01%	Metaproterenol	<0.01%	Propofol	<0.01%
Dezocine	<0.01%	Methadone	<0.01%	Pyrantel	<0.01%
Diclofenac	<0.01%	Methaqualone	<0.01%	Pyrilamine	<0.01%
Dihydrocodeine	<0.01%	Methocarbamol	<0.01%	Quinidine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methylphenidate	<0.01%	Quinine	<0.01%
Dipyrone	<0.01%	6α-Methylprednisolone	<0.01%	Remifentanyl	<0.01%
Doxepin	<0.01%	Morphine	<0.01%	Salbutamol (Albuterol)	<0.01%
Erythromycin	<0.01%	Nalbuphine	<0.01%	Salicylamide	<0.01%
Ethylmorphine	<0.01%	Nalorphine	<0.01%	Salicylic Acid	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Naproxen	<0.01%	Tetrahydrofuranyl fentanyl	<0.01%

ENHANCED KIT
FEXOFENADINE/TERFENADINE

Product #181410 &
181415 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Fexofenadine	0.3 ng/ml
Terfenadine	1.1 ng/ml

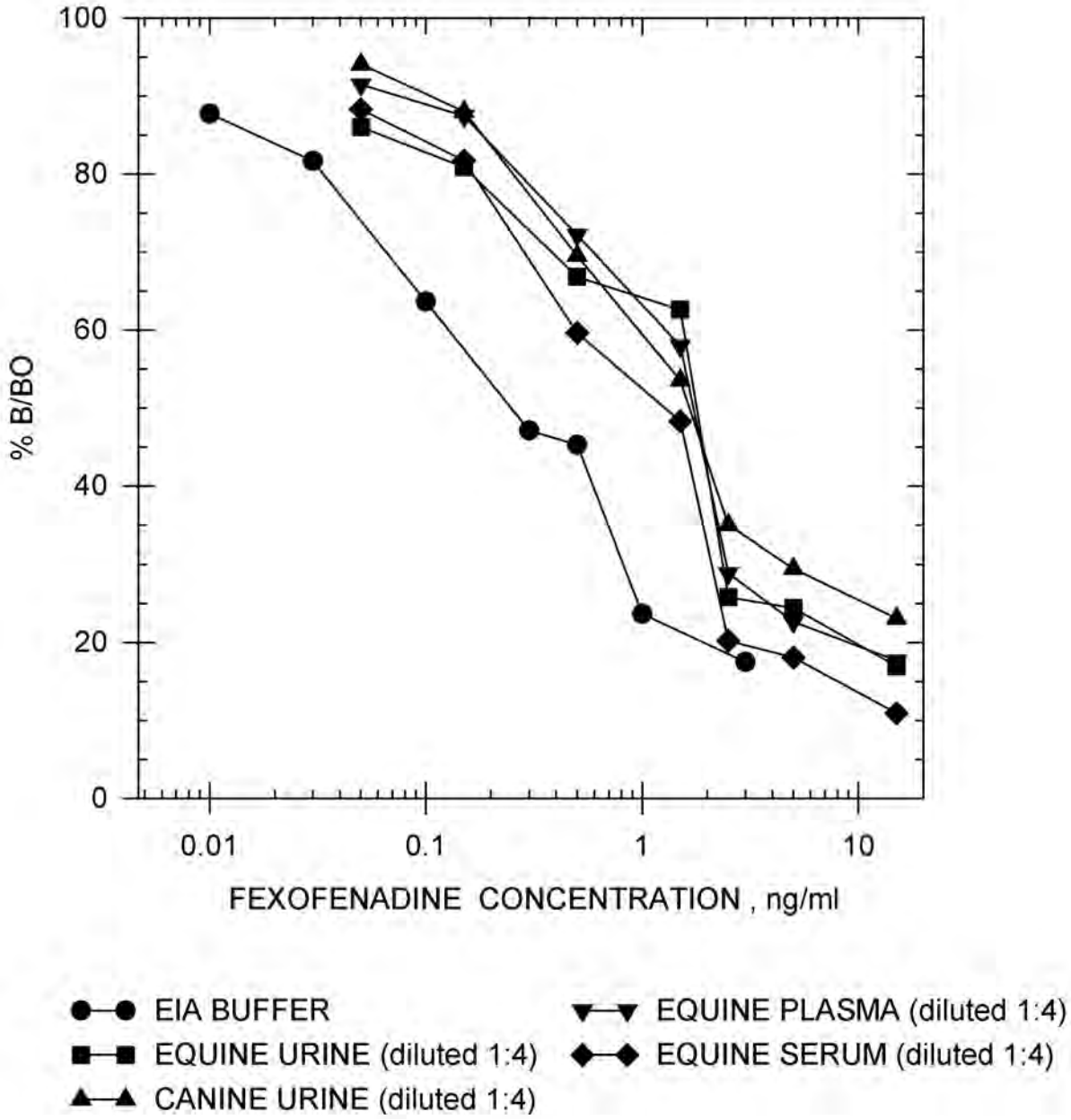
I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (Diluted 1:4)**	
Fexofenadine	1.2 ng/ml	Fexofenadine	1.8 ng/ml
Terfenadine	14 ng/ml	Terfenadine	8.4 ng/ml
I-50 in Equine Plasma (Diluted 1:4)		**I-50 in Equine Serum (Diluted 1:4)**	
Fexofenadine	1.4 ng/ml	Fexofenadine	0.8 ng/ml
Terfenadine	4.9 ng/ml	Terfenadine	6.6 ng/ml

Note: Measuring wavelength was 650 nm**.**

Precision:	Intra-assay	5.69 %
	Inter-assay	3.65 %

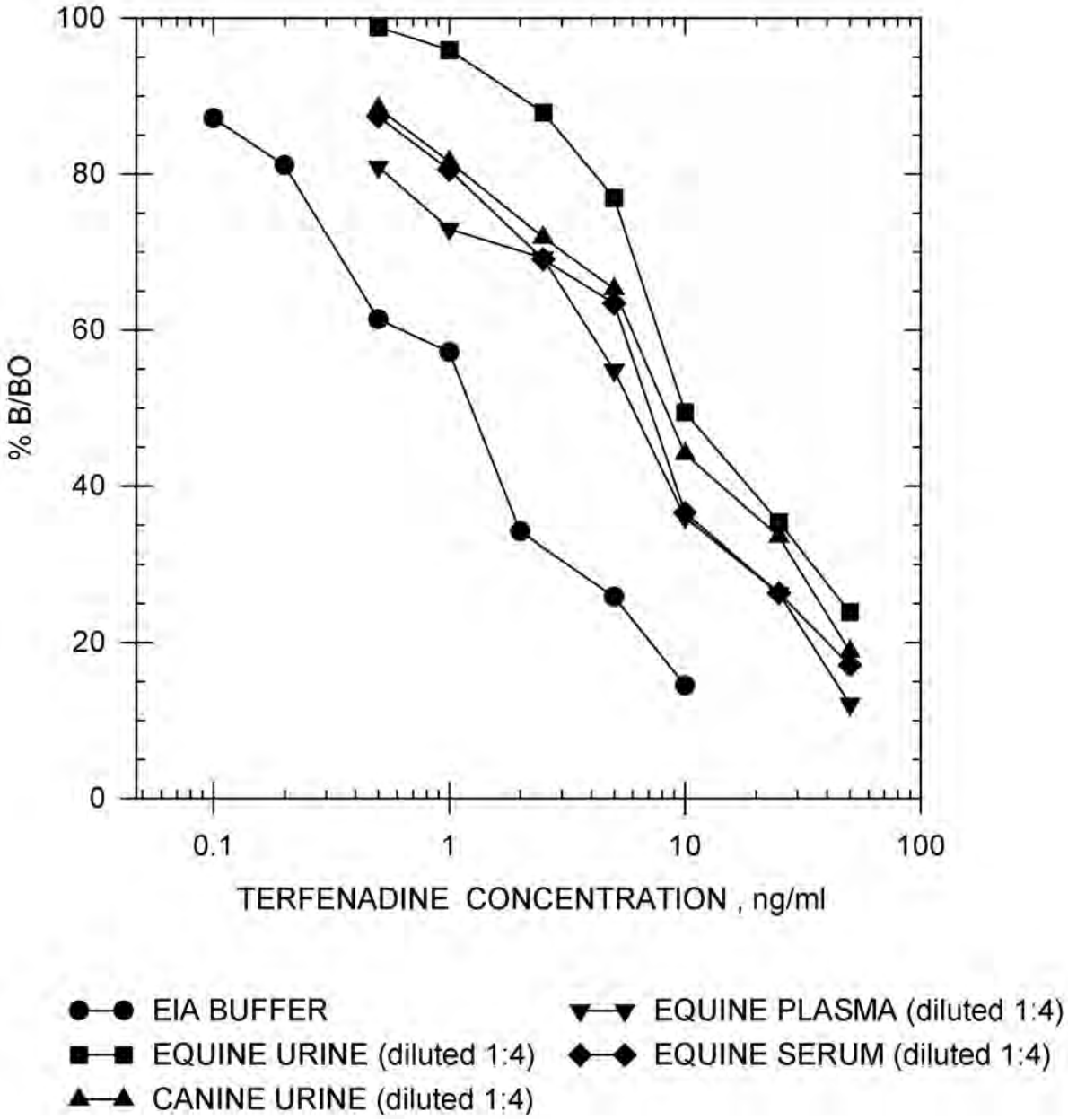
FEXOFENADINE/TERFENADINE STANDARD CURVE

Fexofenadine



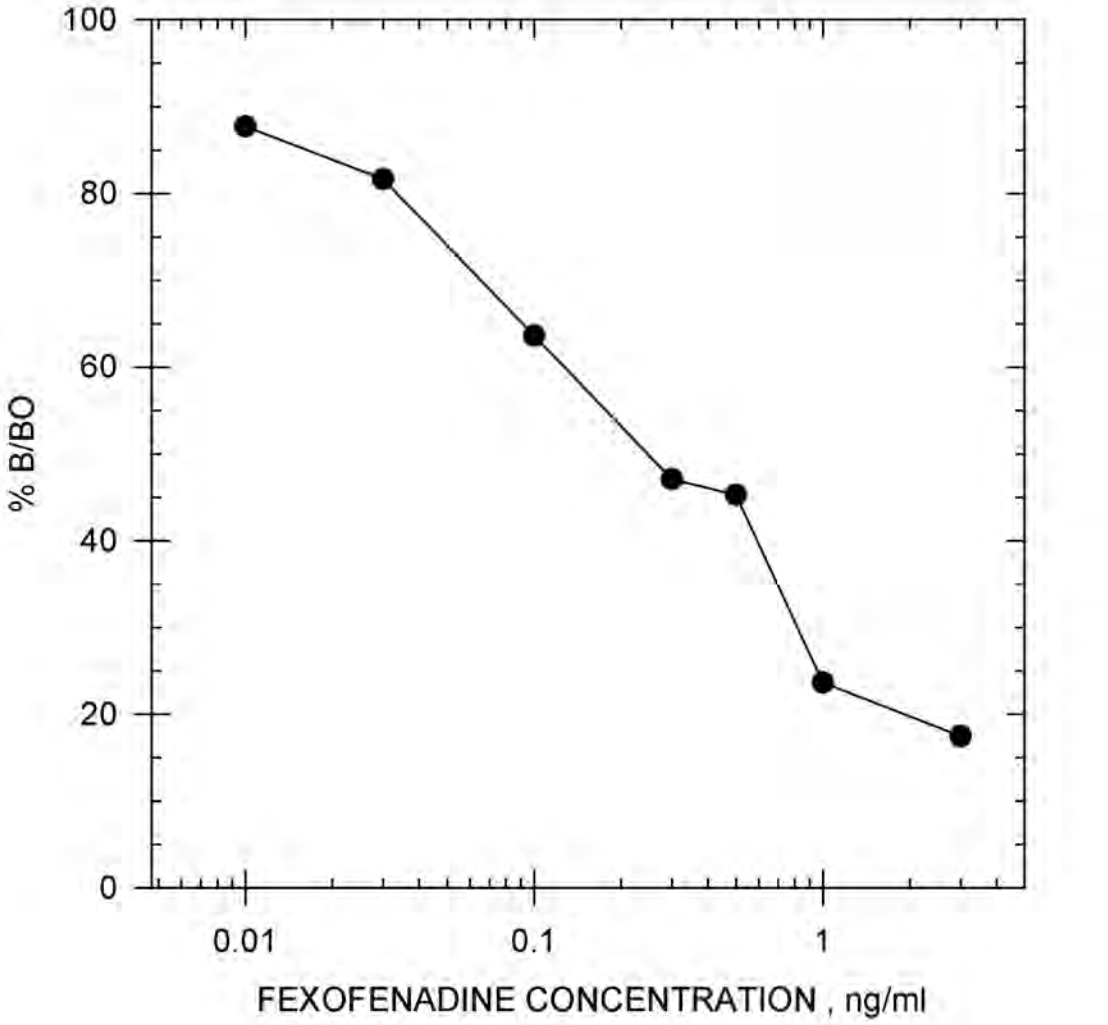
FEXOFENADINE/TERFENADINE STANDARD CURVE

Terfenadine



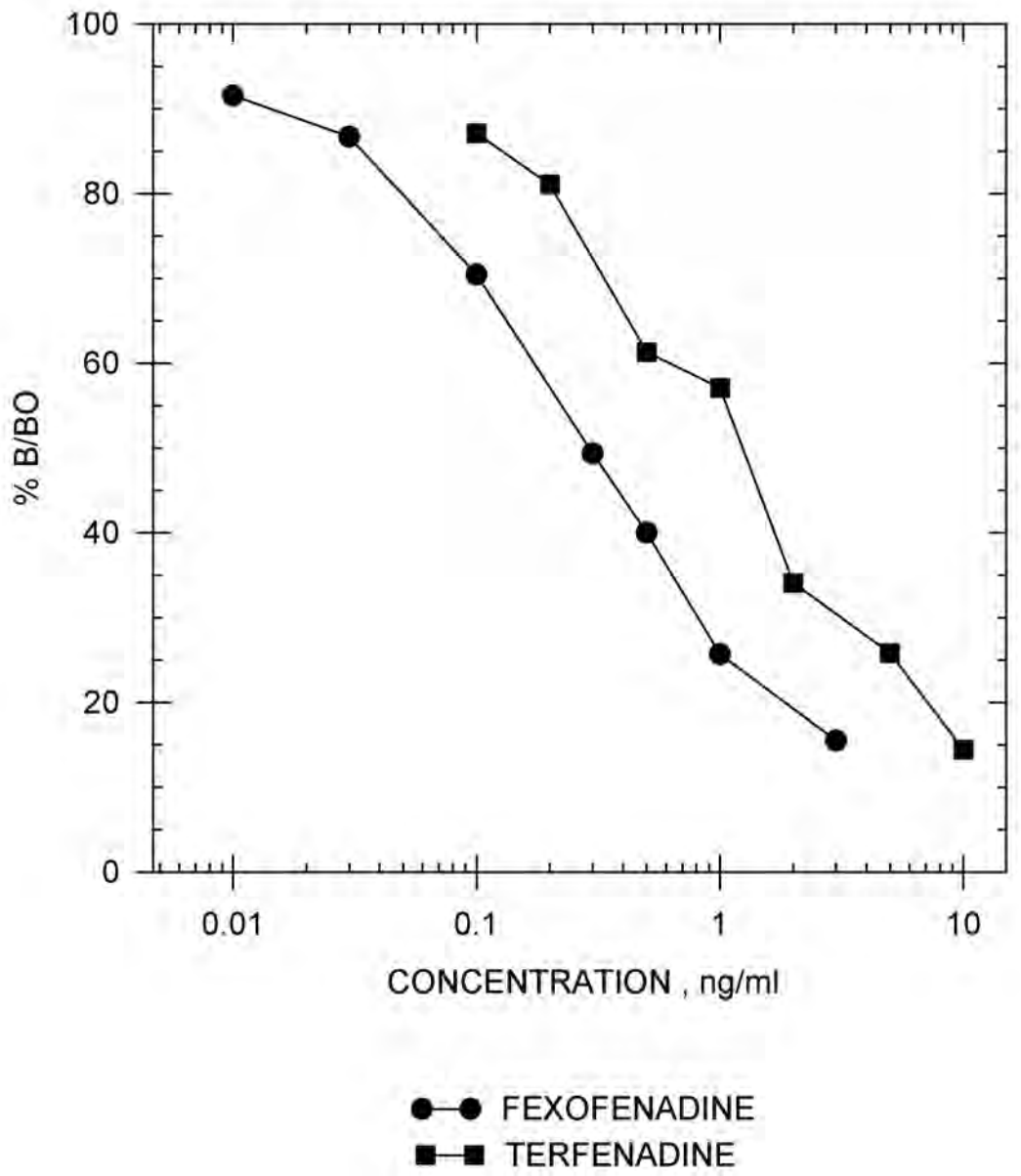
FEXOFENADINE/TERFENADINE STANDARD CURVE

Fexofenadine Standard Curve in EIA Buffer



FEXOFENADINE/TERFENADINE STANDARD CURVE

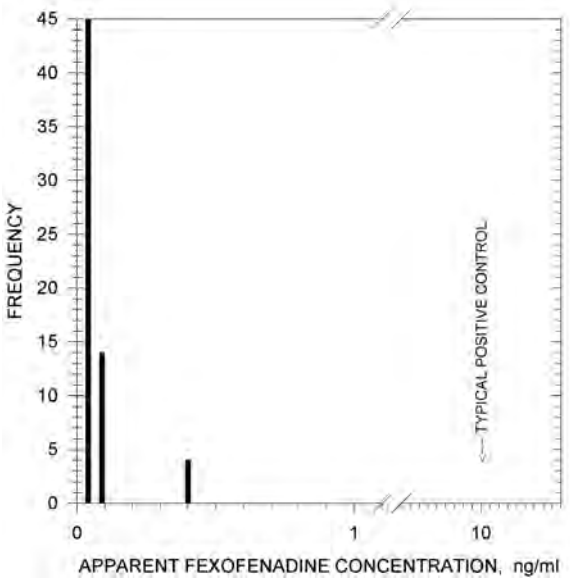
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 74 post-race equine urine samples has shown no background levels above 0.13 ng/ml.

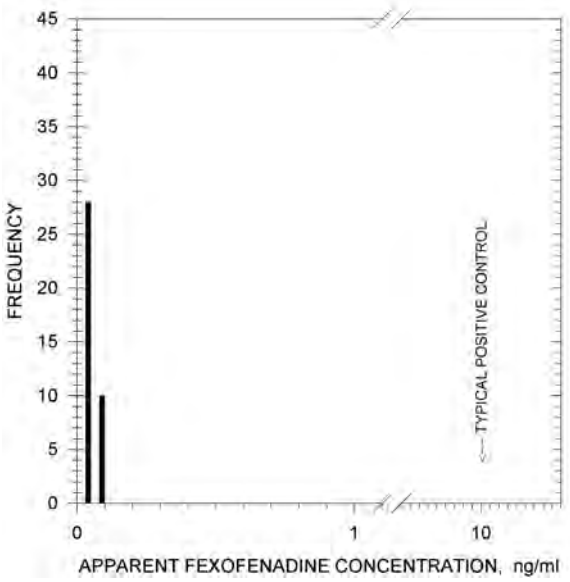
Sample Treatment: A dilution of 1:4 (i.e., 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 38 post-race canine urine samples has shown no background levels above 0.09 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e., 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/ml.

Fexofenadine	100%
Terfenadine	23%
Hydroxyzine	0.97%
Orphenadrine	0.20%
Cetirizine	0.18%
Hydroxyebastine	0.13%
Carebastine	0.07%
Doxepin	0.04%
Amitriptyline	0.03%
Imipramine	0.03%
Nortriptyline	0.03%
Promazine	0.03%
Chlorpromazine	0.02%
Ebastine	0.02%
Trimipramine	0.01%

Acepromazine	< 0.01%	Gemfibrozil	< 0.01%	PCP	< 0.01%
Acetaminophen	< 0.01%	Gentisic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
Acetylsalicylic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Procaine	< 0.01%
E-Amino-n-Caproic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid (Vitamin C)	< 0.01%	Glutethimide	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenylbutazone	< 0.01%
Caffeine	< 0.01%	Heparin	< 0.01%	Polyethylene Glycol	< 0.01%
Chlordiazepoxide	< 0.01%	Hippuric Acid	< 0.01%	Prednisolone	< 0.01%
Clenbuterol	< 0.01%	Hordenine	< 0.01%	Primidone	< 0.01%
Codeine	< 0.01%	Hydrocortisone	< 0.01%	Procainamide	< 0.01%
Cotinine	< 0.01%	Ibuprofen	< 0.01%	Procaine	< 0.01%
Dexamethasone	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Dextromethorphan	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
Diclofenac	< 0.01%	Meperidine	< 0.01%	Pyrilamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaproterenol	< 0.01%	Pyrimethamine	< 0.01%
Dipyrone	< 0.01%	Methadone	< 0.01%	Quinidine	< 0.01%
Ephedrine	< 0.01%	Methaqualone	< 0.01%	Quinine	< 0.01%
Erythromycin	< 0.01%	Methocarbamol	< 0.01%	Salbutamol	< 0.01%
Ethyl-p-Amino-Benzoate (Benzocaine)	< 0.01%	Methylene Blue	< 0.01%	Salicylamide	< 0.01%
		Methylprednisolone	< 0.01%	Salicylic Acid	< 0.01%
Fenoprofen	< 0.01%	Nalorphine	< 0.01%	Theophylline	< 0.01%
Flunixin	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
Folic Acid	< 0.01%	Niacinamide	< 0.01%	Trimethoprim	< 0.01%
Folinic Acid	< 0.01%	Nicotine	< 0.01%	Uric Acid	< 0.01%
Furosemide	< 0.01%	Oxyphenbutazone	< 0.01%		

ENHANCED KIT

FLUNITRAZEPAM

Product #109510 &
109515 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

7-Aminoflunitrazepam	3.2 ng/ml
Flunitrazepam	4.1 ng/ml
Diazepam	9.6 ng/ml

I-50 in Equine Urine (Diluted 1:9)

7-Aminoflunitrazepam	24.8 ng/ml
Flunitrazepam	96.7 ng/ml
Diazepam	102.3 ng/ml

I-50 in Canine Urine (Diluted 1:9)

7-Aminoflunitrazepam	16.6 ng/ml
Flunitrazepam	34.0 ng/ml
Diazepam	53.6 ng/ml

I-50 in Equine Plasma

7-Aminoflunitrazepam	1.5 ng/ml
Flunitrazepam	4.6 ng/ml
Diazepam	14.6 ng/ml

I-50 in Equine Serum

7-Aminoflunitrazepam	1.7 ng/ml
Flunitrazepam	5.3 ng/ml
Diazepam	11.6 ng/ml

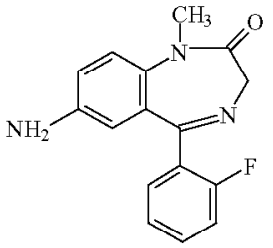
Precision:

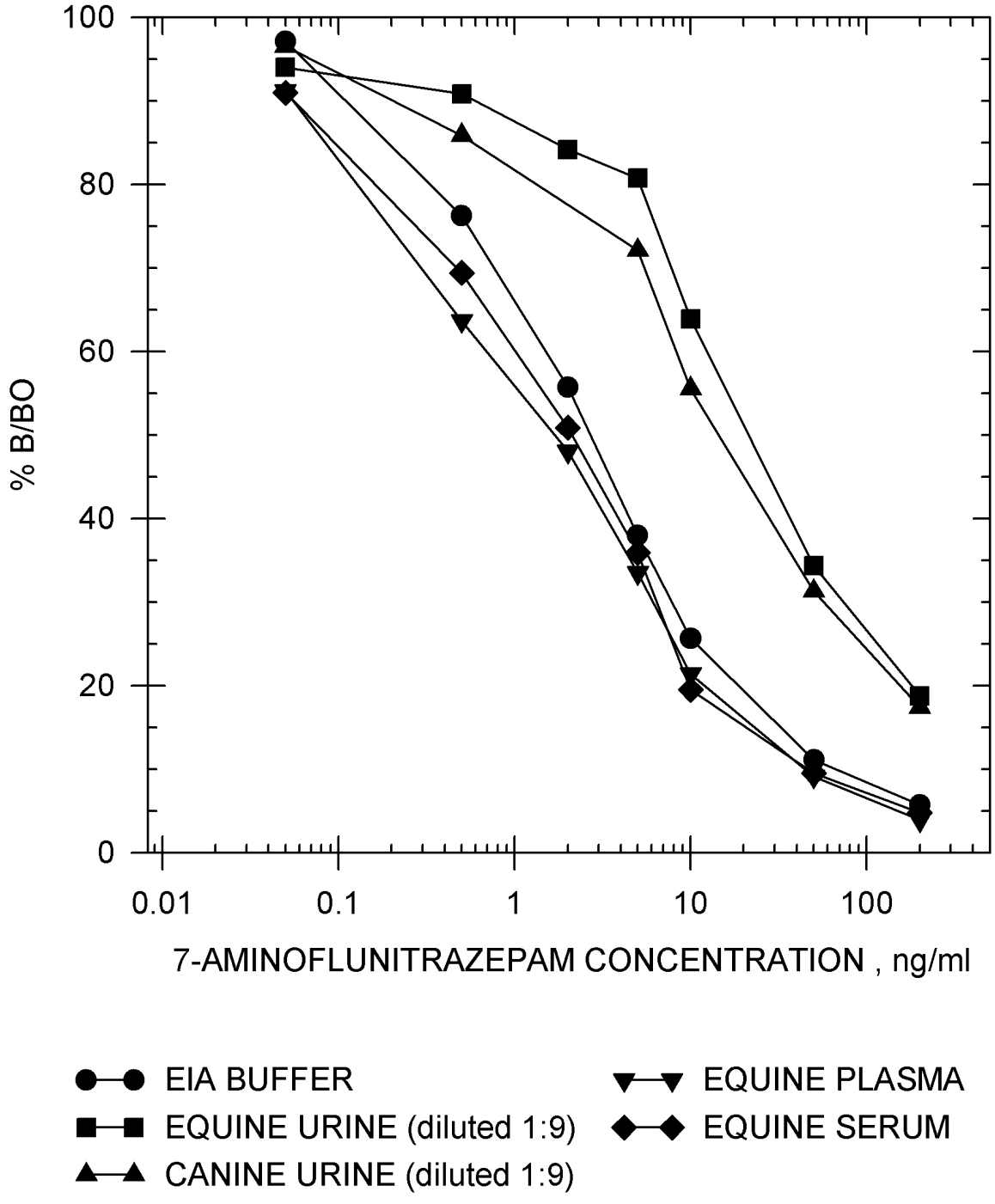
Intra-Assay	2.18%
Inter-Assay	2.73%

Note: Measuring wavelength was 650 nm.

FLUNITRAZEPAM STANDARD CURVES

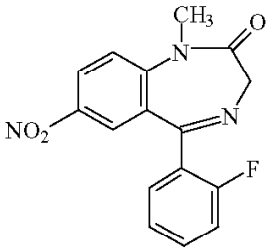
7-Aminoflunitrazepam

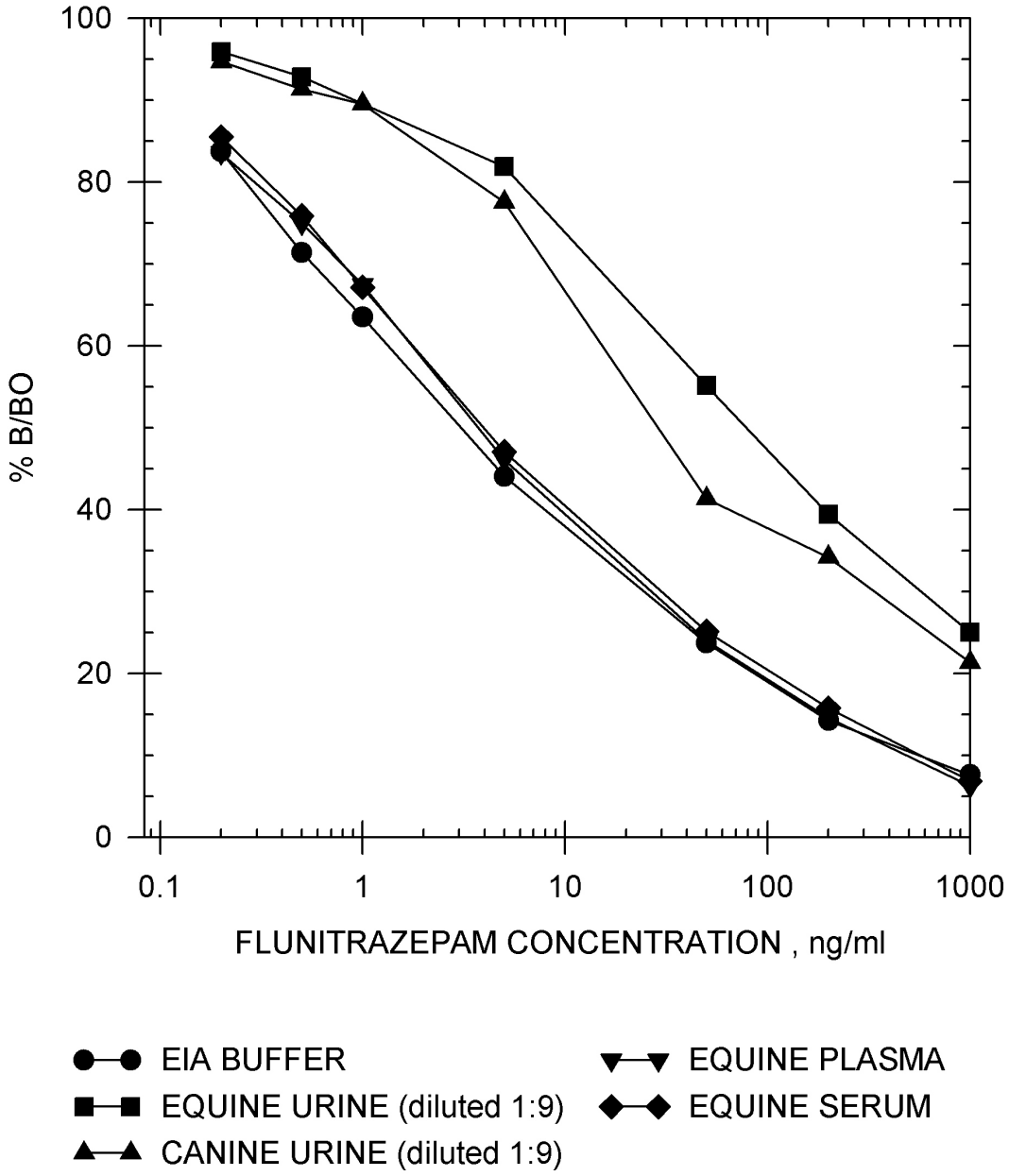




FLUNITRAZEPAM STANDARD CURVES

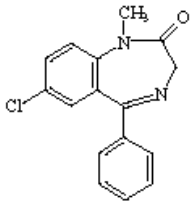
Flunitrazepam

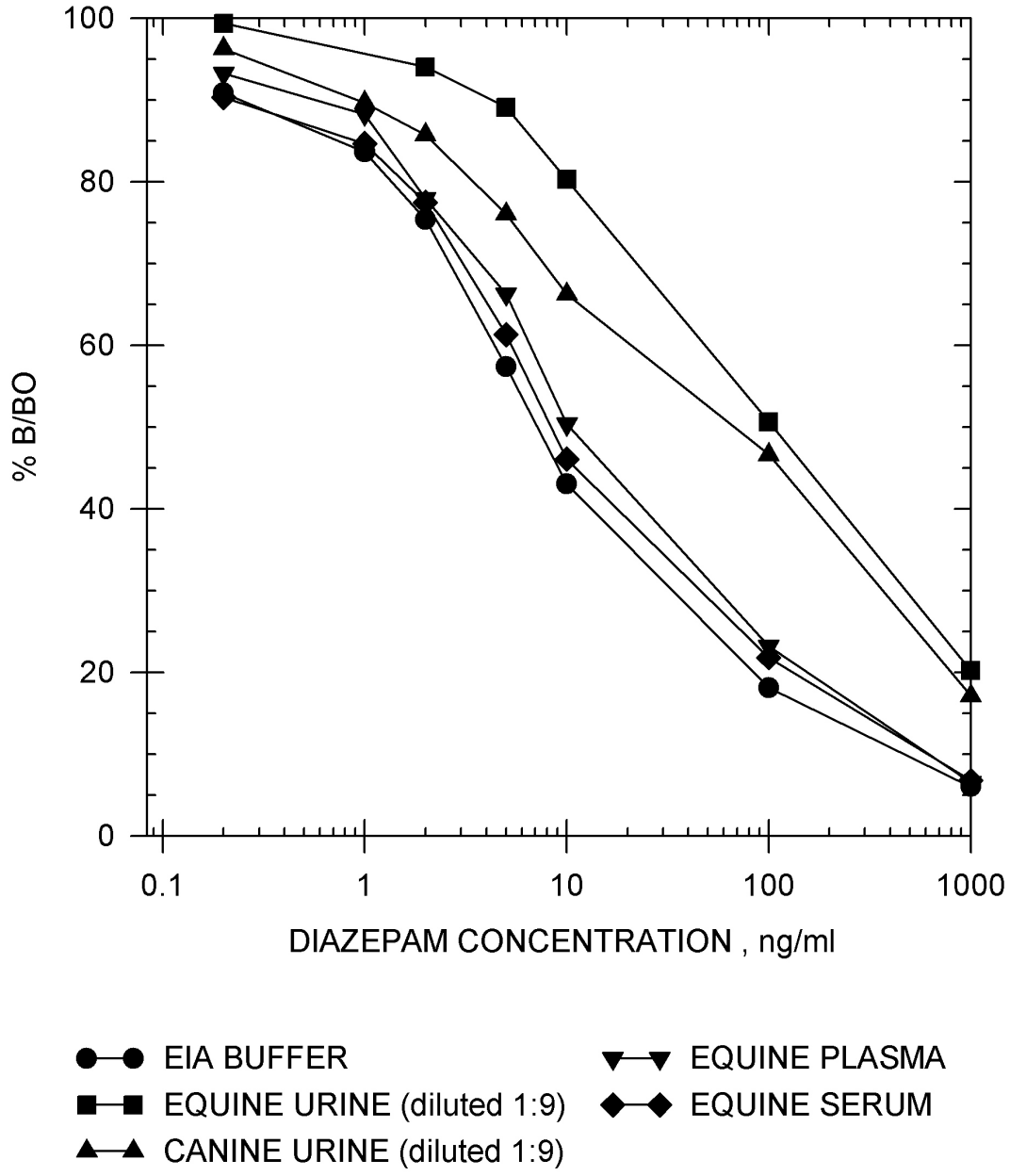




FLUNITRAZEPAM STANDARD CURVES

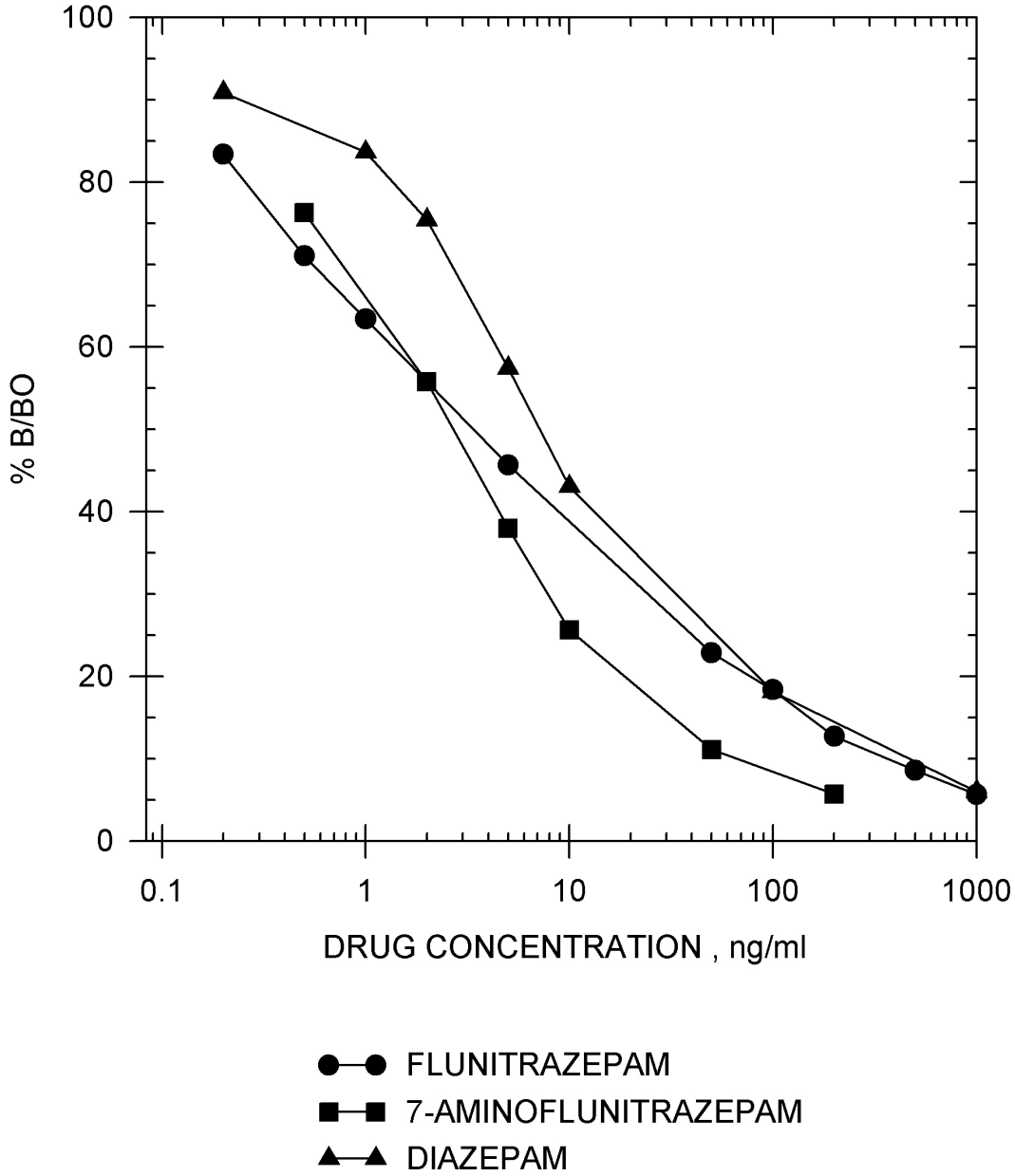
Diazepam





FLUNITRAZEPAM STANDARD CURVES

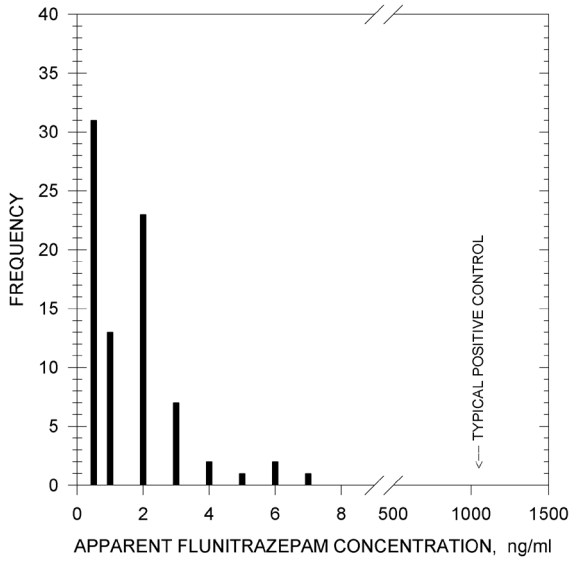
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of post-race equine urine samples, diluted 1:9, has shown background levels below 3.5 ng/ml for 76 of the 80 samples evaluated.

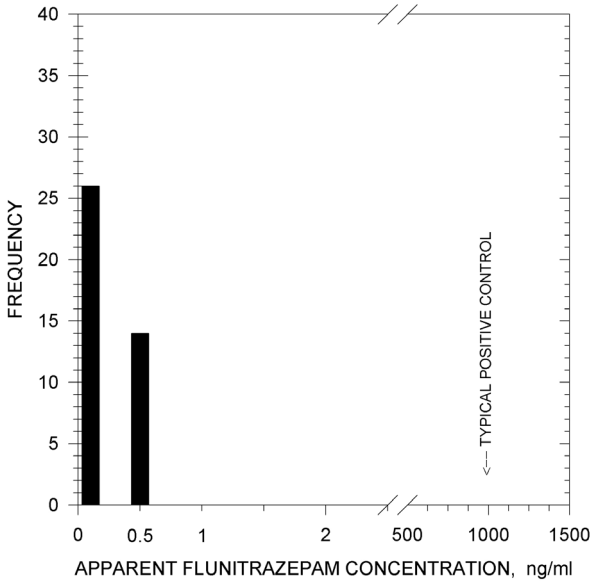
Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:9, has shown no background levels above 0.27 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.

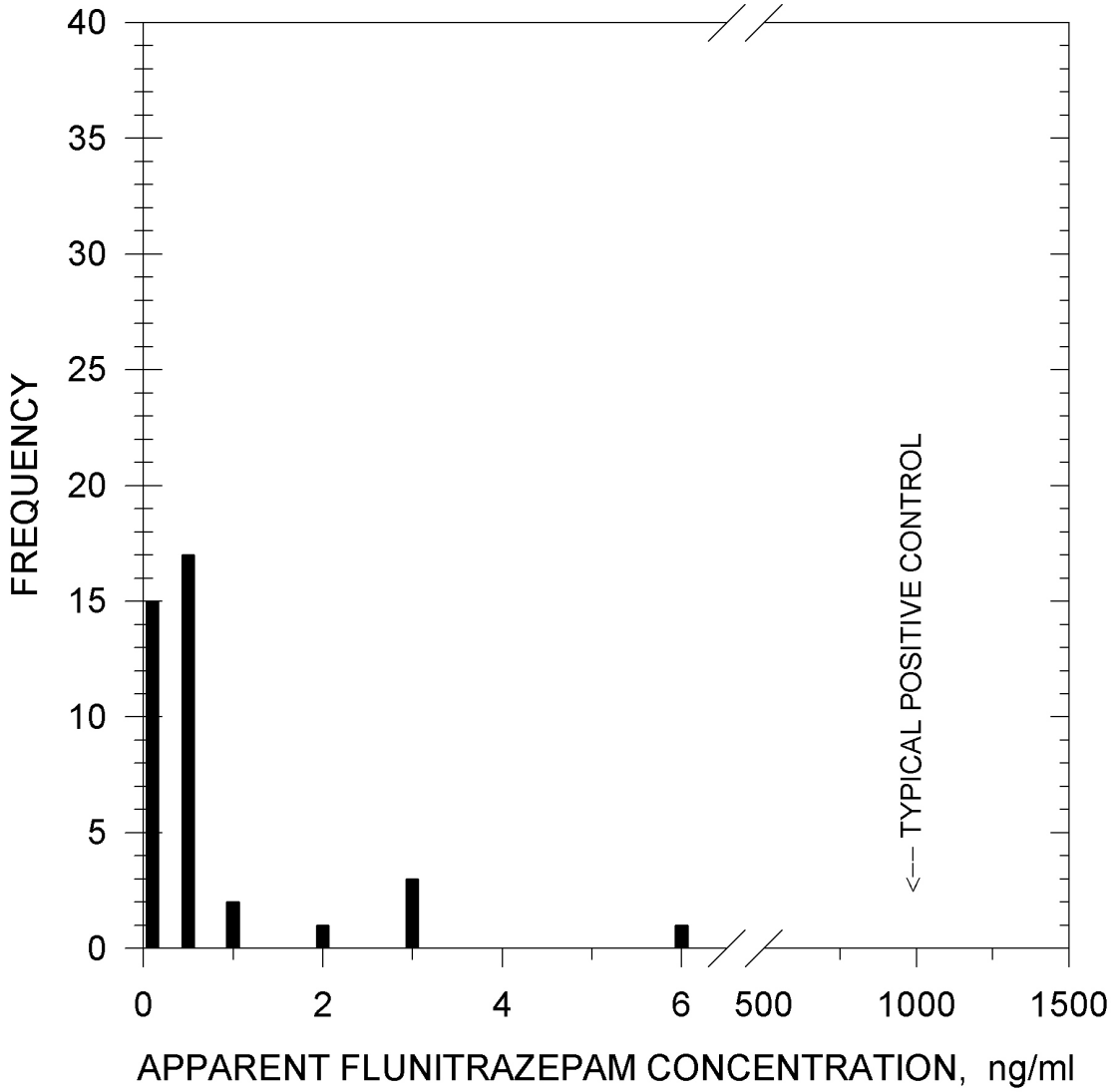


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race equine plasma samples has shown background levels below 2.4 ng/ml for 38 of the samples evaluated.

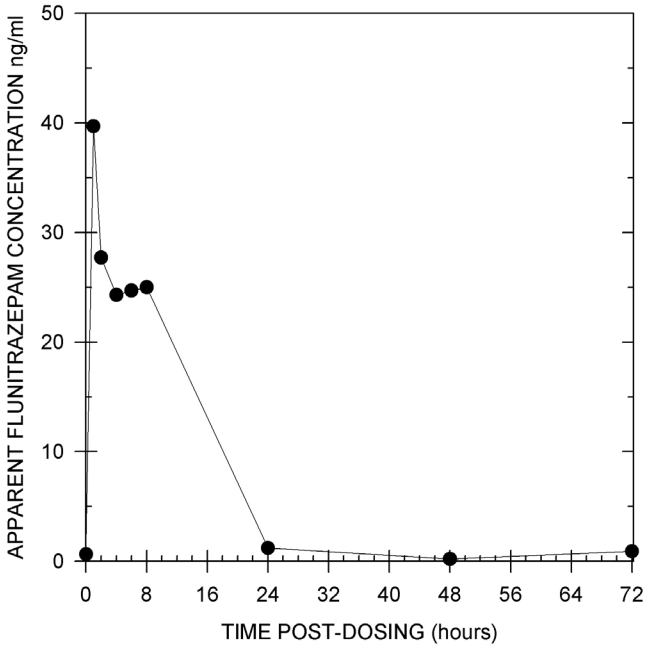
Sample Treatment: No sample treatment is necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.

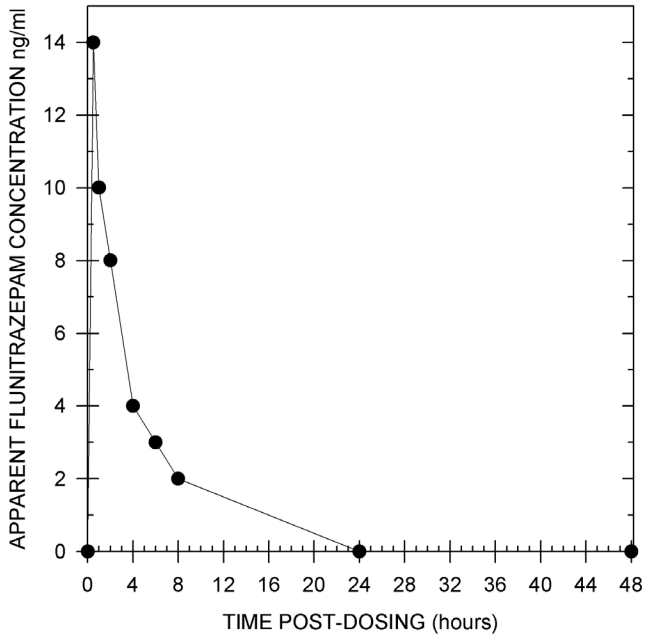


TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 10 mg of Flunitrazepam by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine urine. Samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.



Duration of Detection: After administration of 10 mg of Flunitrazepam by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine plasma



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

7-Aminoflunitrazepam	212%	N-Desmethylflunitrazepam	0.5%
Flunitrazepam	100%	Halazepam	0.4%
Diazepam	69%	Triazolam	0.3%
Clobazam	3.3%	Nitrazepam	0.3%
Clonazepam	2.1%	Nordiazepam	0.2%
Midazolam Maleate	1.4%	Methylene Blue	0.02%
7-Aminoclonazepam	0.6%	Trimpramine	0.01%

Acepromazine	<0.01%	Isoxsuprine	<0.01%
Acetaminophen	<0.01%	Lidocaine	<0.01%
Acetylsalicylic Acid	<0.01%	Meperidine	<0.01%
E-amino-n-caproic Acid	<0.01%	Metaproterenol	<0.01%
Amitriptyline	<0.01%	Methadone	<0.01%
Ascorbic Acid	<0.01%	Methaqualone	<0.01%
Benzoic Acid	<0.01%	Methocarbamol	<0.01%
Caffeine	<0.01%	Methylprednisolone	<0.01%
Chlordiazepoxide	<0.01%	Nalorphine	<0.01%
Chlorpromazine	<0.01%	Naproxen	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Clozapine	<0.01%	Nicotine	<0.01%
Codeine	<0.01%	Nortriptyline	<0.01%
Cotinine	<0.01%	Orphenadrine	<0.01%
Dexamethasone	<0.01%	Oxyphenbutazone	<0.01%
Dextromethorphan	<0.01%	PCP	<0.01%
Diclofenac	<0.01%	Penicillin G-Potassium	<0.01%
Dimethyl Sulfoxide	<0.01%	Penicillin G-Procaine	<0.01%
Dipyrone	<0.01%	Pentoxifylline	<0.01%
Doxepin	<0.01%	Phenothiazine	<0.01%
Ephedrine	<0.01%	Phenylbutazone	<0.01%
Erythromycin	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-amino-benzoate	<0.01%	Prednisolone	<0.01%
Fenoprofen	<0.01%	Primadone	<0.01%
Flunixin	<0.01%	Procainamide	<0.01%
Flurazepam	<0.01%	Procaine	<0.01%
Folic Acid	<0.01%	Promazine	<0.01%
Folinic Acid	<0.01%	Pseudoephedrine	<0.01%
Furosemide	<0.01%	Pyrantel	<0.01%
Gemfibrozil	<0.01%	Pyrilamine	<0.01%
Gentisic Acid	<0.01%	Pyrimethamine	<0.01%
Glipizide	<0.01%	Quinidine	<0.01%
L-Glutamic Acid	<0.01%	Quinine	<0.01%
Gluthethimide	<0.01%	Salbutamol	<0.01%
Glycopyrrolate	<0.01%	Salicylamide	<0.01%
Heparin	<0.01%	Salicylic Acid	<0.01%
Hippuric Acid	<0.01%	Theophylline	<0.01%
Hordenine	<0.01%	Thiamine	<0.01%
Hydrocortisone	<0.01%	Trimethoprim	<0.01%
Ibuprofen	<0.01%	Uric Acid	<0.01%
Imipramine	<0.01%		

ENHANCED KIT

FLUNIXIN

Product #101910 & 101915 (5 Kit Bulk)

FLUNIXIN TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

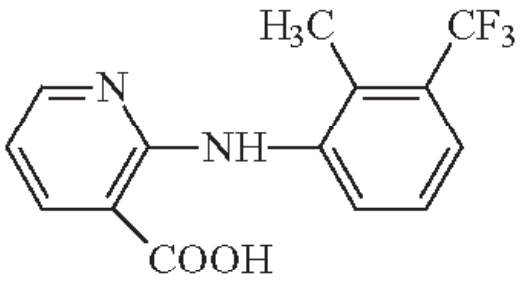
Flunixin	
I-50 in EIA Buffer	2.2 ng/ml
I-50 in Equine Urine (Diluted 1:9)	13.0 ng/ml
I-50 in Canine Urine (Diluted 1:9)	18.5 ng/ml
I-50 in Equine Plasma	9.1 ng/ml
I-50 in Equine Serum	16.3 ng/ml

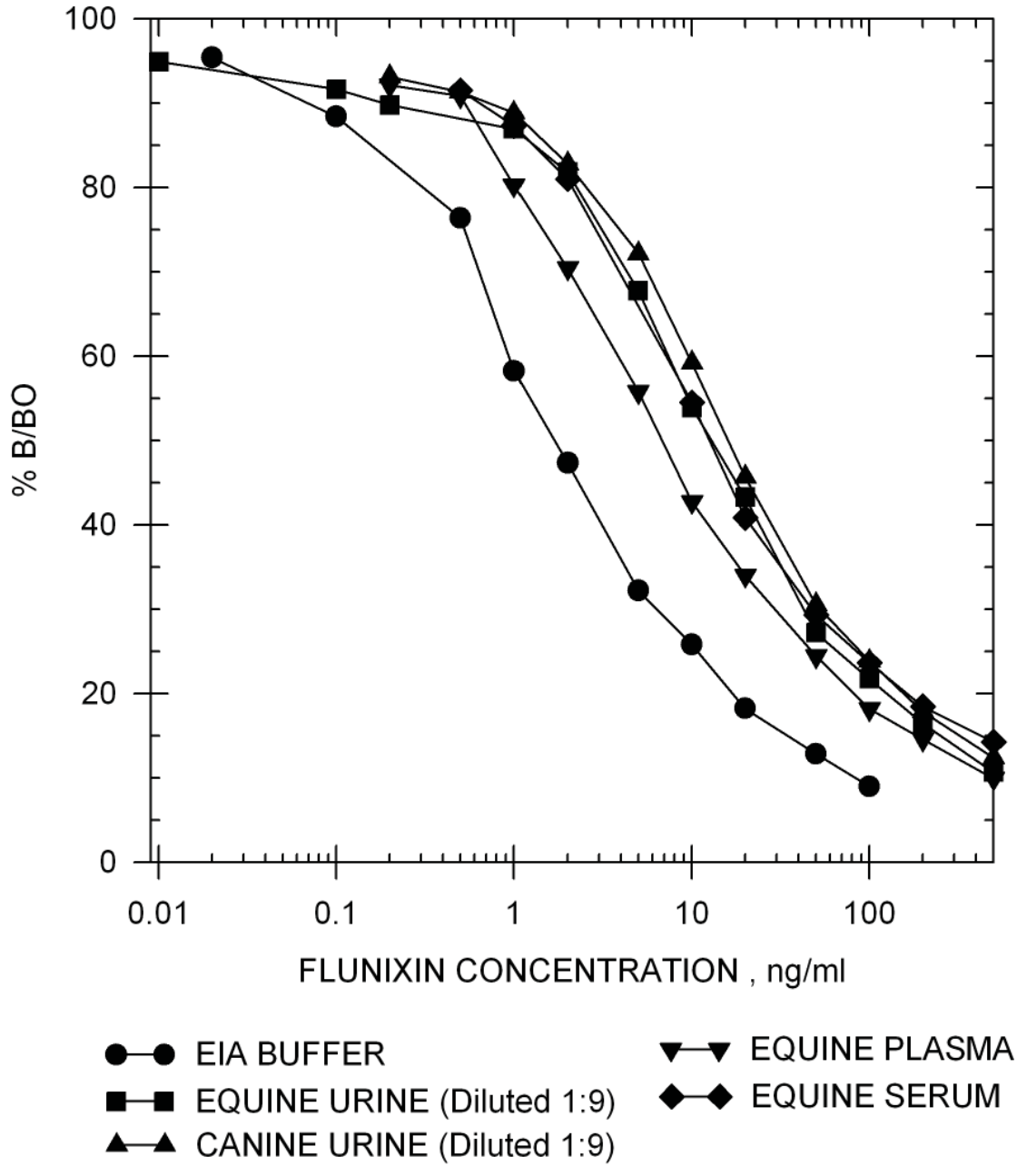
Precision:	Intra-assay	5.02 %
	Inter-assay	3.38 %

Note: Measuring wavelength was 650 nm**.**

FLUNIXIN STANDARD CURVES

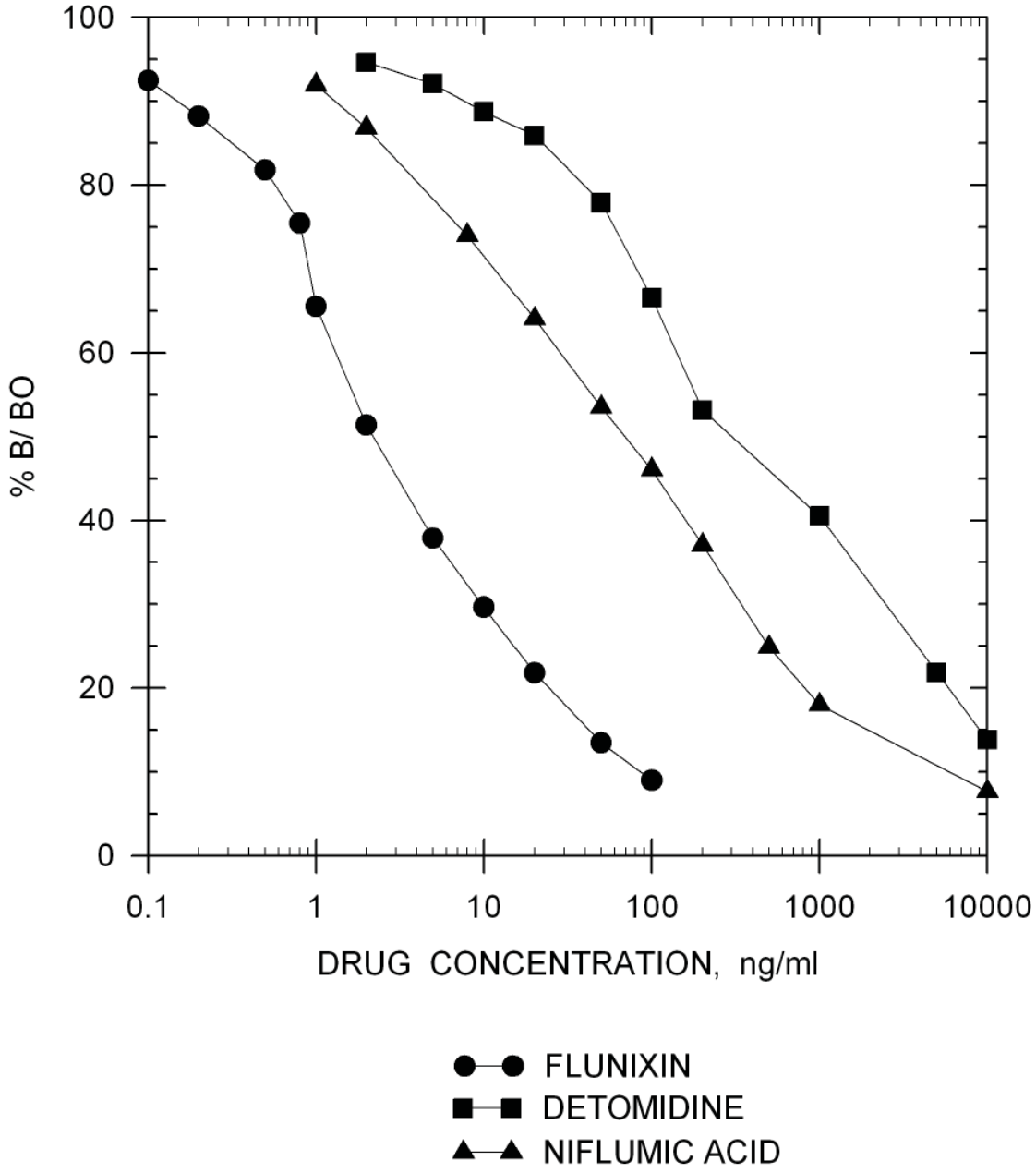
Flunixin





FLUNIXIN STANDARD CURVES

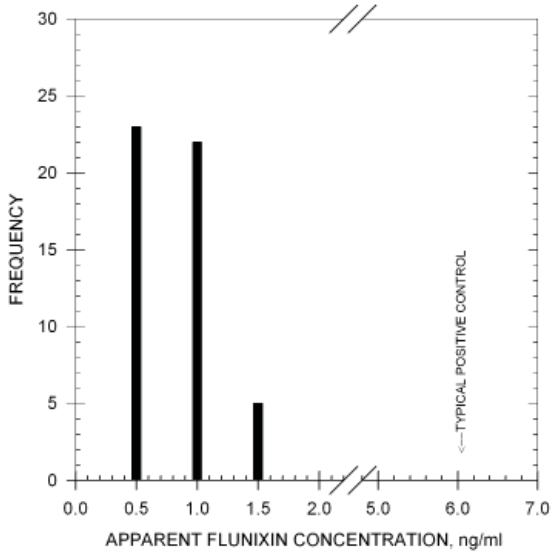
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race equine urine samples, diluted 1:9, has shown no background levels above 1.5 ng/ml.

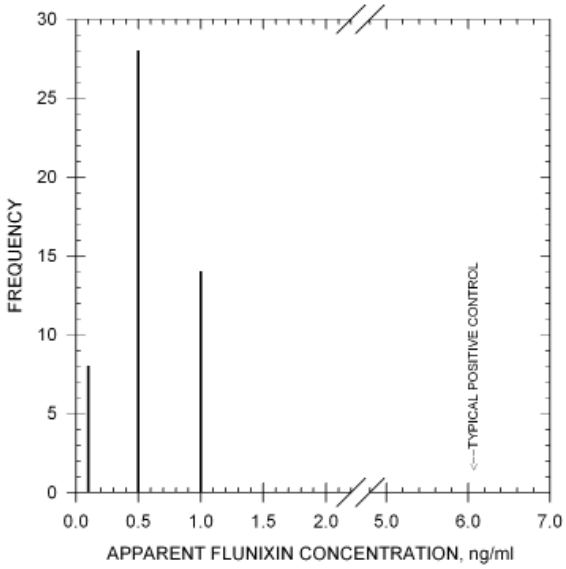
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples, diluted 1:9, has shown no background levels above 1.0 ng/ml.

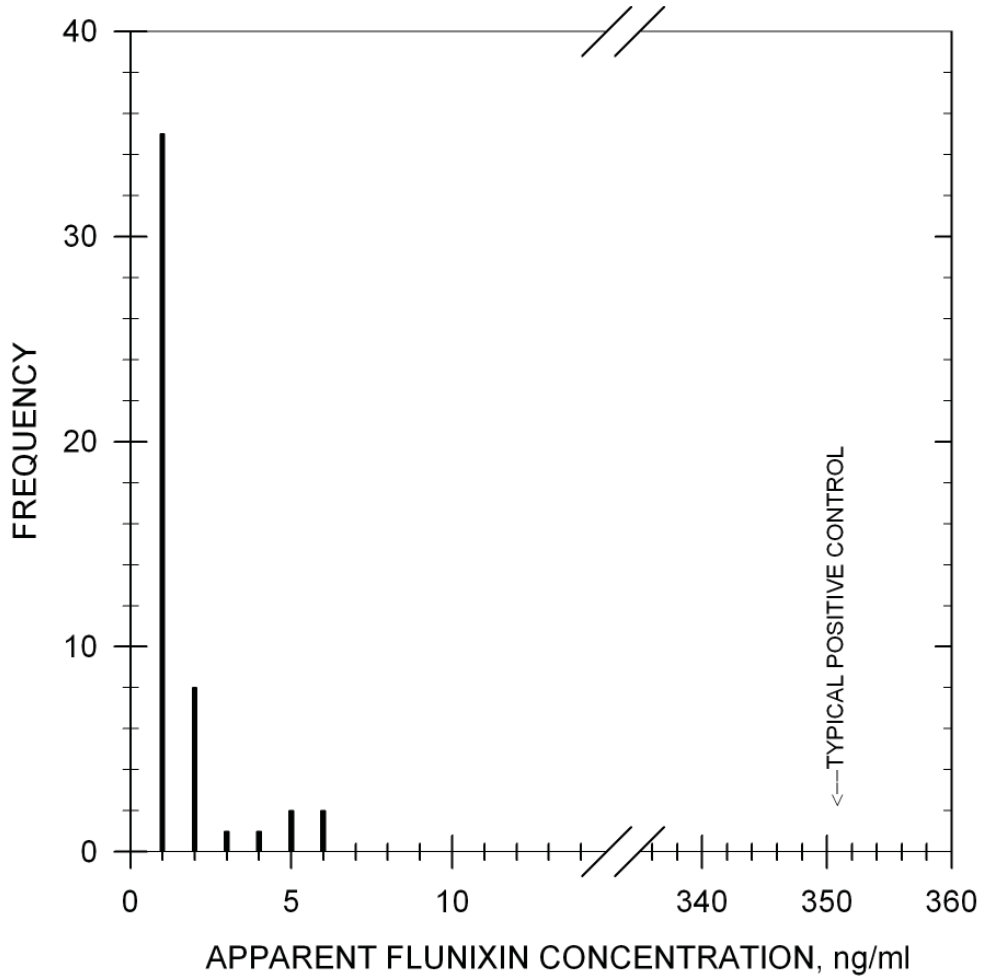
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 49 post-race equine plasma samples has shown no background levels above 6 ng/ml.

Sample Treatment: No sample dilution is necessary.



CAUTION STATEMENT

CAUTION: Screening tests using this assay for flunixin may produce positive indications of the drug's presence in urine for two weeks following the last administration of a recommended dose or therapeutic regimen. The scientific literature and recent unpublished studies suggest that the best estimate of a no-effect level of flunixin approximates ten nanograms per milliliter (10 ng/mL) in plasma or serum, corresponding to a concentration of no less than one microgram per milliliter (1.0 μg/mL), and likely no less than five micrograms per milliliter (5 μg/mL) in urine.

1. Toutain, P.L., Autefage, A., Legrand, C. and Alvinerie, M. 1994. Plasma concentration and therapeutic efficacy of phenylbutazone and flunixin meglumine in the horse: pharmaco-kinetic/pharmacodynamic modelling. J. Vet. Pharmacol. and Therap. 17, 459-469.

2. Sams, R., Gerken, D.F. and Ashcraft, S.M. 1995. Detection time for flunixin after multiple intravenous or intramuscular doses to horses. J. of Anal. Toxicol. (To be submitted).

3. Soma, L.R., Uboh, C.E., Rudy, J. and Fegely, J. 1992. Plasma concentrations of flunixin in the horse: its relationship to thromboxane B_2 production. J. Vet. Pharmacol. and Therap. 15, 292-300.

Neogen Corporation's Flunixin assay is very sensitive, and is therefore able to detect Flunixin at much lower concentrations than the no-effect levels described above. If you require the most sensitive assay possible, Neogen Corporation recommends that urine samples be diluted 1:9 in EIA buffer. This dilution reduces natural urine sample backgrounds. The I-50 of the resultant assay will approximate 13 nanograms per milliliter (13 ng/mL).

Urine samples may be further diluted to reduce the sensitivity of this assay. For example, a 1:500 dilution of equine urine samples will increase the I-50 of the resultant curve to approximately 1.1 micrograms per milliliter (1.1 μg/mL). A 1:2500 dilution will increase the I-50 to approximately 7 micrograms per milliliter (7 μg/mL).

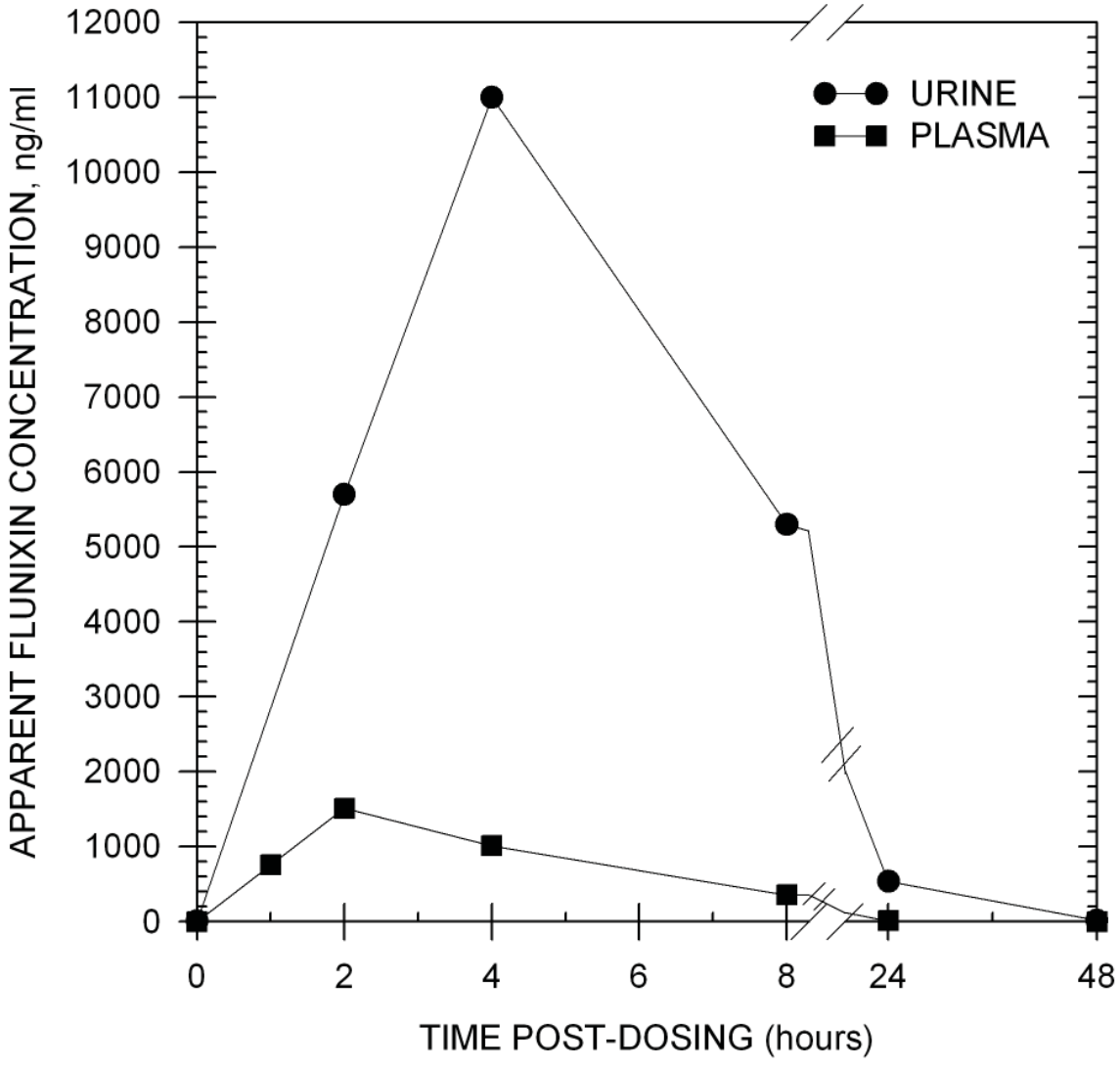
The I-50 of curves generated from equine plasma is 9 nanograms per milliliter (9 ng/mL), and therefore approximates the no-effect level. Plasma may or may not be diluted depending on your requirements.

Note that the positive control provided in the kit is pre-diluted and should not be diluted further. This control is provided to yield information on the proper operation of the kit only and is not a regulatory cutoff.

TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 500 mg of flunixin orally to one horse, the presence of this drug was detected for at least 24 hours in equine urine and 8 hours in plasma. All urine samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment. Plasma samples were not diluted before testing.

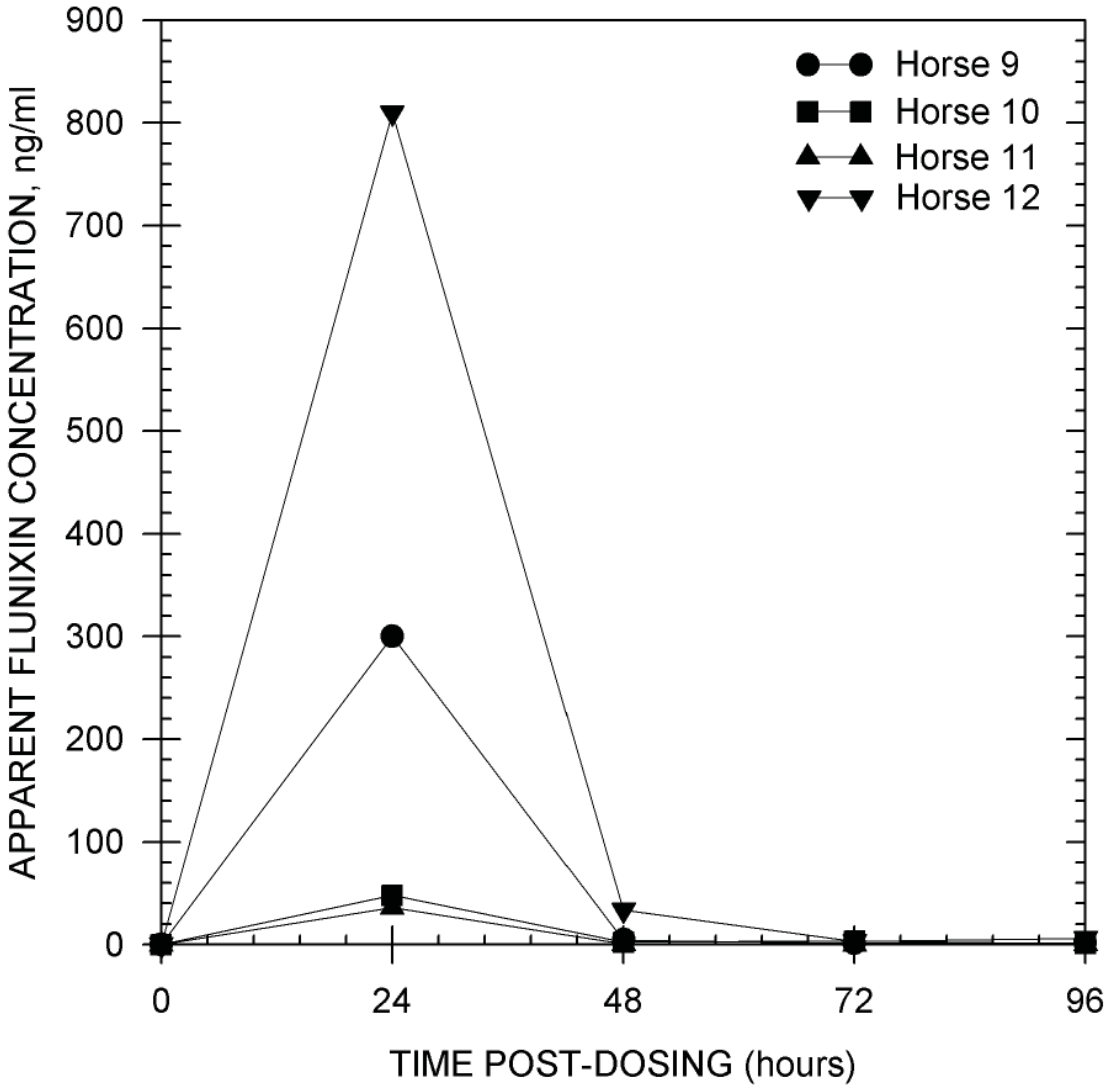


TYPICAL DURATION OF DETECTION

Duration of Detection:

A single dose of 1.1 mg of flunixin was administered to 4 horses. The presence of this drug was detected for at least 24 hours in equine urine for horses 9, 10 and 11, and for 48 hours in horse 12. All urine samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.

Note: This data clearly indicates the variances that can be observed from horse to horse.

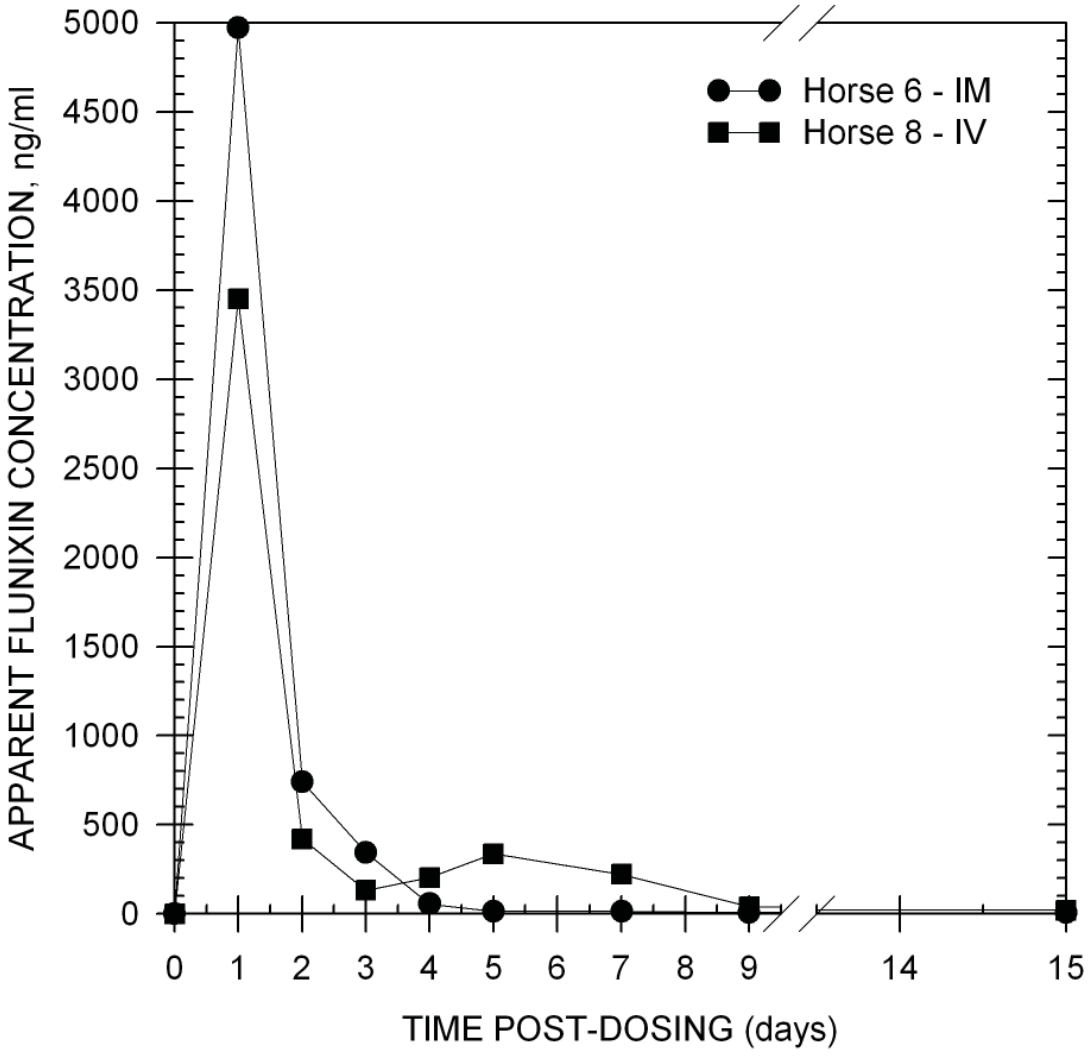


TYPICAL DURATION OF DETECTION

Duration of Detection:

A 5 day dosing regimen of 1.1 mg of flunixin was administered to 2 horses. Flunixin was detectable for 3 days in Horse 6 with an intramuscular injection and for 7 days in Horse 8 with an intravenous injection. All urine samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.

Note: Testing commenced after the last day of the dosing regimen.

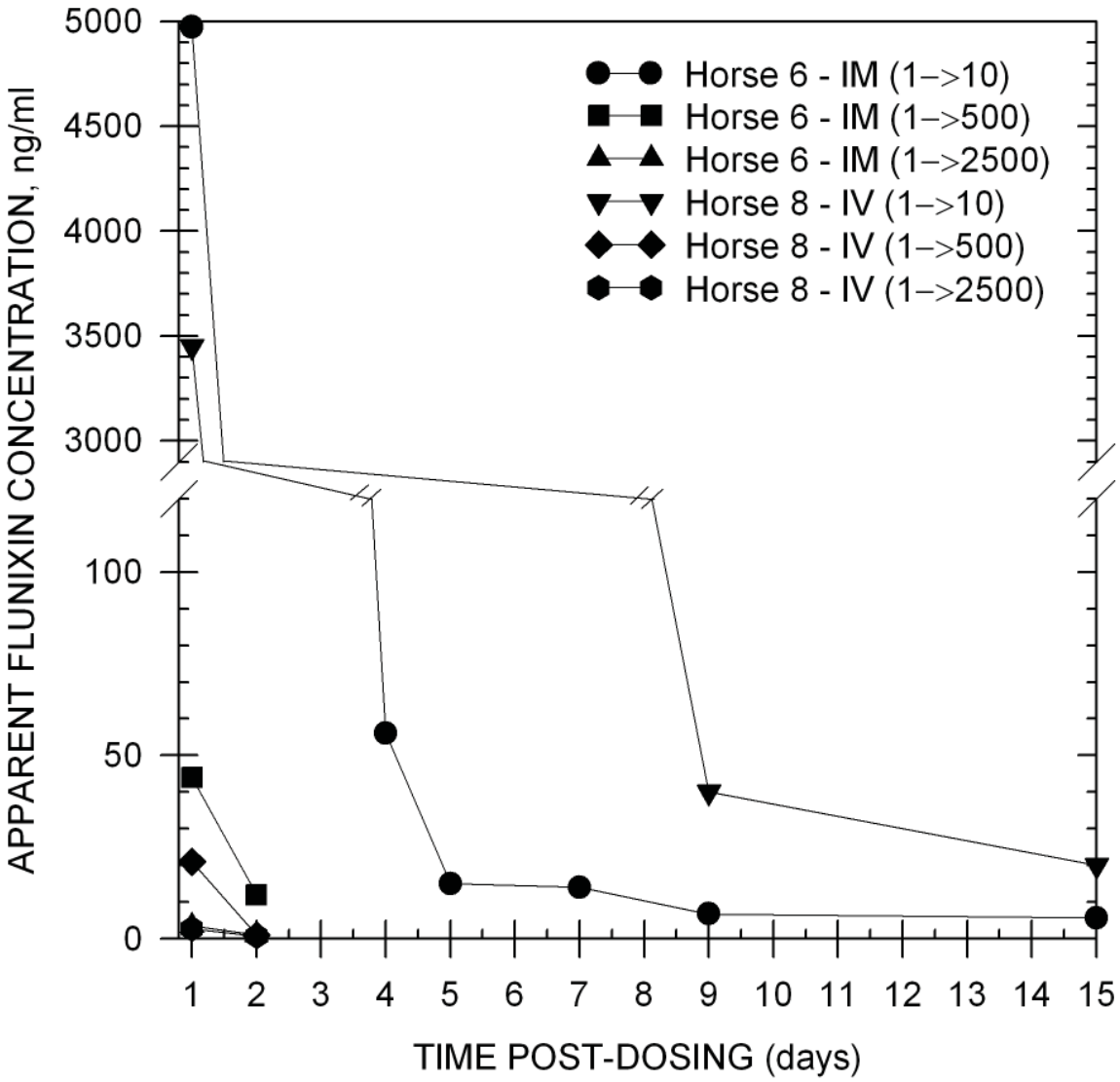


TYPICAL DURATION OF DETECTION

Duration of Detection:

A 5 day dosing regimen of 1.1 mg of flunixin was administered to Horse 6, intramuscularly and Horse 8, intravenously. Samples were diluted 1→10 before testing as recommended in sample treatment. Samples were also diluted 1→500 and 1→2500 before testing as recommended in the "Caution Statement."

Note: Testing commenced after the last day of the dosing regimen.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Flunixin	100%
Niflumic Acid	3.63%
Detomidine	0.86%
Meclofenamic Acid	0.05%
Phenothiazine	0.03%
Diflunisal	0.02%
Etodolac	0.02%
Reserpine	0.02%
Stanozolol	0.01%
Xylazine	0.01%

Acepromazine	<0.01%	Fenbufen	<0.01%	Nefopam	<0.01%
Acetamidophenol (Acetaminophen)	<0.01%	Fenoprofen	<0.01%	Niacinamide	<0.01%
Amcinonide	<0.01%	Flufenamic acid	<0.01%	Orphenadrine	<0.01%
E-amino-n-caproic acid	<0.01%	Flumethasone	<0.01%	Oxyphenbutazone	<0.01%
Aminophylline	<0.01%	Flunisolide	<0.01%	PCP	<0.01%
Amiprilose	<0.01%	Fluphenazine	<0.01%	Pentazocine	<0.01%
Ascorbic Acid	<0.01%	Flurazepam	<0.01%	Pentoxifylline	<0.01%
Aspirin	<0.01%	Flurbiprofen	<0.01%	Phenylbutazone	<0.01%
Atropine	<0.01%	Furosemide	<0.01%	Piroxicam	<0.01%
Benzydamine	<0.01%	Glycopyrrolate	<0.01%	Polyethylene glycol	<0.01%
1-Benzylpiperazine	<0.01%	Guaifenesin	<0.01%	Prednisolone	<0.01%
Betamethasone	<0.01%	Hordenine	<0.01%	Prednisone	<0.01%
Boldenone	<0.01%	Hydrocortisone	<0.01%	Procaine	<0.01%
Budesonide	<0.01%	Ibuprofen	<0.01%	Promazine	<0.01%
Buprenorphine	<0.01%	Indomethacin	<0.01%	Propoxyphene	<0.01%
Butorphanol	<0.01%	Indoprofen	<0.01%	Pyrantel	<0.01%
Carbamazepine	<0.01%	Isoxicam	<0.01%	Pyrilamine	<0.01%
Carprofen	<0.01%	Isoxsuprine	<0.01%	Salbutamol	<0.01%
Chlorzoxazone	<0.01%	Ketoprofen	<0.01%	Salicylamide	<0.01%
Clenbuterol	<0.01%	Ketorolac	<0.01%	Salicylic acid	<0.01%
Clobetasol propionate	<0.01%	Lidocaine	<0.01%	Sanguinarine	<0.01%
Clobetasone butyrate	<0.01%	Mefenamic Acid	<0.01%	Sufentanil	<0.01%
Cromolyn	<0.01%	Meperidine	<0.01%	Sulindac	<0.01%
Dantrolene	<0.01%	Mepivacaine	<0.01%	Suprofen	<0.01%
Desoximetasone	<0.01%	Metaproterenol	<0.01%	Terbutaline	<0.01%
Dexamethasone	<0.01%	Methacarbamol	<0.01%	Thiamine	<0.01%
Dezocine	<0.01%	Methotrimeprazine	<0.01%	Thiosalicylic Acid	<0.01%
Diazepam	<0.01%	Methylene Blue	<0.01%	Tiaprofenic Acid	<0.01%
Diclofenac	<0.01%	6-α-Methylprednisolone	<0.01%	Tolmetin	<0.01%
Dipyrone	<0.01%	Nabumetone	<0.01%	Trimcinolone	<0.01%
Ethyl p-amino-benzoate	<0.01%	Nalbuphine	<0.01%	Trichlormethiazide	<0.01%
		Nandrolone	<0.01%	Zomepirac	<0.01%
		Naproxen	<0.01%		

ENHANCED KIT
FLUOXETINE

Product# 107610 &
107615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Fluoxetine	5.52 ng/ml
Norfluoxetine	8.28 ng/ml

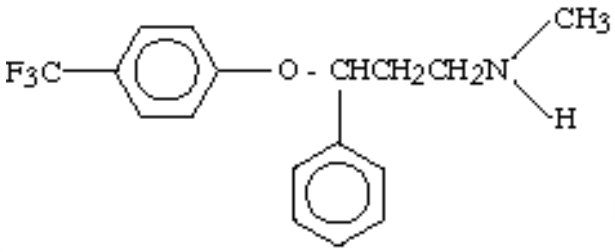
I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (Diluted 1:4)**	
Fluoxetine	56.46 ng/ml	Fluoxetine	62.56 ng/ml
Norfluoxetine	45.14 ng/ml	Norfluoxetine	62.69 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Fluoxetine	11.92 ng/ml	Fluoxetine	60.93 ng/ml
Norfluoxetine	14.11 ng/ml	Norfluoxetine	57.39 ng/ml

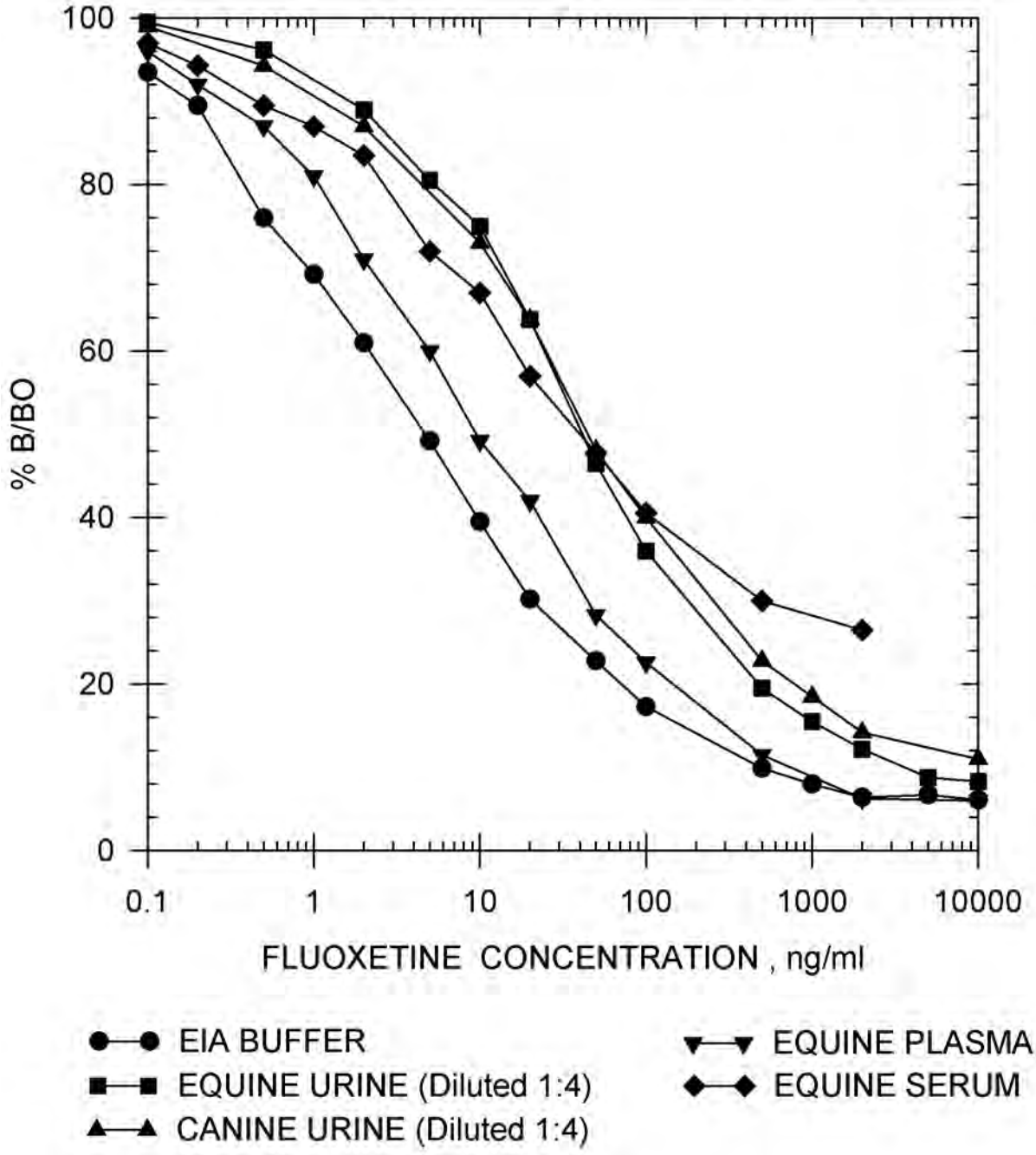
Note: Measuring wavelength was 650 nm**.**

Precision:	Intra-assay	4.29%
	Inter-assay	2.72%

FLUOXETINE STANDARD CURVES

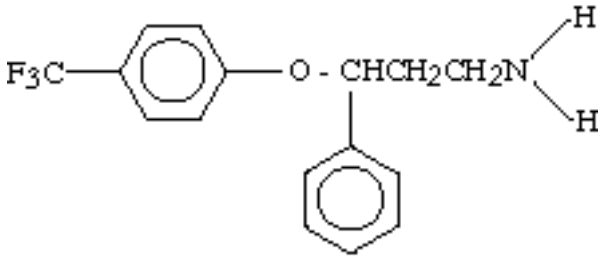
Fluoxetine

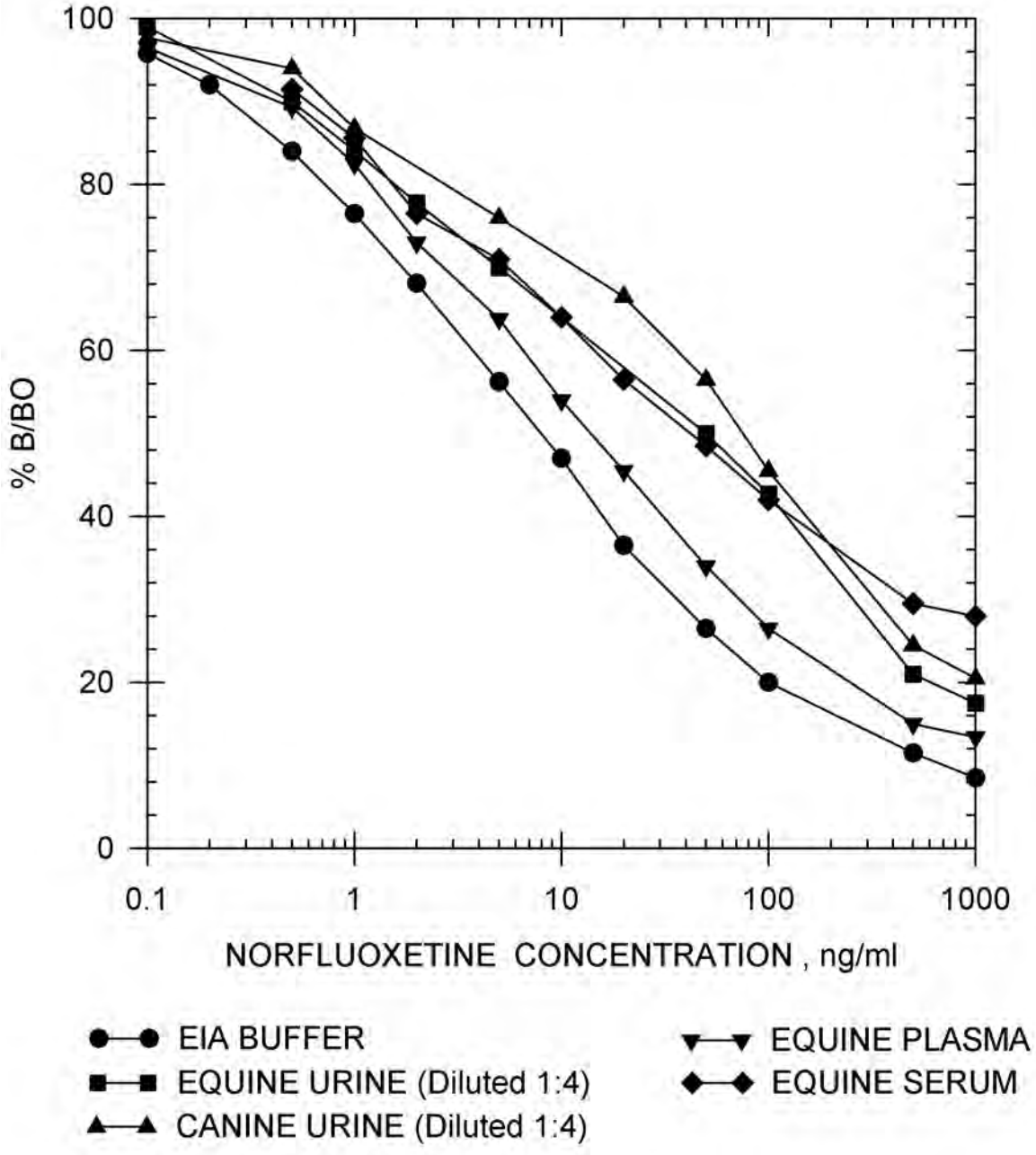




FLUOXETINE STANDARD CURVES

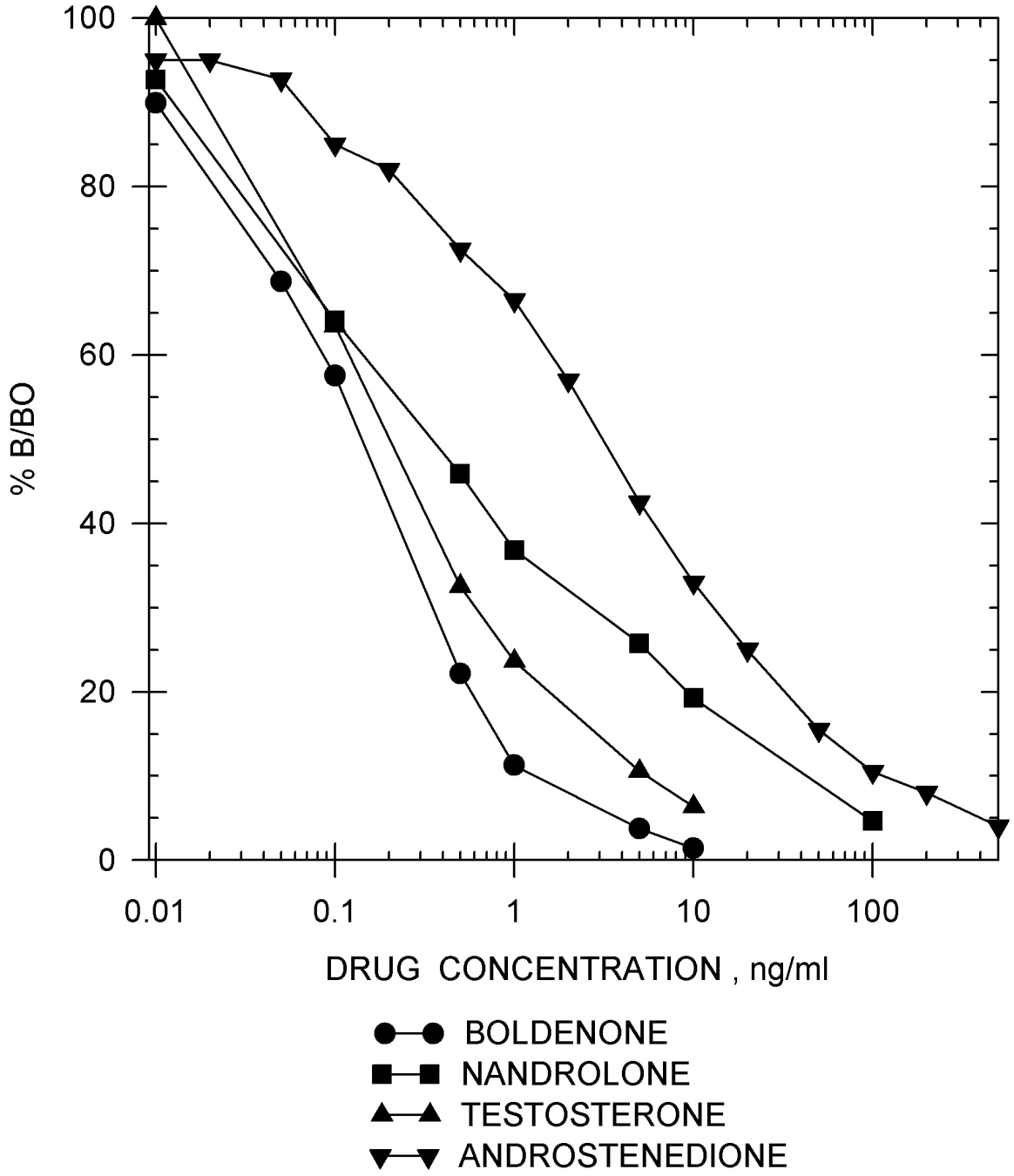
Norfluoxetine





FLUOXETINE STANDARD CURVES

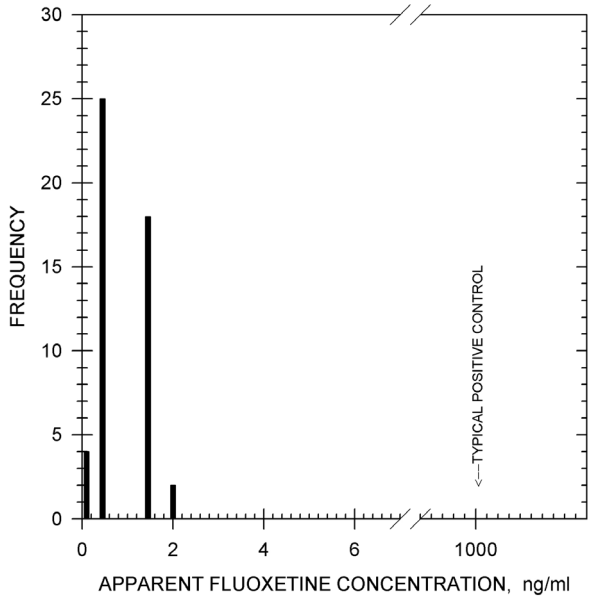
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 49 post-race equine urine samples, diluted 1:4, has shown no background levels above 1.64 ng/ml.

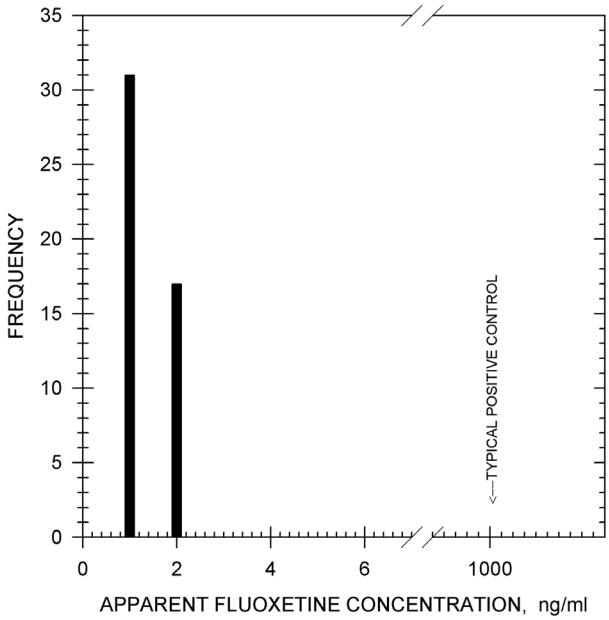
Sample Treatment: A dilution of 1:4 (i.e. 1 part urine to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 48 post-race canine urine samples, diluted 1:4, has shown no background levels above 1.96 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e. 1 part urine to 4 parts EIA buffer) is recommended to reduce natural backgrounds.

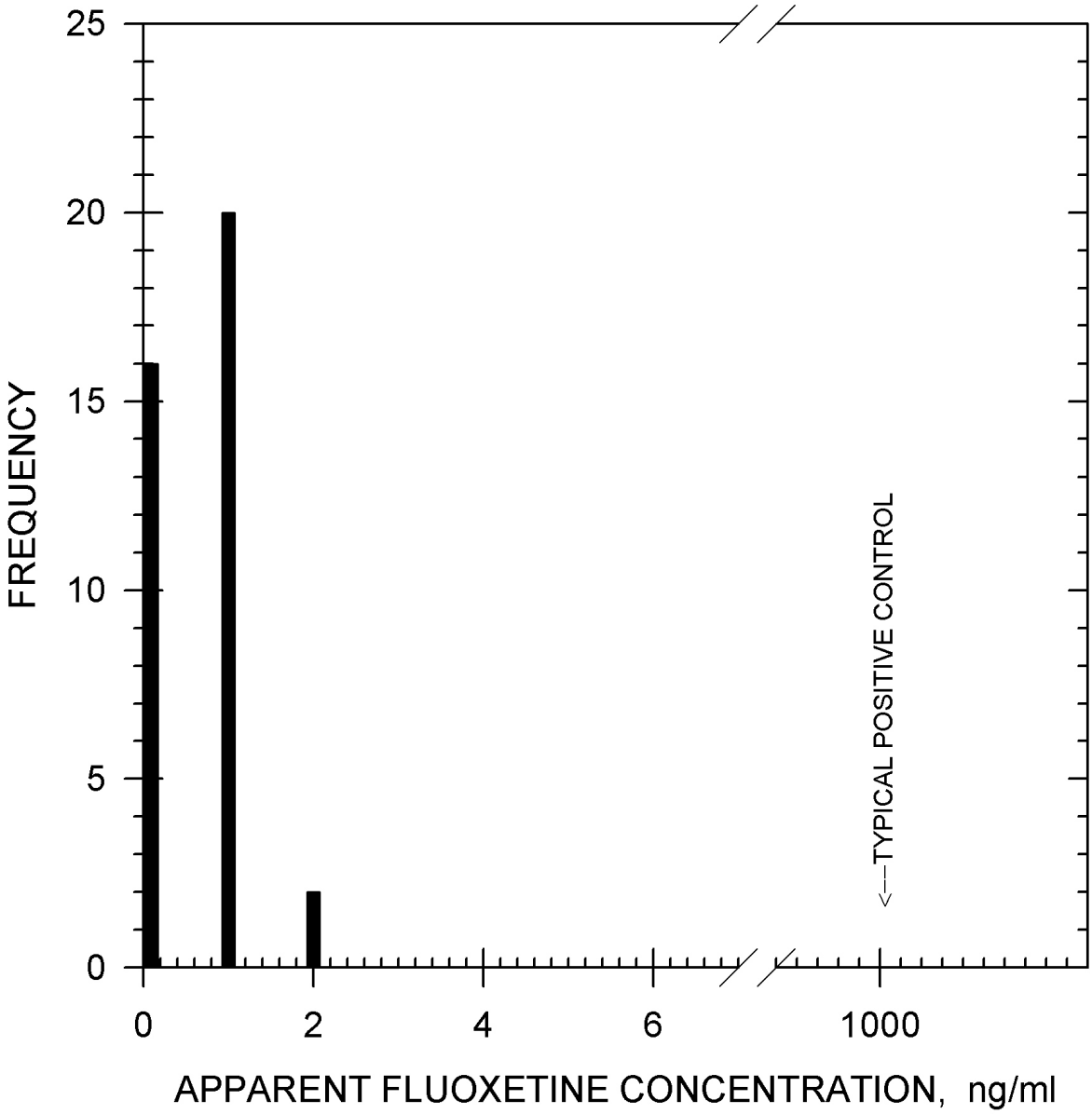


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 38 post-race equine plasma samples has shown no background levels above 1.88 ng/mL

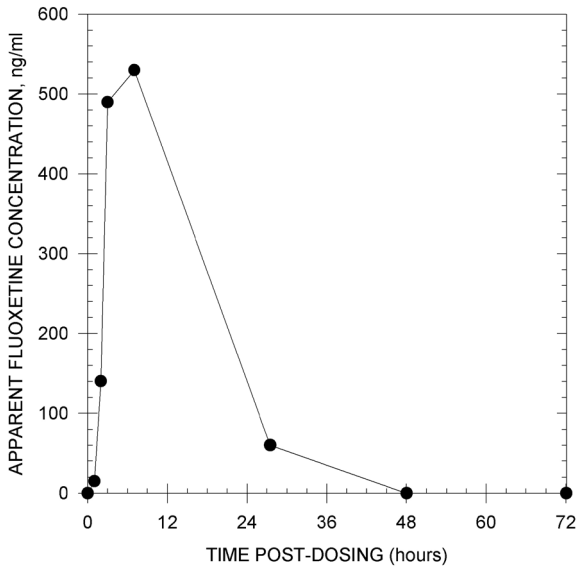
Sample Treatment: No sample dilution is necessary. In some cases a small dilution (1:1) or sample extraction may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.



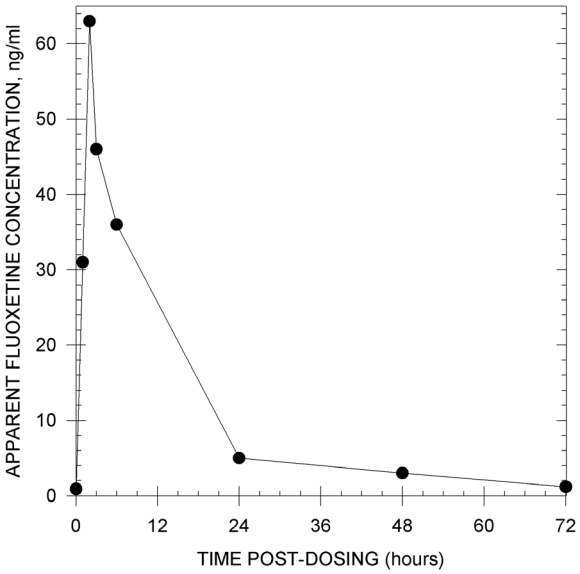
TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 100 mg of fluoxetine orally to one horse, the presence of this drug was detected for at least 28 hours in equine urine. All samples were diluted 1:4 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 100 mg of fluoxetine orally to one horse, the presence of this drug was detected for at least 4 hours in equine plasma.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

	Fluoxetine Norfluoxetine		100% 67%
Acepromazine	<0.01%	Metaproterenol	<0.01%
Acetaminophen	<0.01%	Methadone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Methamphetamine	<0.01%
Amitriptyline	<0.01%	Methaqualone	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methocarbamol	<0.01%
Aspirin	<0.01%	Methylene Blue	<0.01%
Bupropion	<0.01%	6α-Methylprednisolone	<0.01%
Chlordiazepoxide	<0.01%	Nalorphine	<0.01%
Chlorpromazine	<0.01%	Naproxen	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Clomipramine	<0.01%	Nortriptyline	<0.01%
Cotinine	<0.01%	Orphenadrine	<0.01%
Desipramine	<0.01%	Oxyphenbutazone	<0.01%
Dexamethasone	<0.01%	Penicillin G-Potassium	<0.01%
Dextromethorphan	<0.01%	Penicillin G-Procaine	<0.01%
Diclofenac	<0.01%	Pentoxifylline	<0.01%
Dimethyl Sulfoxide	<0.01%	Perphenazine	<0.01%
Dipyrone	<0.01%	Phencyclidine	<0.01%
Doxepin	<0.01%	Phenothiazine	<0.01%
Erythromycin	<0.01%	Phenylbutazone	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Polyethylene Glycol	<0.01%
		Prednisolone	<0.01%
Fenfluramine	<0.01%	Primadone	<0.01%
Fenoprofen	<0.01%	Procainamide	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Folic Acid	<0.01%	Promazine	<0.01%
Folinic Acid	<0.01%	Pyrantel	<0.01%
Furosemide	<0.01%	Pyrilamine	<0.01%
Gemfibrozil	<0.01%	Pyrimethamine	<0.01%
Gentisic Acid	<0.01%	Quinidine	<0.01%
Glipizide	<0.01%	Quinine	<0.01%
L-Glutamic Acid	<0.01%	Salbutamol	<0.01%
Glutethimide	<0.01%	Salicylamide	<0.01%
Glycopyrrolate	<0.01%	Salicylic Acid	<0.01%
Hordenine	<0.01%	Theophylline	<0.01%
Hydrocortisone	<0.01%	Thiamine	<0.01%
Ibuprofen	<0.01%	Tramadol	<0.01%
Imipramine	<0.01%	Tranylcypromine	<0.01%
Isoxsuprine	<0.01%	Trazodone	<0.01%
Lidocaine	<0.01%	Trimethoprim	<0.01%
Maprotiline	<0.01%	Trimipramine	<0.01%
Meperidine	<0.01%	Uric Acid	<0.01%

FLUPHENAZINE

Product #104110 & 104115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

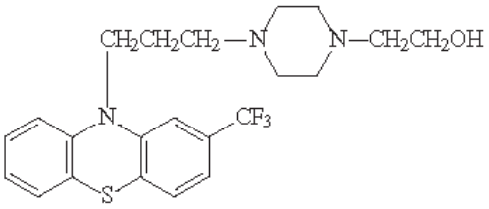
Fluphenazine	0.3 ng/ml
Perphenazine	0.6 ng/ml
Prochlorperazine	0.9 ng/ml
Trifluoperazine	2.5 ng/ml
Triflupromazine	2.5 ng/ml
Acetophenazine	7 ng/ml
Chlorpromazine	9 ng/ml

Precision:	Intra-assay	3.17 %
	Inter-assay	5.95 %

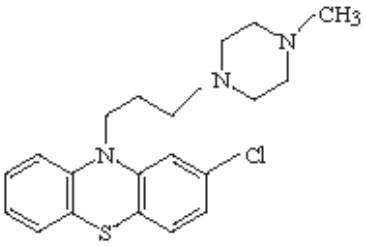
Note: Measuring wavelength was 650 nm**.**

FLUPHENAZINE STANDARD CURVES

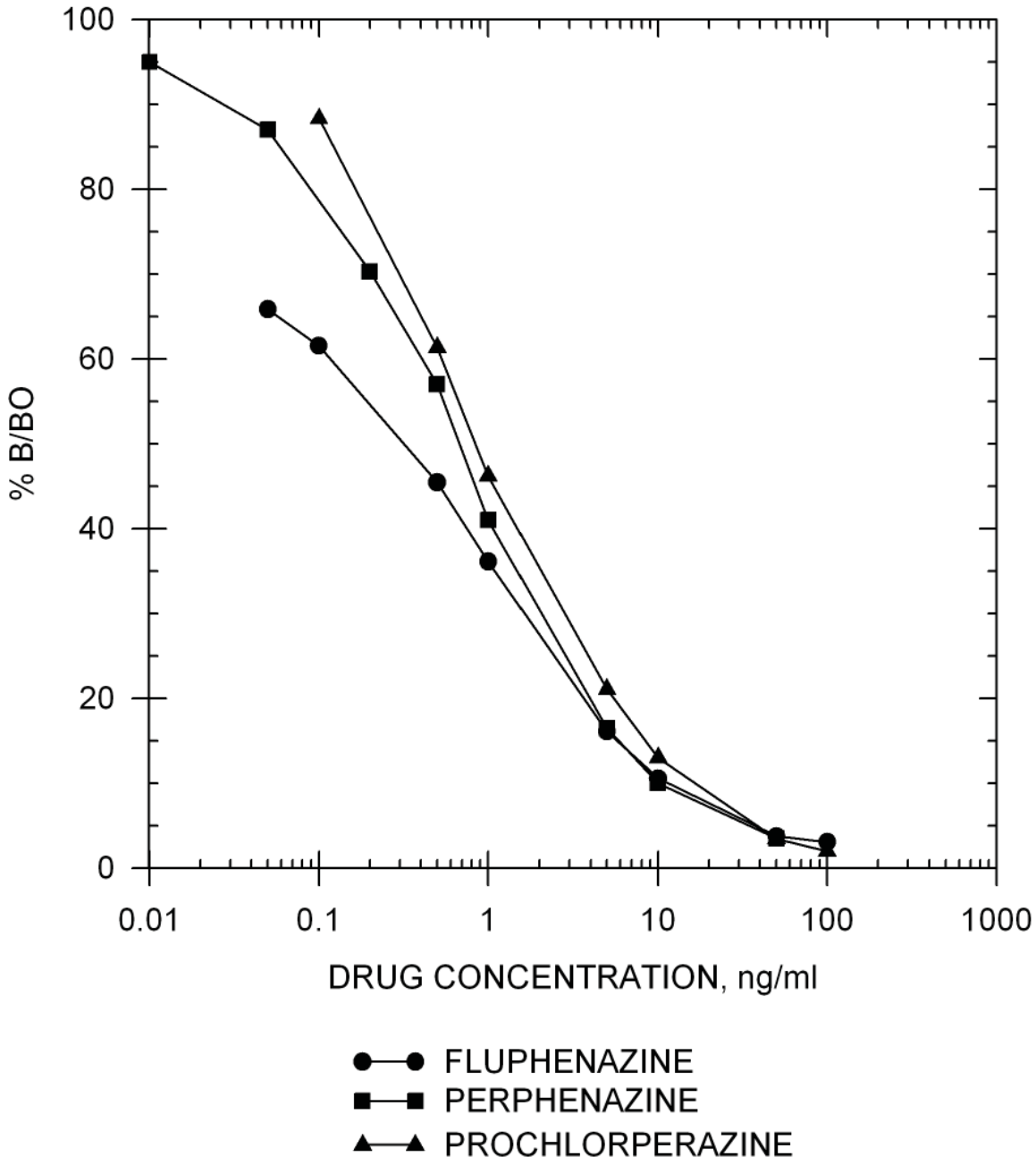
Fluphenazine



Prochlorperazine

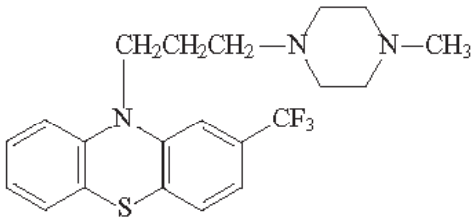


Drug Standard Curve Comparison in EIA Buffer

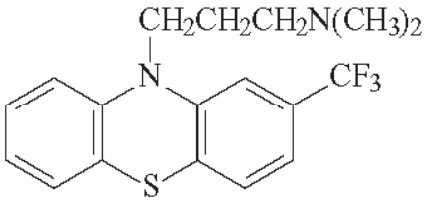


FLUPHENAZINE STANDARD CURVES

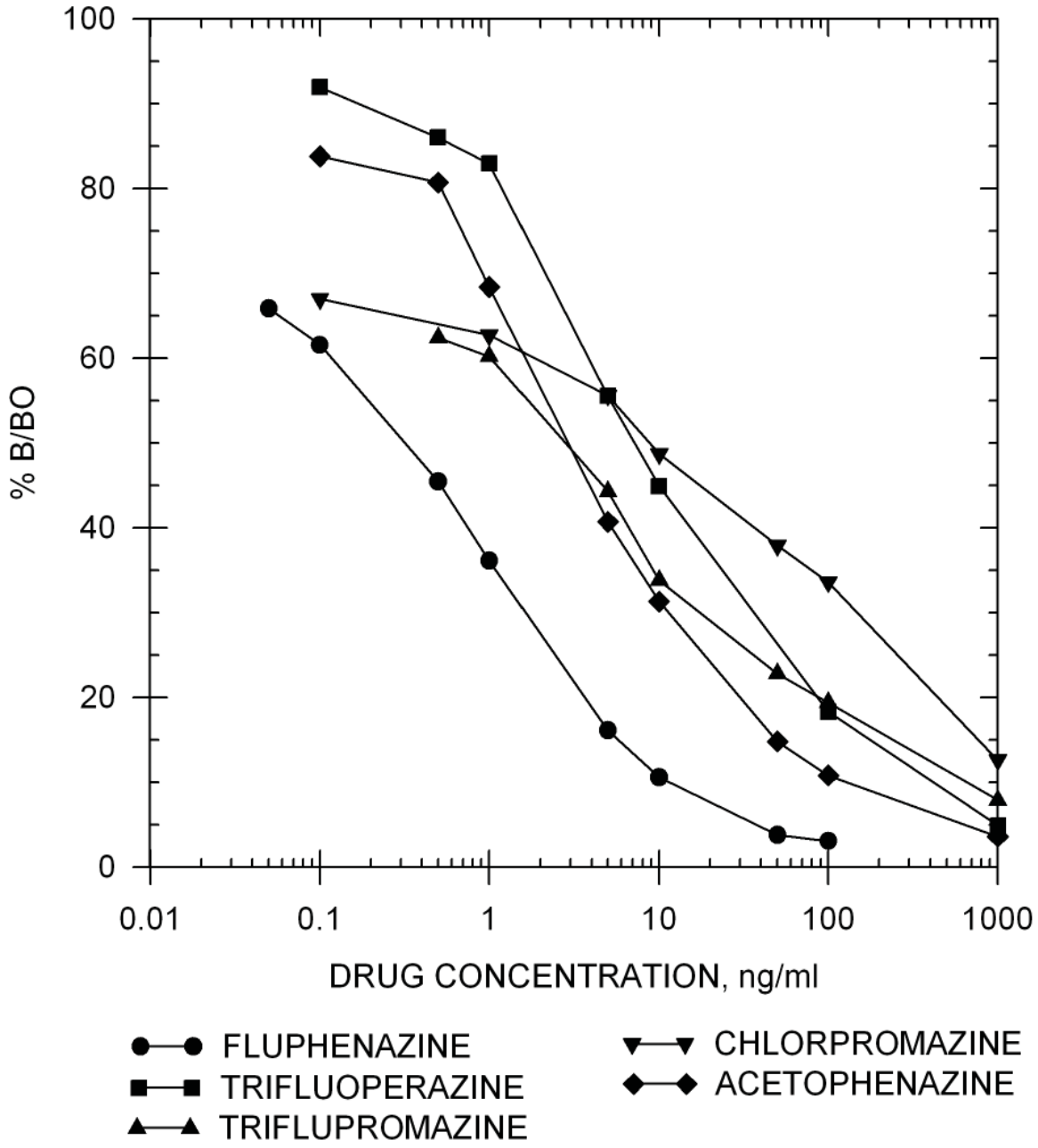
Trifluoperazine



Triflupromazine



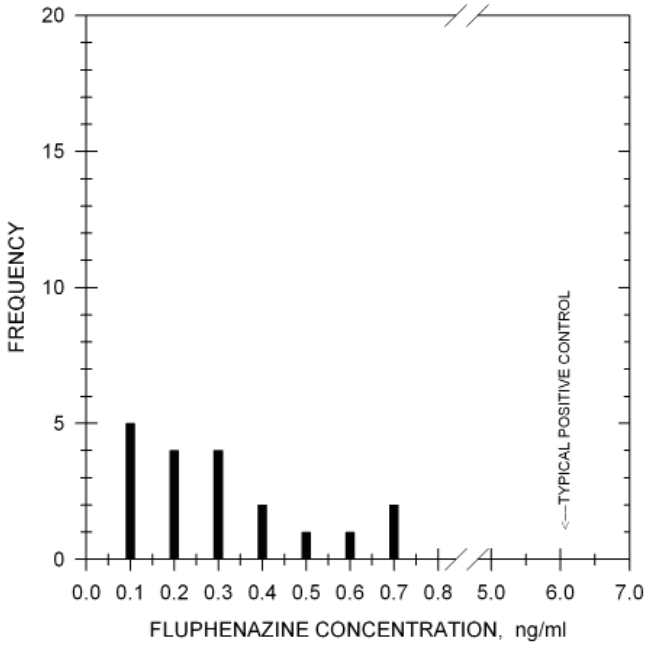
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 19 post-race equine urine samples has shown no background levels above 0.7 ng/ml. Background levels in serum have not been evaluated.

Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds in equine urine.



TYPICAL EQUINE SERUM BACKGROUND LEVELS

Backgrounds: This test may work best with serum samples extracted.

Sample Treatment: An extraction is recommended for equine serum samples.

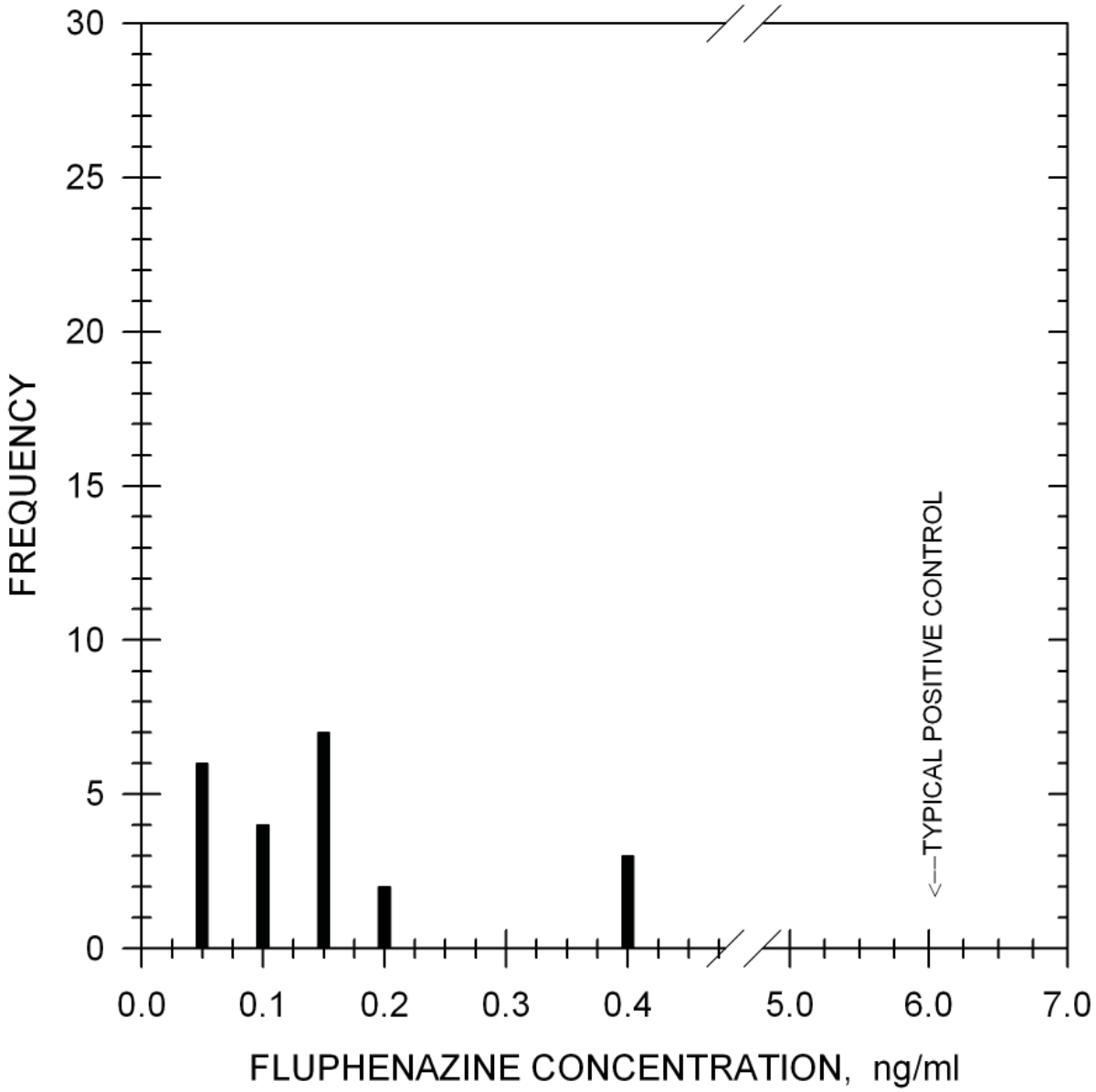
Extraction Procedure:

1. Mix 1 ml serum (or urine) sample with 1 ml 0.5M K_2CO_3 and 8 ml petroleum ether/dichloromethane (2:1) for 15 minutes.
2. Centrifuge tube (to reduce emulsions) and transfer top (organic) phase to a clean tube.
3. Evaporate sample (organic phase) to dryness under a stream of N_2.
4. Dissolve the residue in 10 µl methanol and bring up the final volume to either 100 µl or 250 µl in EIA buffer.
5. Take 20 µl of extracted sample for assay.

TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 22 post-race equine plasma samples has shown no background levels above 0.4 ng/ml.

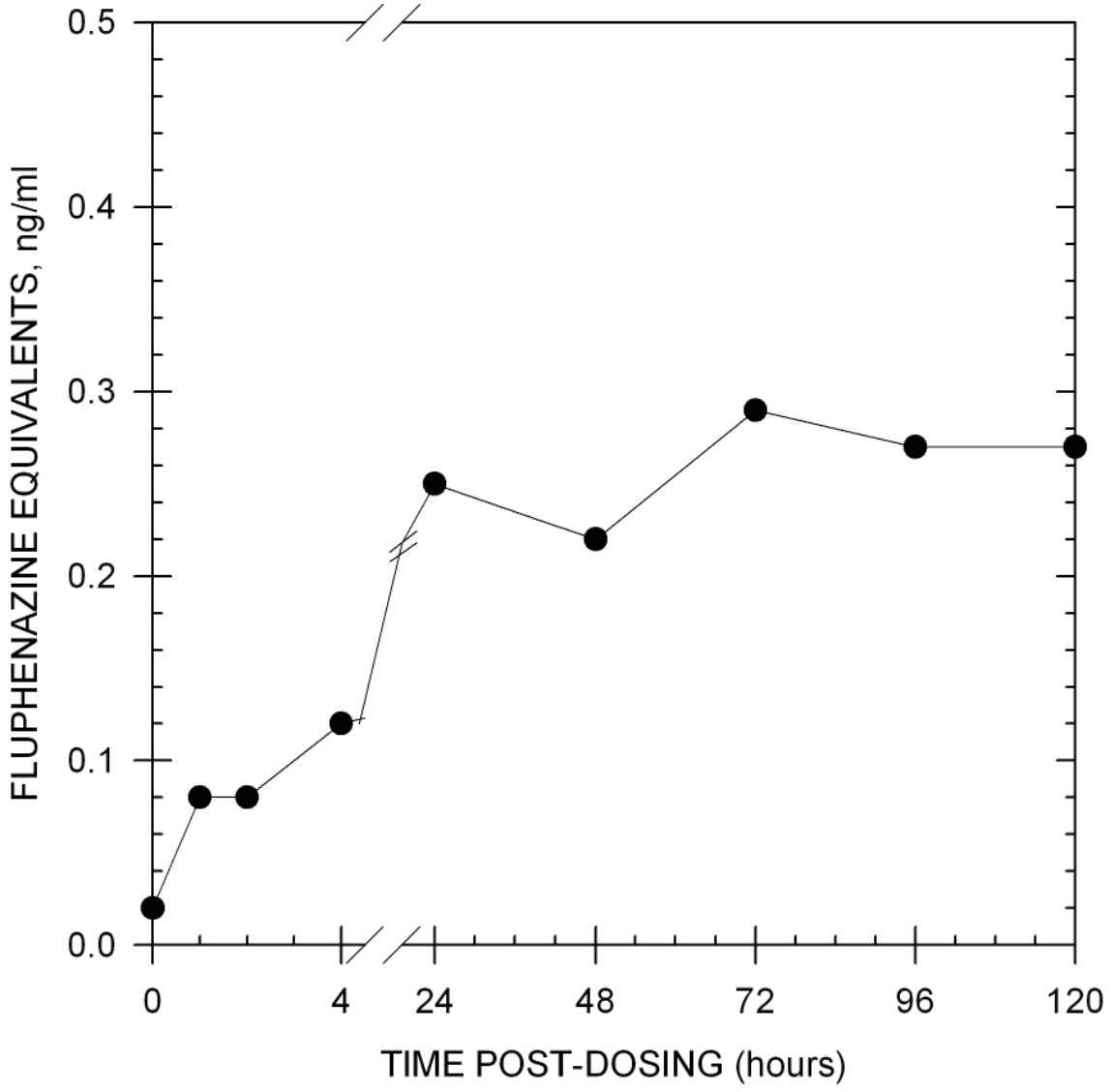
Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 12.5 mg of fluphenazine decanoate by intramuscular injection to one horse, the presence of this drug was detected for 120 hours in equine serum. All samples were extracted according to the recommended procedure.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Fluphenazine	100%
Perphenazine	112%
Prochlorperazine	51%
Trifluoperazine	12%
Triflupromazine	12%
Acetophenazine	4.3%
Chlorpromazine	3.3%
Chlorprothixene	0.2%
Thioridazine	0.1%
Phenothiazine	0.02%
Promazine	0.01%

Acepromazine	< 0.01%	Gemfibrozil	< 0.01%	Oxphenbutazone	< 0.01%
Acetaminophen	< 0.01%	Gentisic Acid	< 0.01%	PCP	< 0.01%
Acetylsalicylic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Potassium	< 0.01%
E-amino-n-caproic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	Glutethimide	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenothiazine	< 0.01%
Benperidol	< 0.01%	Haloperidol	< 0.01%	Phenylbutazone	< 0.01%
Benzoic Acid	< 0.01%	Heparin	< 0.01%	Pimozide	< 0.01%
Bromperidol	< 0.01%	Hippuric Acid	< 0.01%	Polyethylene Glycol	< 0.01%
Chlordiazepoxide	< 0.01%	Hordenine	< 0.01%	Prednisolone	< 0.01%
Clenbuterol	< 0.01%	Hydrocortisone	< 0.01%	Primadone	< 0.01%
Clozapine	< 0.01%	Ibuprofen	< 0.01%	Procainamide	< 0.01%
Codeine	< 0.01%	Imipramine	< 0.01%	Procaine	< 0.01%
Cotinine	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
Dextromethorphan	< 0.01%	Meperidine	< 0.01%	Pyrilamine	< 0.01%
Diclofenac	< 0.01%	Mesordiazine	< 0.01%	Pyrimethamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaclopramide	< 0.01%	Quinidine	< 0.01%
Dipyrone	< 0.01%	Metaproterenol	< 0.01%	Quinine	< 0.01%
Doxepin	< 0.01%	Methadone	< 0.01%	Risperidone	< 0.01%
Droperidol	< 0.01%	Methaqualone	< 0.01%	Salbutamol	< 0.01%
Ephedrine	< 0.01%	Methocarbamol	< 0.01%	Salicylamide	< 0.01%
Erythromycin	< 0.01%	Methylene Blue	< 0.01%	Salicylic Acid	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Methylprednisolone	< 0.01%	Sulpiride	< 0.01%
Fenoprofen	< 0.01%	Nalorphine	< 0.01%	Theophylline	< 0.01%
Fluanisone	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
Flunixin	< 0.01%	Niacinamide	< 0.01%	Trifluperidol	< 0.01%
Folic Acid	< 0.01%	Nicotine	< 0.01%	Trimethoprim	< 0.01%
Folinic Acid	< 0.01%	Nortriptyline	< 0.01%	Trimipramine	< 0.01%
Furosemide	< 0.01%	Orphenadrine	< 0.01%	Uric Acid	< 0.01%

ENHANCED KIT

FUROSEMIDE

Product# 104210-1 & 104215-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

Furosemide

I-50 in EIA Buffer	12 ng/ml
I-50 in Equine Urine (Diluted 1:9)	175 ng/ml
I-50 in Canine Urine (Diluted 1:9)	150 ng/ml
I-50 in Equine Plasma	20 ng/ml
I-50 in Equine Serum	25 ng/ml

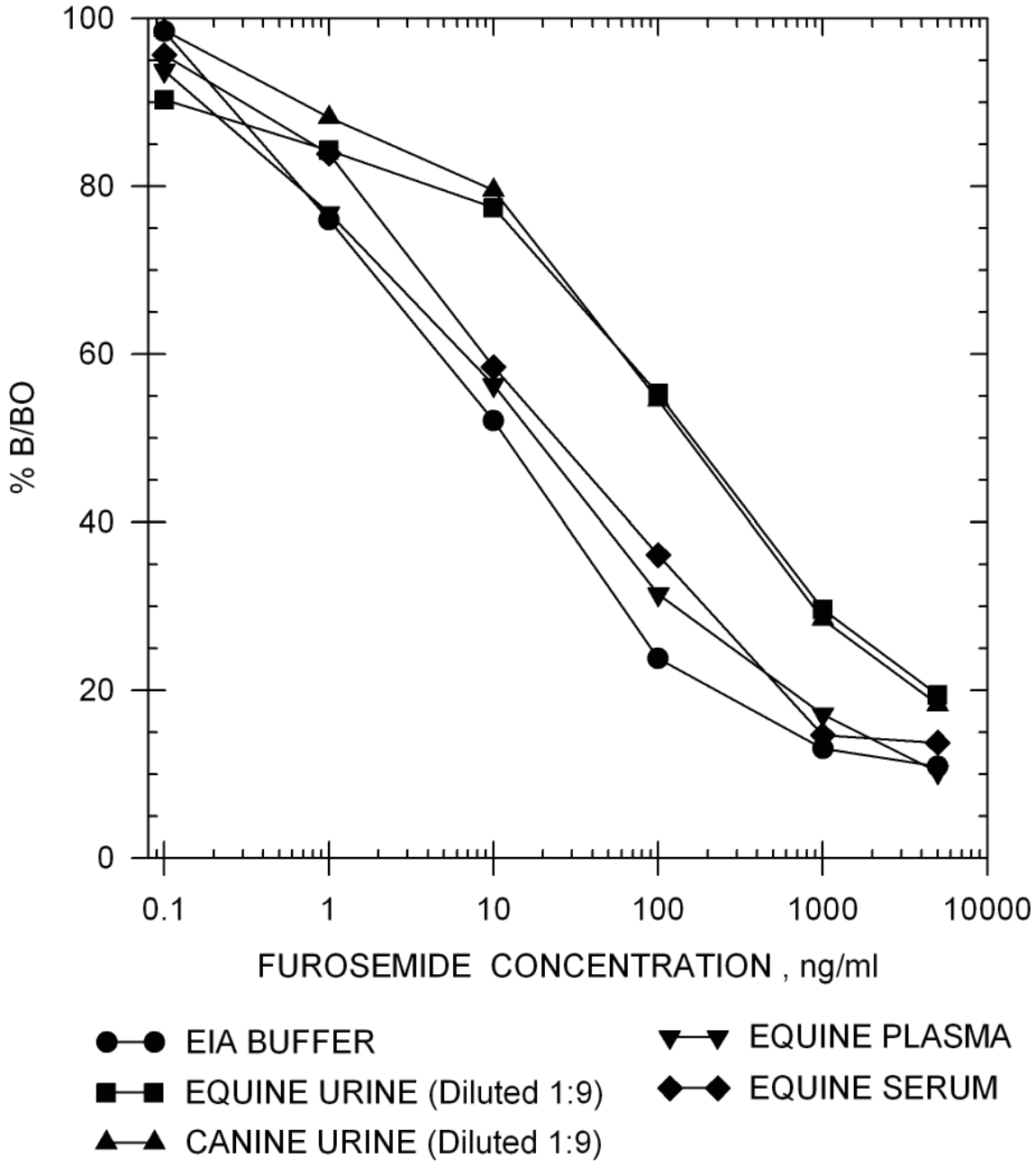
Precision:

Intra-assay	2.85%
Inter-assay	3.25%

Note: Measuring wavelength was 650 nm.

FUROSEMIDE STANDARD CURVES

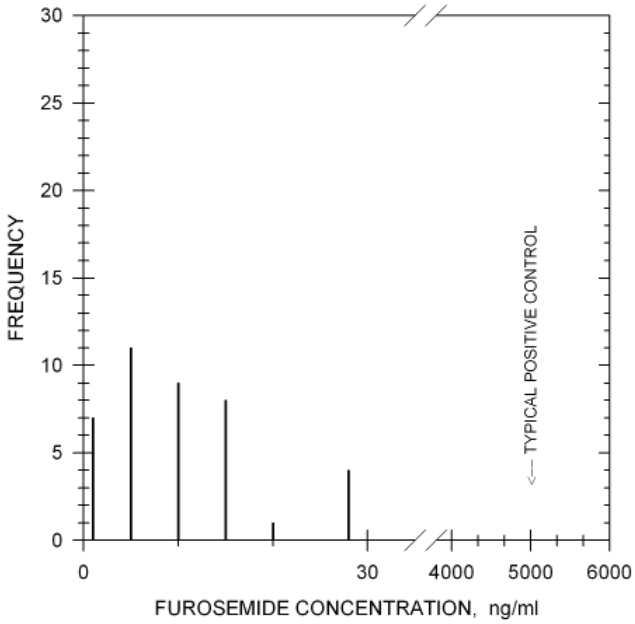
Furosemide



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:9, has shown no background levels above 28 ng/ml.

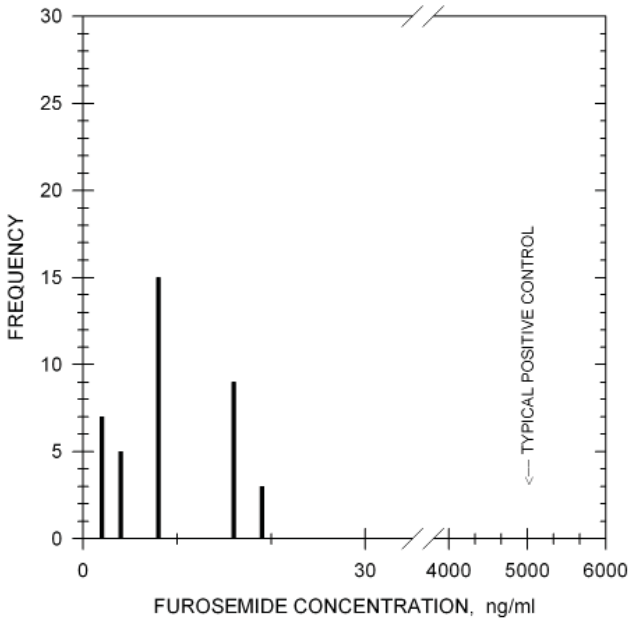
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples, diluted 1:9, has shown no background levels above 19 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural background.

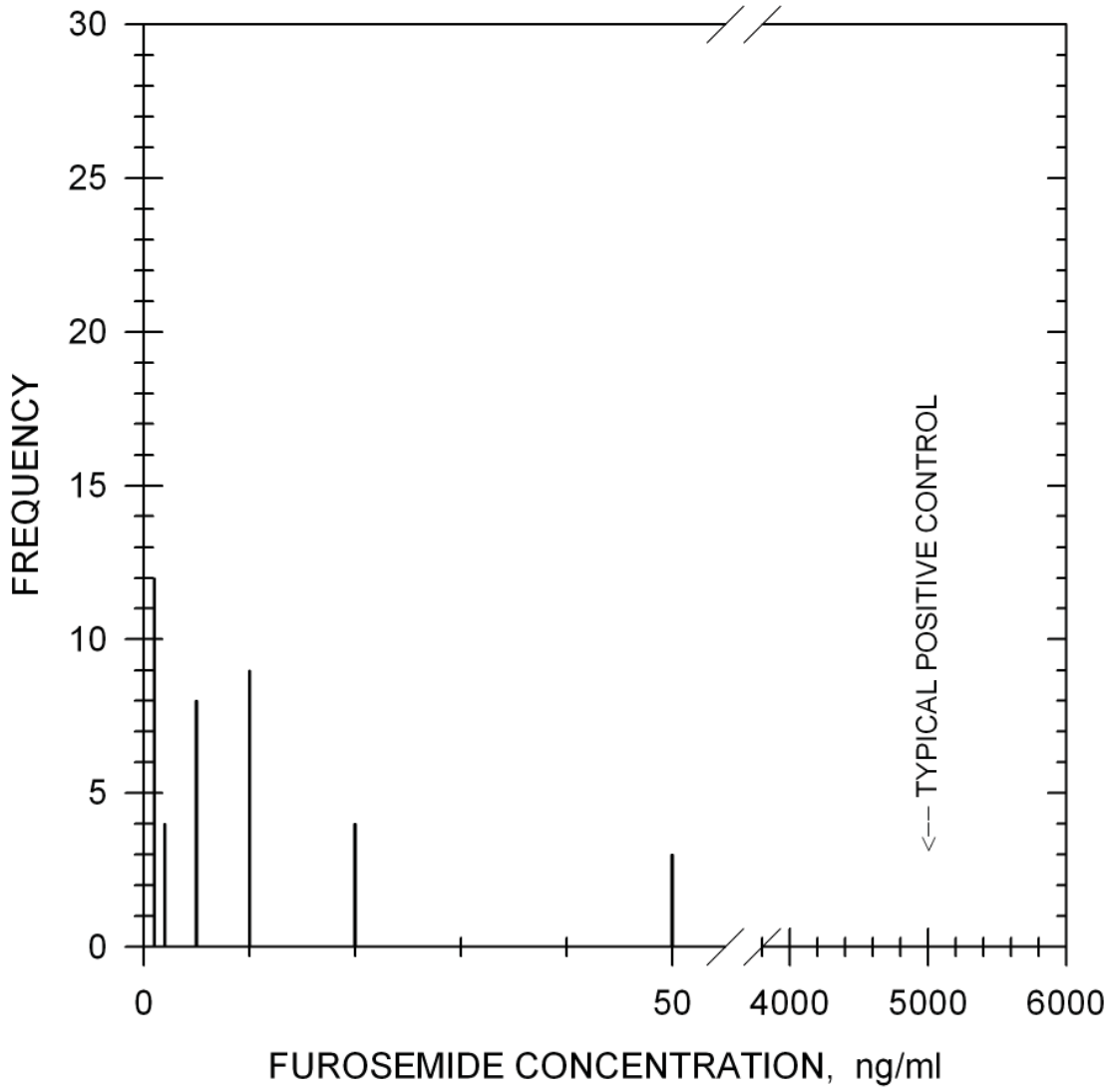


TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 50 ng/ml.

Sample Treatment: No sample dilution is necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth in plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection: Data not currently available.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Furosemide	100%
Benzydamine	2%

Acepromazine	<0.01%	Isoxsuprine	<0.01%
Acetamidophenol	<0.01%	Ketoprofen	<0.01%
Acetazolamide	<0.01%	Ketorolac	<0.01%
Amcinonide	<0.01%	Lidocaine	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Meclofenamic Acid	<0.01%
Aminophylline	<0.01%	Mefenamic Acid	<0.01%
Amiprilose	<0.01%	Metaproterenol	<0.01%
Ascorbic Acid	<0.01%	Methocarbamol	<0.01%
Aspirin	<0.01%	Methotrimeprazine	<0.01%
Atropine	<0.01%	Methylene Blue	<0.01%
Budesonide	<0.01%	6α-Methylprednisolone	<0.01%
Bumetanide	<0.01%	Nabumetone	<0.01%
Caffeine	<0.01%	Naproxen	<0.01%
Carbamazepine	<0.01%	Nefopam	<0.01%
Carprofen	<0.01%	Niacinamide	<0.01%
Chlorzoxazone	<0.01%	Niflumic Acid	<0.01%
Clenbuterol	<0.01%	Orphenadrine	<0.01%
Clobetasol Propionate	<0.01%	Oxyphenbutazone	<0.01%
Clobetasone Butyrate	<0.01%	Pentoxifylline	<0.01%
Desoximetasone	<0.01%	Phenothiazine	<0.01%
Detomidine	<0.01%	Phenylbutazone	<0.01%
Dexamethasone	<0.01%	Polyethylene Glycol	<0.01%
Diclofenac	<0.01%	Prednisolone	<0.01%
Diflunisal	<0.01%	Procaine	<0.01%
Dimethyl Sulfoxide	<0.01%	Promazine	<0.01%
Dipyrone	<0.01%	Propoxyphene	<0.01%
Droperidol	<0.01%	Pyrantel	<0.01%
Ethacrynic Acid	<0.01%	Pyrilamine	<0.01%
Ethyl p-Amino-Benzoate	<0.01%	Reserpine	<0.01%
Etodolac	<0.01%	Salbutamol	<0.01%
Fenbufen	<0.01%	Salicylamide	<0.01%
Fenoprofen	<0.01%	Salicylic Acid	<0.01%
Flufenamic Acid	<0.01%	Sanguinarine	<0.01%
Flunosolide	<0.01%	Stanozolol	<0.01%
Flunixin	<0.01%	Sulindac	<0.01%
Flurbiprofen	<0.01%	Suprofen	<0.01%
Glycopyrrolate	<0.01%	Theobromine	<0.01%
Guaifenesin	<0.01%	Theophylline	<0.01%
Haloperidol	<0.01%	Thiamine	<0.01%
Hordenine	<0.01%	Thiosalicylic Acid	<0.01%
Hydrocortisone	<0.01%	Tiaprofenic Acid	<0.01%
Hydrochlorothiazide	<0.01%	Tolmetin	<0.01%
Ibuprofen	<0.01%	Trichlormethiazide	<0.01%
Indomethacin	<0.01%	Xylazine	<0.01%
Indoprofen	<0.01%	Zomepirac	<0.01%
Isoxicam	<0.01%		

GLYCOPYRROLATE

Product# 102010

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

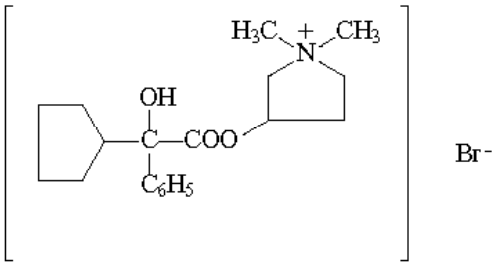
I-50 in EIA Buffer	
Glycopyrrolate	3.5 ng/ml

Precision:	Intra-assay	N/A
	Inter-assay	N/A

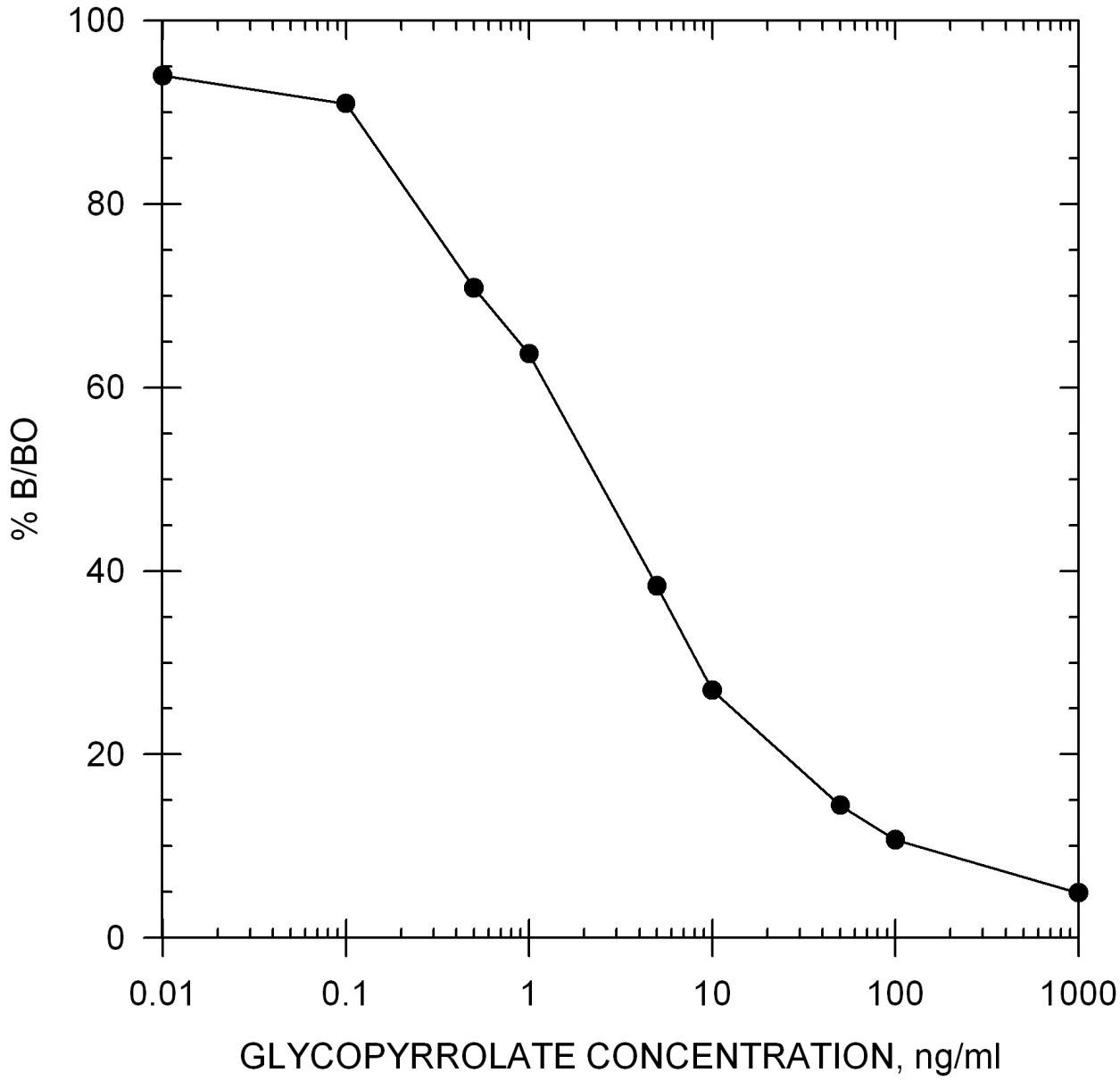
Note: Measuring wavelength was 650 nm**.**

GLYCOPYRROLATE STANDARD CURVE

Glycopyrrolate



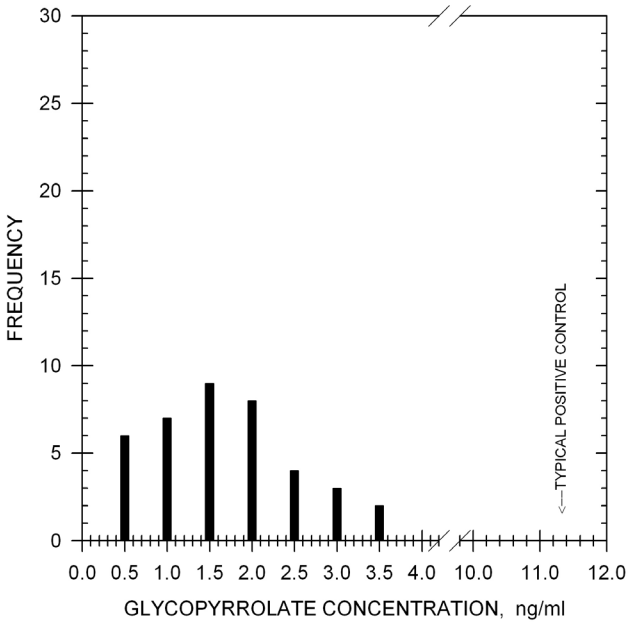
Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

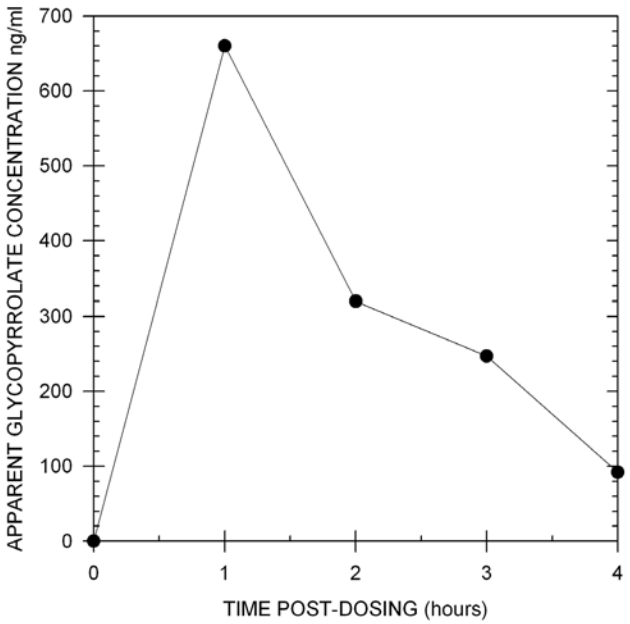
Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 3.5 ng/ml.

Sample Treatment: No sample dilution is necesssary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 1 mg of glycopyrrolate by intravenous injection to one horse, the presence of this drug was detected for at least 4 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description.

Glycopyrrolate	100%
Cyclopentolate	0.45%
Clidinium	0.20%
Mephenzolate	0.20%
Atropine	<0.01%
Heptaminol	<0.01%
Ipratropium	<0.01%
Scopolamine	<0.01%

ENHANCED KIT

GUANABENZ

Product #109210 & 109215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Guanabenz	0.4 ng/ml
Guanfacine	13.0 ng/ml

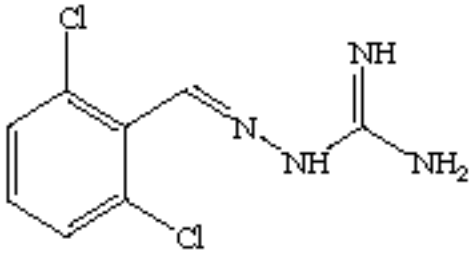
I-50 in Equine Urine		**I-50 in Canine Urine**	
Guanabenz	0.3 ng/ml	Guanabenz	0.5 ng/ml
Guanfacine	11.8 ng/ml	Guanfacine	12.6 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Guanabenz	0.5 ng/ml	Guanabenz	0.8 ng/ml
Guanfacine	13.9 ng/ml	Guanfacine	23.3 ng/ml

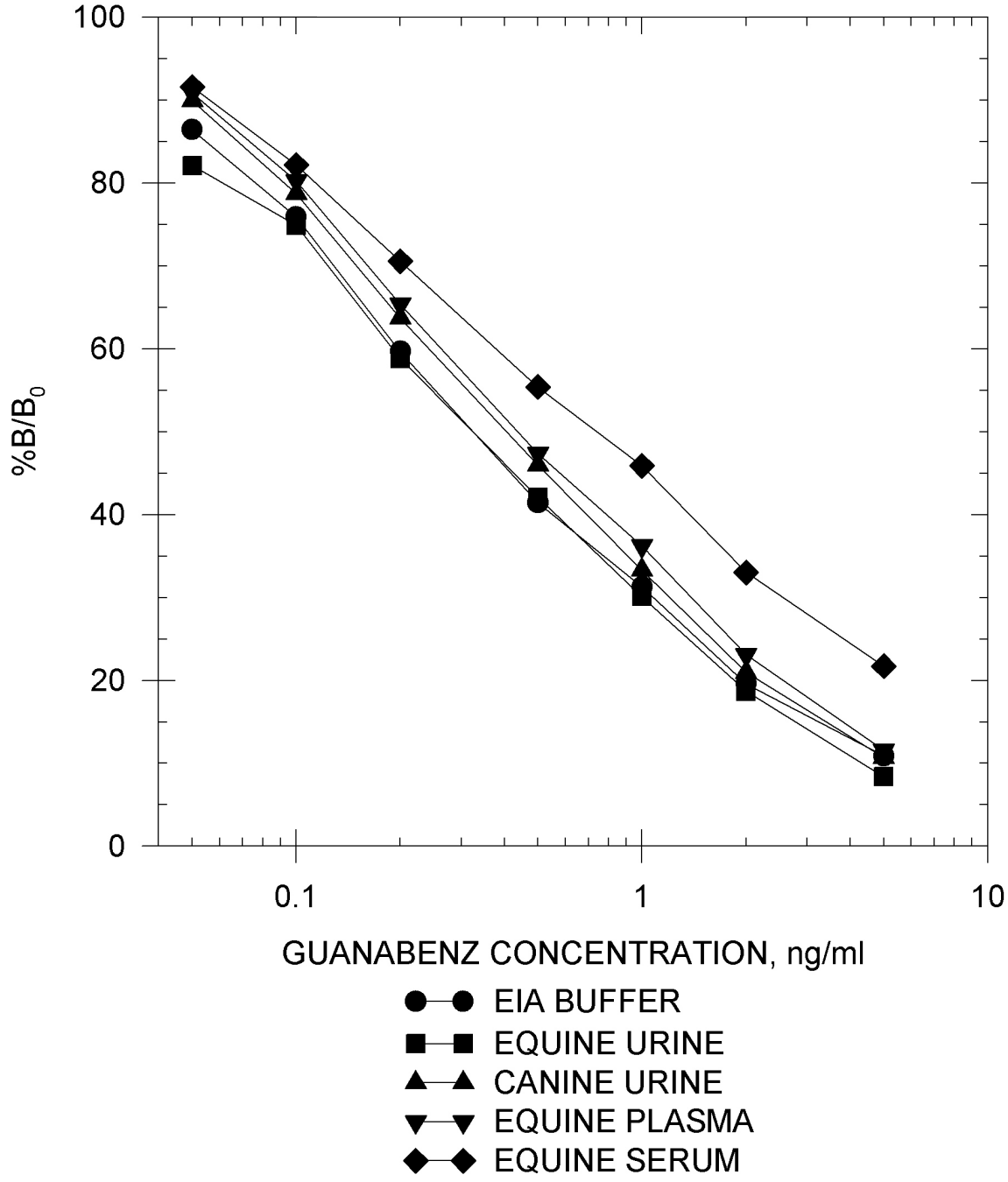
Note: Measuring wavelength was 650 nm**.**

Precision:	Intra-assay	2.92%
	Inter-assay	3.69%

GUANABENZ STANDARD CURVES

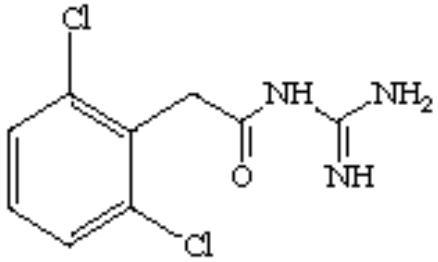
Guanabenz

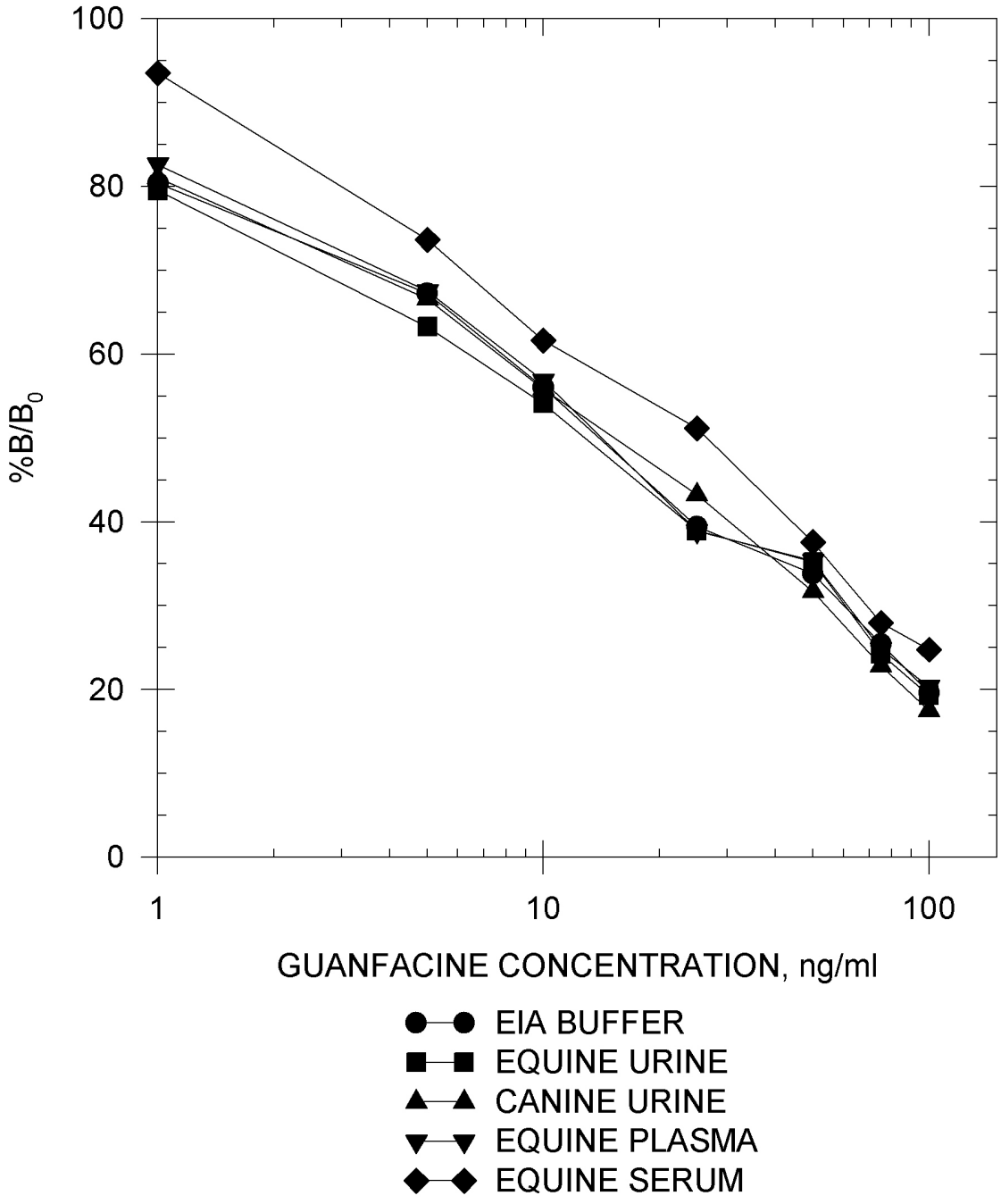




GUANABENZ STANDARD CURVES

Guanfacine

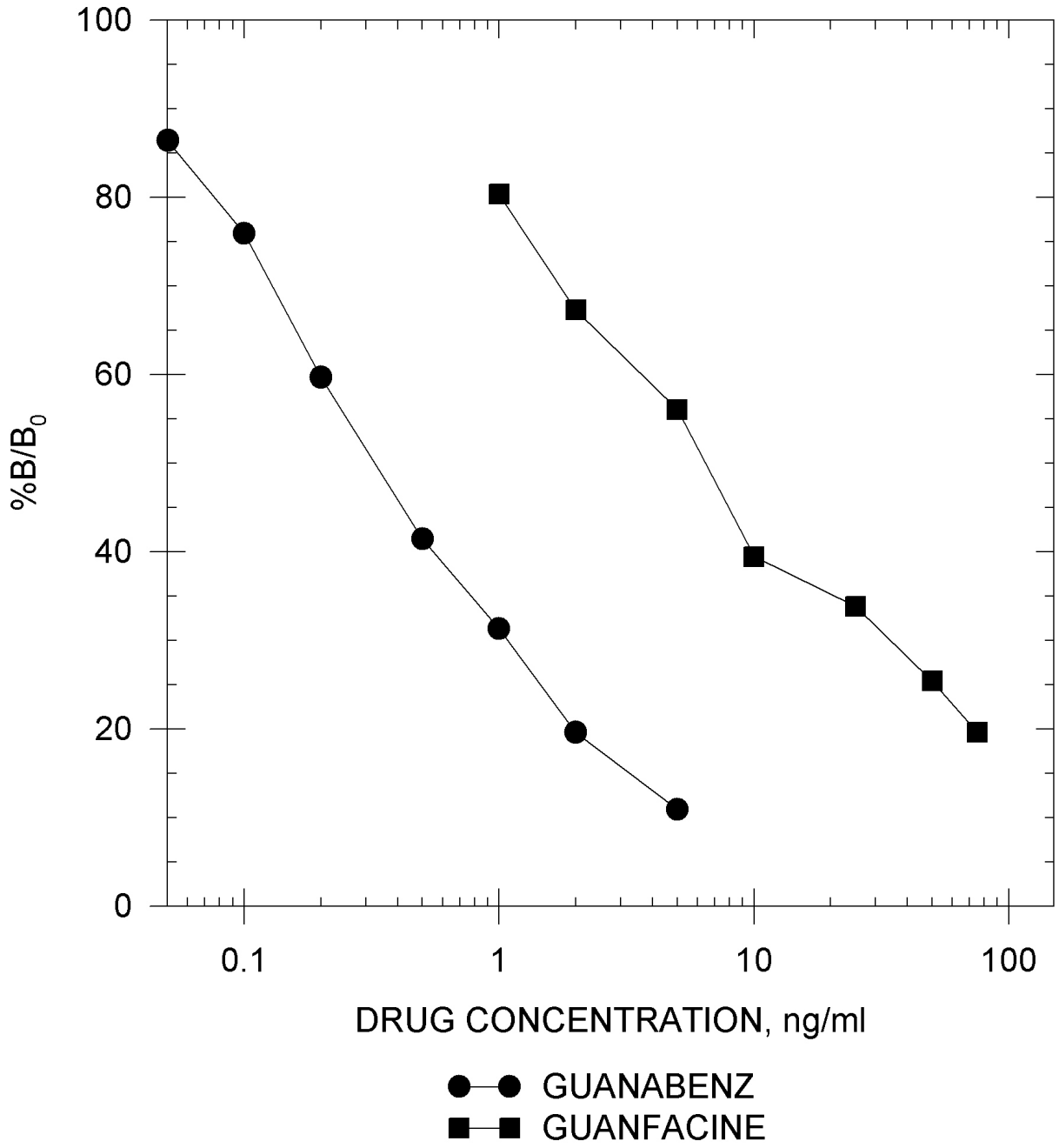




Rev 12/2009

GUANABENZ STANDARD CURVES

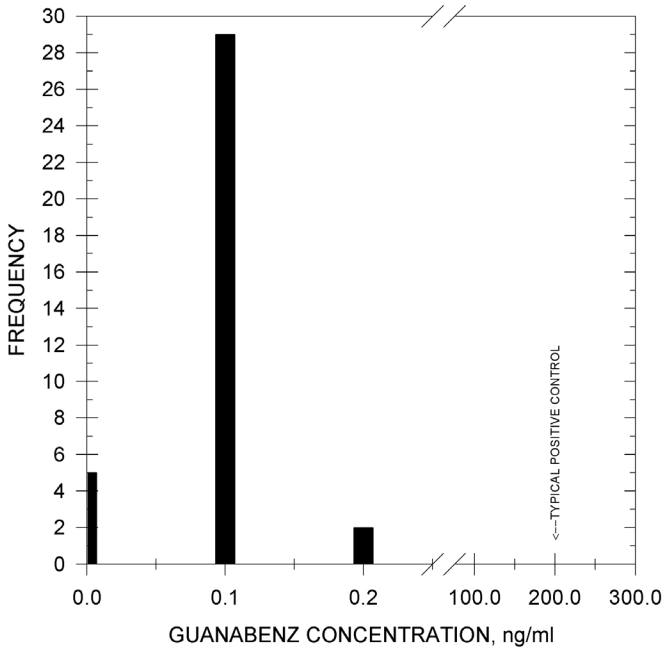
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 36 post-race equine urine samples has shown no background levels above 0.20 ng/ml.

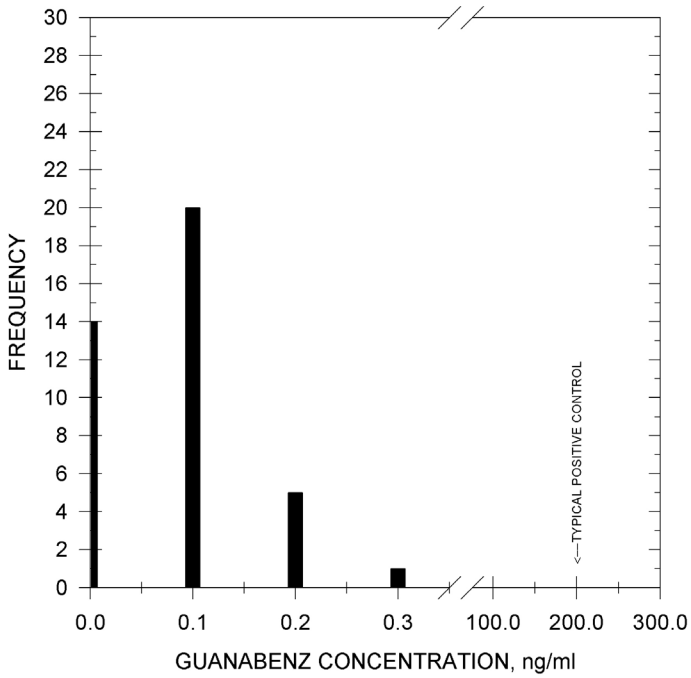
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.30 ng/ml.

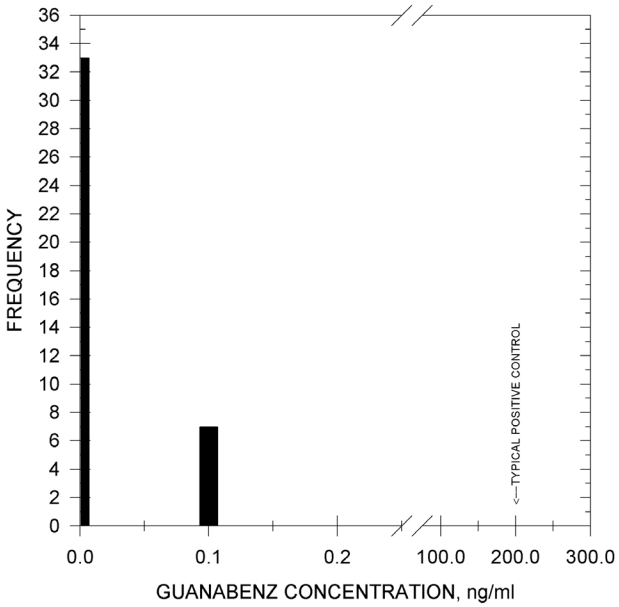
Sample Treatment: No sample dilution is necessary.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

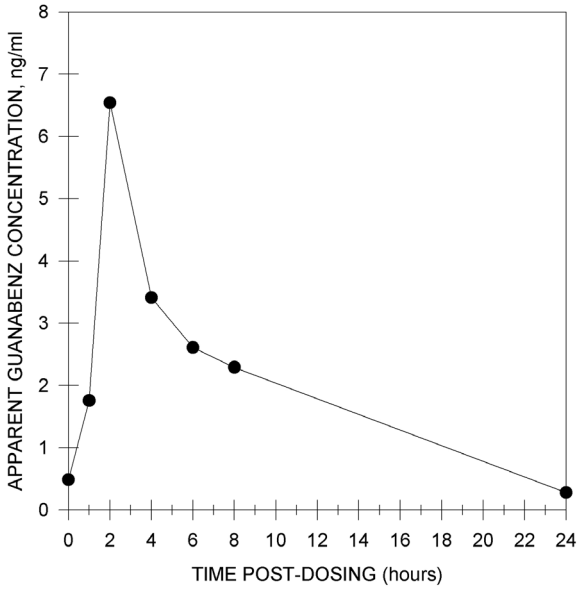
Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 0.10 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

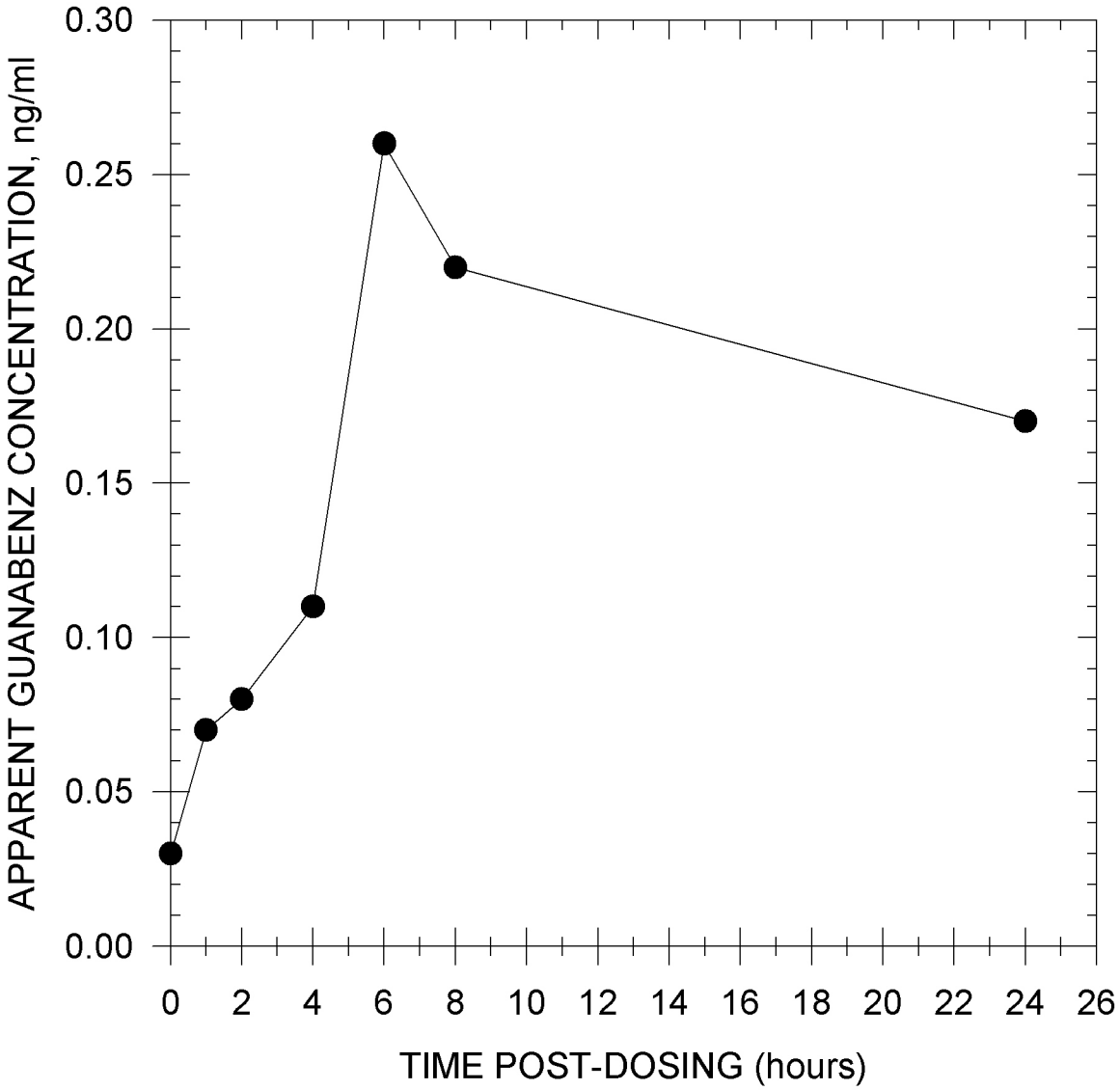
Duration of Detection: After administration of 20 mg of guanabenz intravenously to four horses, the presence of this drug was detectable for up to 8 hours in equine urine.



TYPICAL DURATION OF DETECTION

Duration of Detection:

The presence of amitraz was detected at a low concentration, peaking in equine urine for at least 12 hours after administration of 75mg of amitraz by intravenous injection to one horse. According to the recommended sample treatment for this assay, no sample dilution was required before testing the samples.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Guanabenz	100%
Guanfacine	2.9%
Eltenac	0.02%

Acepromazine	<0.01%	Methocarbamol	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Methylene Blue	<0.01%
Amitraz	<0.01%	6-α-Methylprednisolone	<0.01%
Ascorbic Acid	<0.01%	Naproxen	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Clonidine	<0.01%	Orphenadrine	<0.01%
Detomidine	<0.01%	Oxyphenbutazone	<0.01%
Dexamethasone	<0.01%	Pentoxifylline	<0.01%
Diclofenac	<0.01%	Phenothiazine	<0.01%
Dimethyl Sulfoxide	<0.01%	Phenylbutazone	<0.01%
Dipyrone	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-Amino-Benzoate	<0.01%	Prednisolone	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Furosemide	<0.01%	Promazine	<0.01%
Glycopyrrolate	<0.01%	Pyrantel	<0.01%
Guandrel	<0.01%	Pyrilamine	<0.01%
Guanethidine	<0.01%	Romifidine	<0.01%
Heparin	<0.01%	Salbutamol	<0.01%
Hordenine	<0.01%	Salicylamide	<0.01%
Hydrocortisone	<0.01%	Salicylic Acid	<0.01%
Isoxsuprine	<0.01%	Thiamine	<0.01%
Lidocaine	<0.01%	Xylazine	<0.01%
Metaproterenol	<0.01%		

ENHANCED KIT

HALOPERIDOL METABOLITES

Product #102110 & 102115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Haloperidol Metabolite (II)	0.16 ng/ml
Haloperidol	0.19 ng/ml
Bromperidol	0.21 ng/ml
Haloperidol Metabolite (I)	0.33 ng/ml

I-50 in Equine Urine (Diluted 1:3)

Haloperidol Metabolite (II)	0.58 ng/ml
Haloperidol	1.4 ng/ml
Haloperidol Metabolite (I)	3.6 ng/ml

I-50 in Canine Urine (Diluted 1:1)

Haloperidol Metabolite (II)	0.11 ng/ml
Haloperidol	0.79 ng/ml
Haloperidol Metabolite (I)	1.3 ng/ml

I-50 in Equine Plasma (Diluted 1:1)

Haloperidol Metabolite (II)	0.48 ng/ml
Haloperidol	4.5 ng/ml
Haloperidol Metabolite (I)	2.1 ng/ml

I-50 in Equine Serum

Haloperidol Metabolite (II)	0.57 ng/ml
Haloperidol	23 ng/ml
Haloperidol Metabolite (I)	4.7 ng/ml

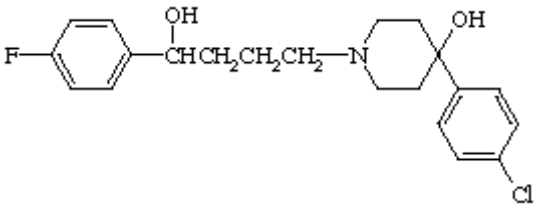
Precision:

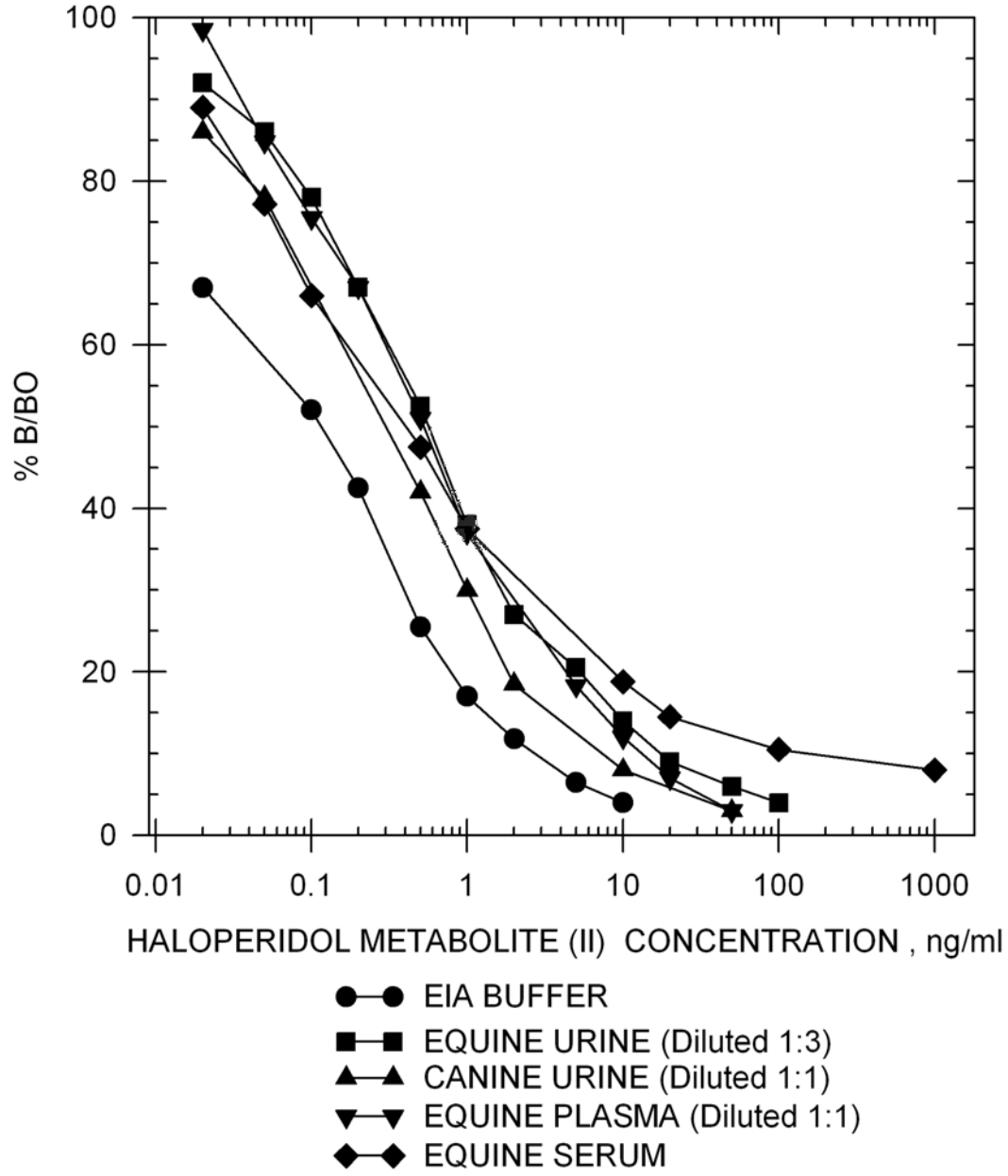
Intra-assay	2.81 %
Inter-assay	5.28 %

Note: Measuring wavelength was 650 nm**.**

HALOPERIDOL METABOLITES STANDARD CURVES

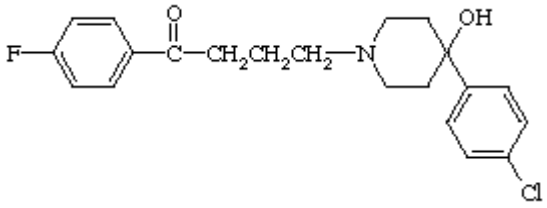
Haloperidol Metabolite II

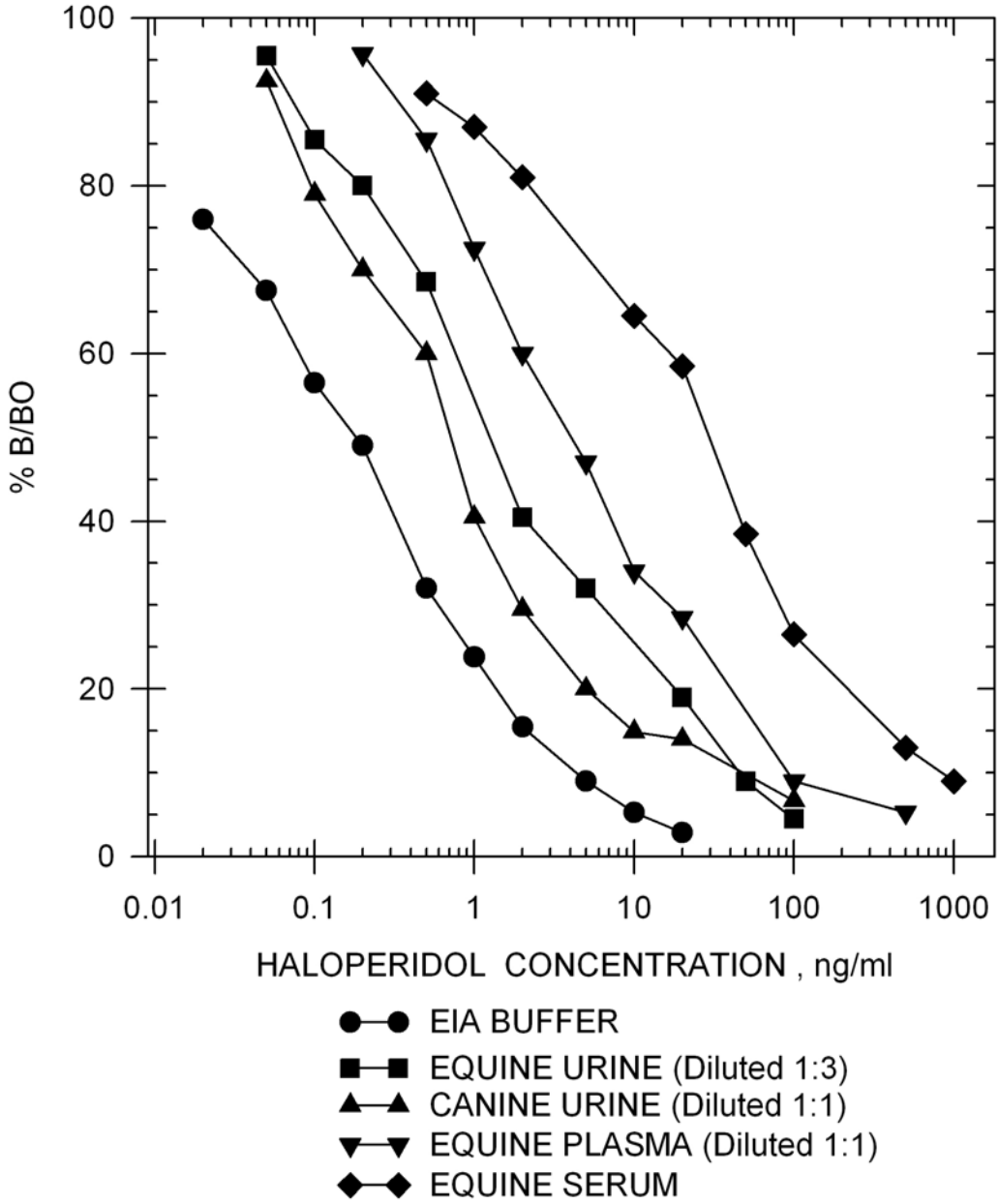




HALOPERIDOL METABOLITES STANDARD CURVES

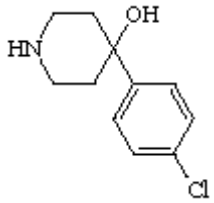
Haloperidol

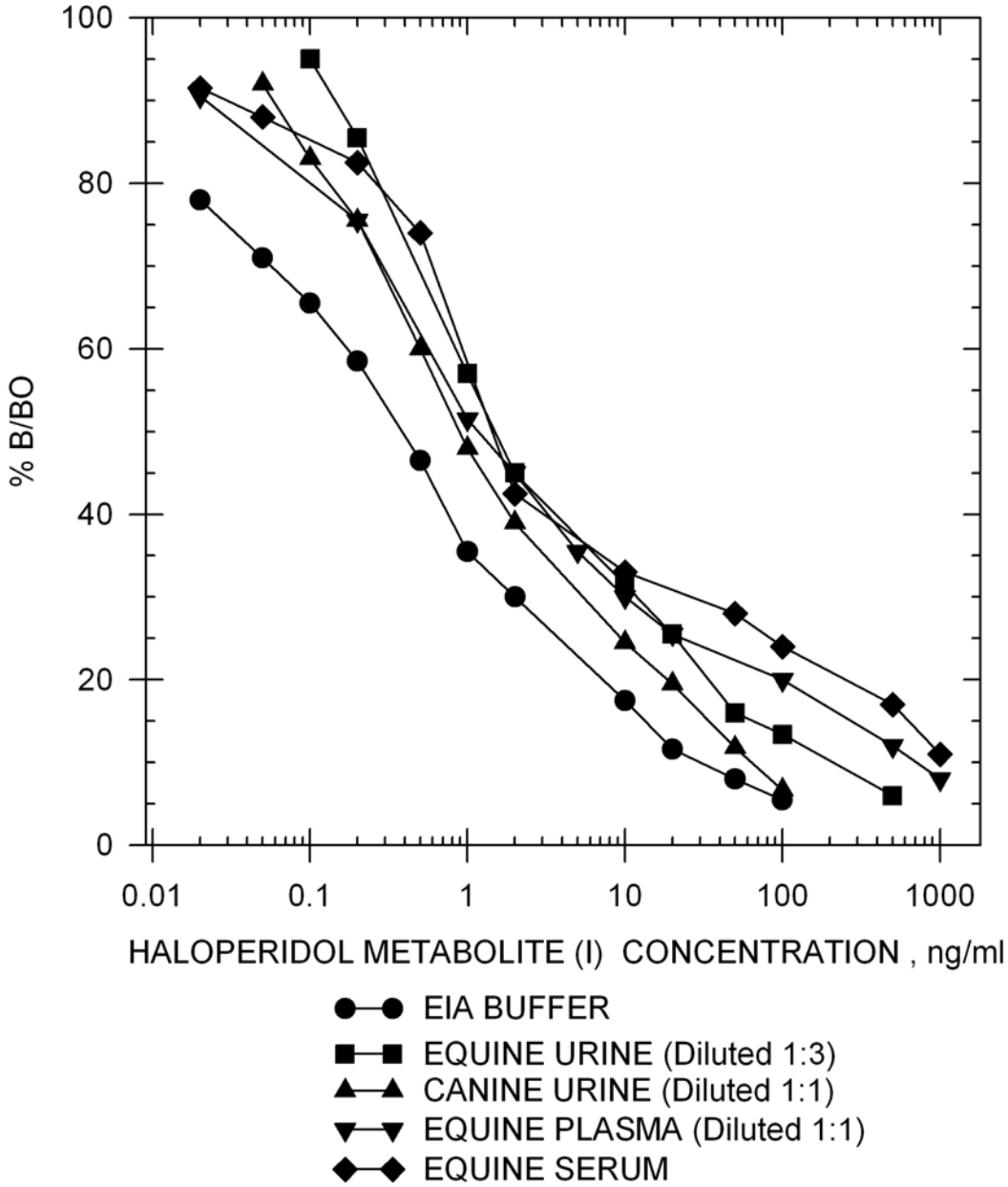




HALOPERIDOL METABOLITES STANDARD CURVES

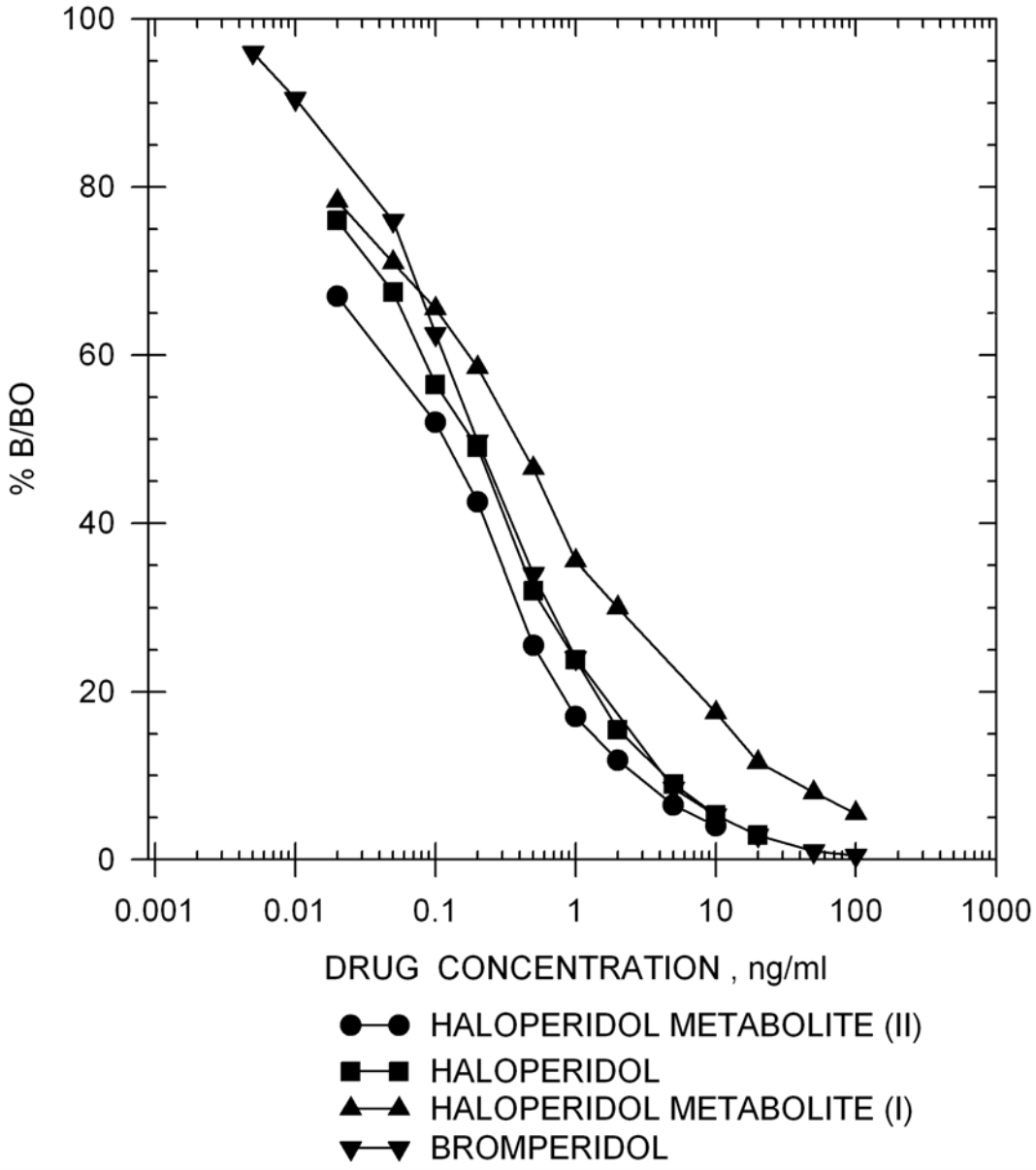
Haloperidol Metabolite I





HALOPERIDOL METABOLITES STANDARD CURVES

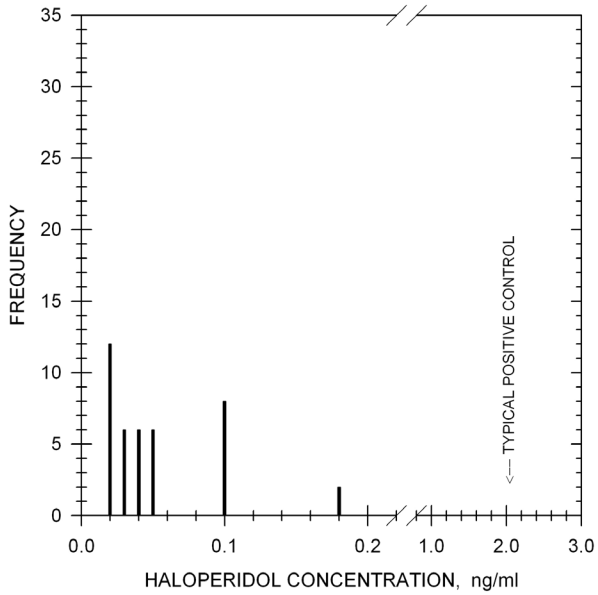
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:3, has shown no backgrounds levels above 0.4 ng/ml.

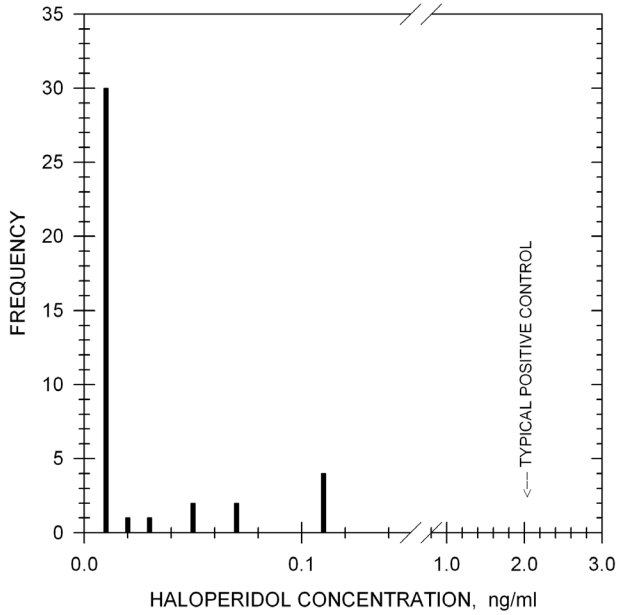
Sample Treatment: A dilution of 1:3 (i.e. 1 part sample to 3 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 48 post-race canine urine samples, diluted 1:1, has shown no backgrounds levels above 0.38 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.

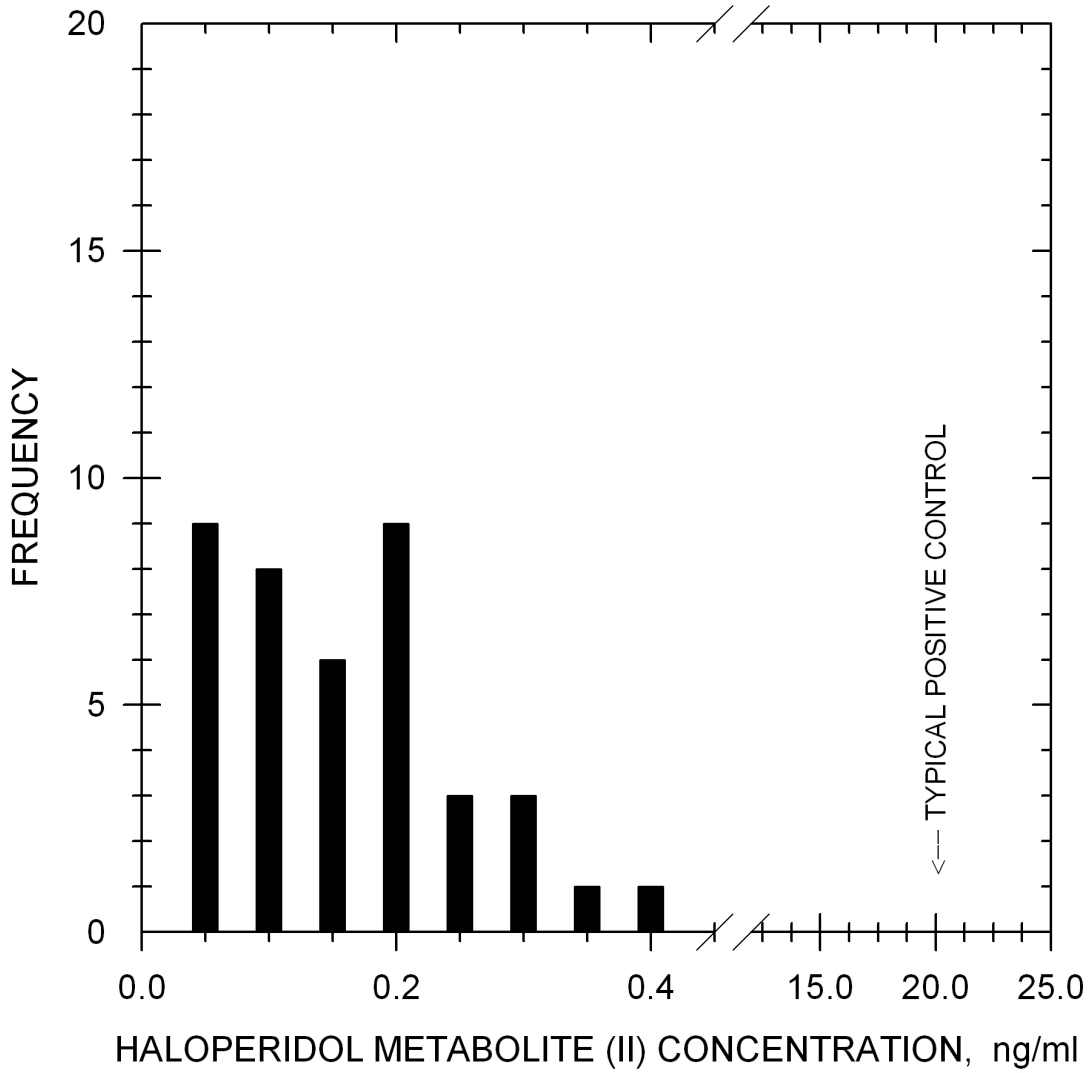


TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples, diluted 1:1, has shown no backgrounds levels above 0.4 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.

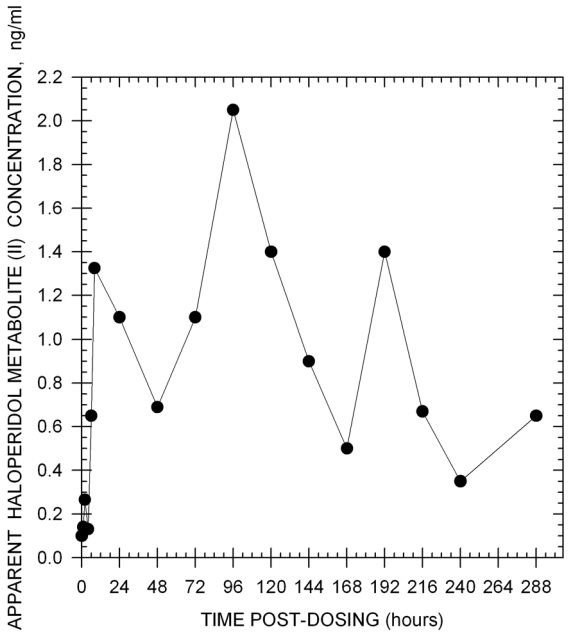
Note: For best results, plasma and serum samples should be extracted.



TYPICAL DURATION OF DETECTION

Duration of Detection:

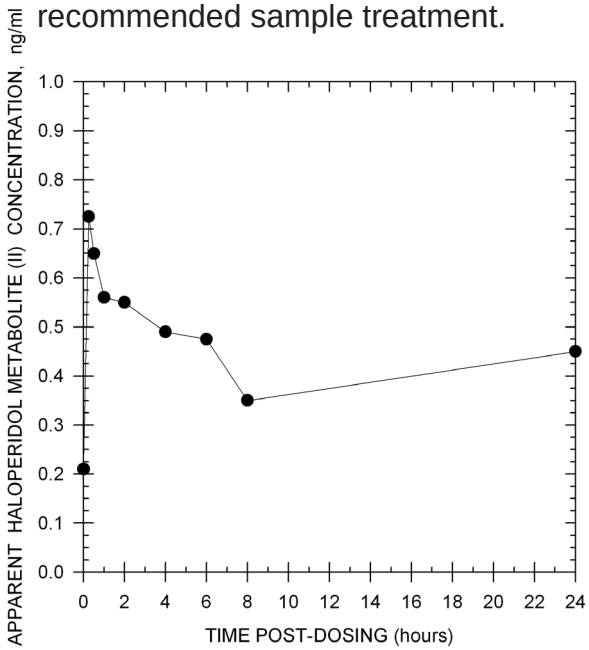
After administration of 5 mg of Haloperidol by intravenous injection to one horse, the presence of this drug and/or its metabolites were detectable starting at 6 hours up to the 288 hour time point in equine urine. However, the 240 hour time point was not detectable. All samples were diluted 1:3 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 5 mg of Haloperidol by intravenous injection to one horse, the presence of this drug was detectable at the 15 and 30 minute time point in equine plasma. All samples were diluted 1:1 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Bromperidol	157%
Haloperidol Metabolite (II) ((+/-)-4-(4-Chlorophenyl)-α-(4-fluorophenyl)-4-hydroxy-1-piperidinebutanol)	100%
Haloperidol	84%
Haloperidol Metabolite (I) (4-(4-Chlorophenyl)-4-hydroxypiperidine)	48%
Azaperone	0.002%

Acepromazine	<0.01%	Meperidine	<0.01%
Acetaminophen	<0.01%	Mesoridazine	<0.01%
Acetophenazine	<0.01%	Metaproterenol	<0.01%
Amitriptyline	<0.01%	Methadone	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methaqualone	<0.01%
Aspirin	<0.01%	Methocarbamol	<0.01%
Benperidol	<0.01%	Methylene Blue	<0.01%
Bumetanide	<0.01%	6α-Methylprednisolone	<0.01%
Chlordiazepoxide	<0.01%	Nalorphine	<0.01%
Chloropromazine	<0.01%	Naproxen	<0.01%
Chlorprothixene	<0.01%	Niacinamide	<0.01%
Clenbuterol	<0.01%	Nortriptyline	<0.01%
Cotinine	<0.01%	Orphenadrine	<0.01%
Detomidine	<0.01%	Oxyphenbutazone	<0.01%
Dexamethasone	<0.01%	Penicillin G-Potassium	<0.01%
Dextromethorphan	<0.01%	Penicillin G-Procaine	<0.01%
Diclofenac	<0.01%	Pentoxifylline	<0.01%
Dimethyl Sulfoxide	<0.01%	Perphenazine	<0.01%
Dipyrone	<0.01%	Phencyclidine	<0.01%
Doxepin	<0.01%	Phenothiazine	<0.01%
Droperidol	<0.01%	Phenylbutazone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Pimozide	<0.01%
Erythromycin	<0.01%	Polyethylene Glycol	<0.01%
Ethacrynic Acid	<0.01%	Prednisolone	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Primadone	<0.01%
Fenoprofen	<0.01%	Procainamide	<0.01%
Fluanisone	<0.01%	Procaine	<0.01%
Flunixin	<0.01%	Prochlorperazine	<0.01%
Fluphenazine	<0.01%	Promazine	<0.01%
Furosemide	<0.01%	Promethazine	<0.01%
Gemfibrozil	<0.01%	Pyrantel	<0.01%
Gentisic Acid	<0.01%	Pyrilamine	<0.01%
Glipizide	<0.01%	Quinidine	<0.01%
Glutethimide	<0.01%	Quinine	<0.01%
Glycopyrrolate	<0.01%	Risperidone	<0.01%
Haloperidol Metabolite (III) (3-(4-Fluorobenzoyl) propionic acid)	<0.01%	Salbutamol (Albuterol)	<0.01%
Heparin	<0.01%	Salicylamide	<0.01%
Hordenine	<0.01%	Salicylic Acid	<0.01%
Hydrochlorothiazide	<0.01%	Spiperone	<0.01%
Hydrocortisone	<0.01%	Theophylline	<0.01%
Ibuprofen	<0.01%	Thiamine	<0.01%
Imipramine	<0.01%	Thioridazine	<0.01%
Isoxsuprine	<0.01%	Thiothexene	<0.01%
Lidocaine	<0.01%	Trifluoperazine	<0.01%
		Triflupromazine	<0.01%
		Trimipramine	<0.01%

ENHANCED KIT
HYDROCHLOROTHIAZIDE

Product #180310
& 180315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Hydrochlorothiazide	12 ng/mL
Trichlormethiazide	6 ng/mL
Chlorothiazide	123 ng/mL

I-50 in Equine Urine (Diluted 1:19)		I-50 in Canine Urine (Diluted 1:9)	
Hydrochlorothiazide	370 ng/mL	Hydrochlorothiazide	216 ng/mL
Trichlormethiazide	243 ng/mL	Trichlormethiazide	258 ng/mL
Chlorothiazide	4148 ng/mL	Chlorothiazide	481 ng/mL

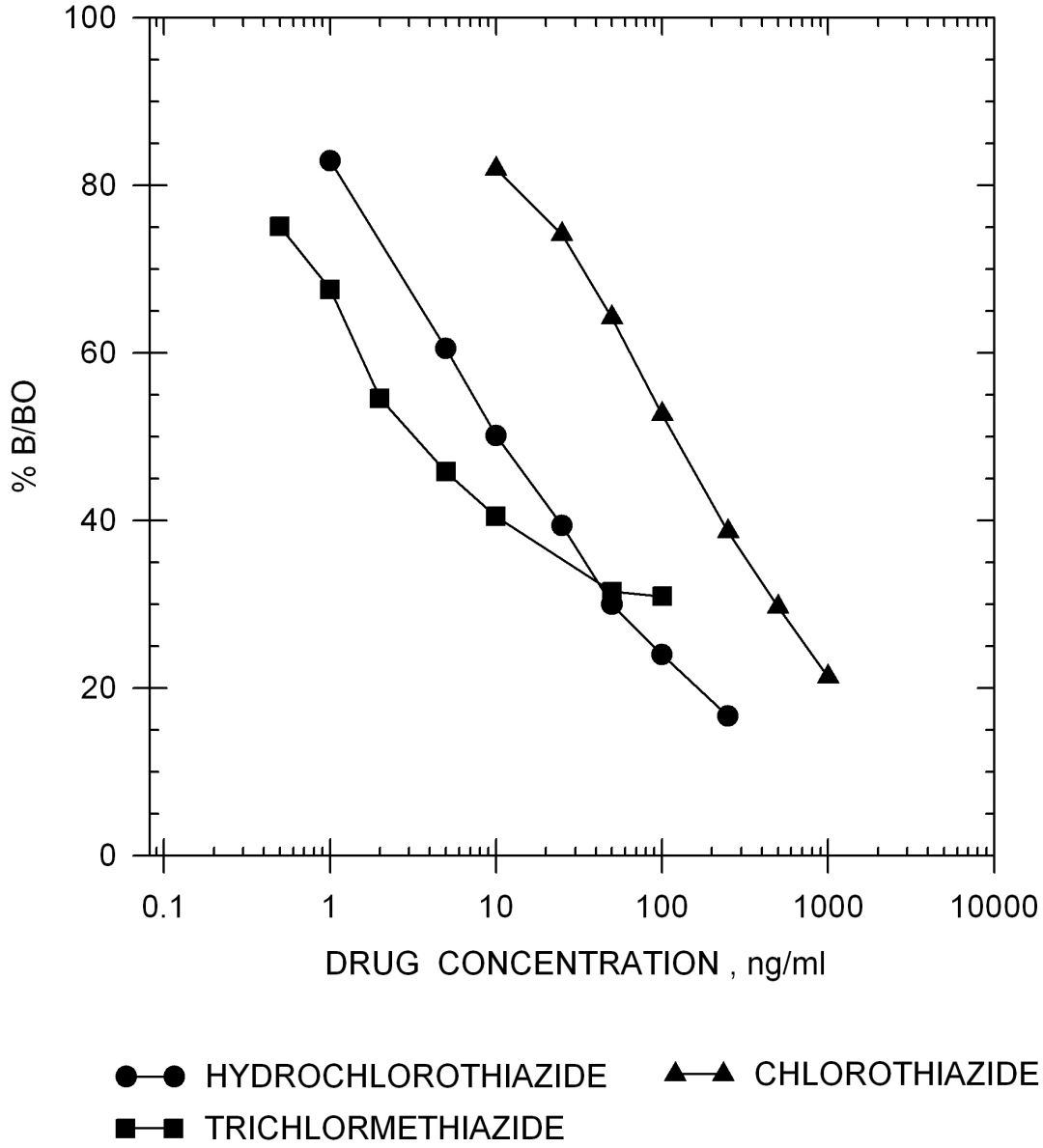
I-50 in Equine Serum (Diluted 1:4)		I-50 in Equine Plasma (Diluted 1:4)	
Hydrochlorothiazide	51 ng/mL	Hydrochlorothiazide	45 ng/mL
Trichlormethiazide	11 ng/mL	Trichlormethiazide	22 ng/mL
Chlorothiazide	635 ng/mL	Chlorothiazide	558 ng/mL

Precision: Intra-Assay 3.24%
Inter-Assay 3.01%

Note: Measuring wavelength was 650 nm.

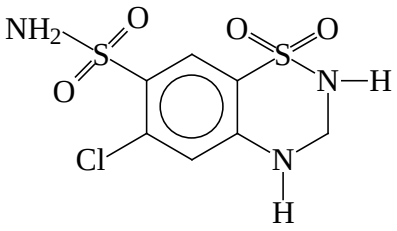
HYDROCHLOROTHIAZIDE STANDARD CURVES

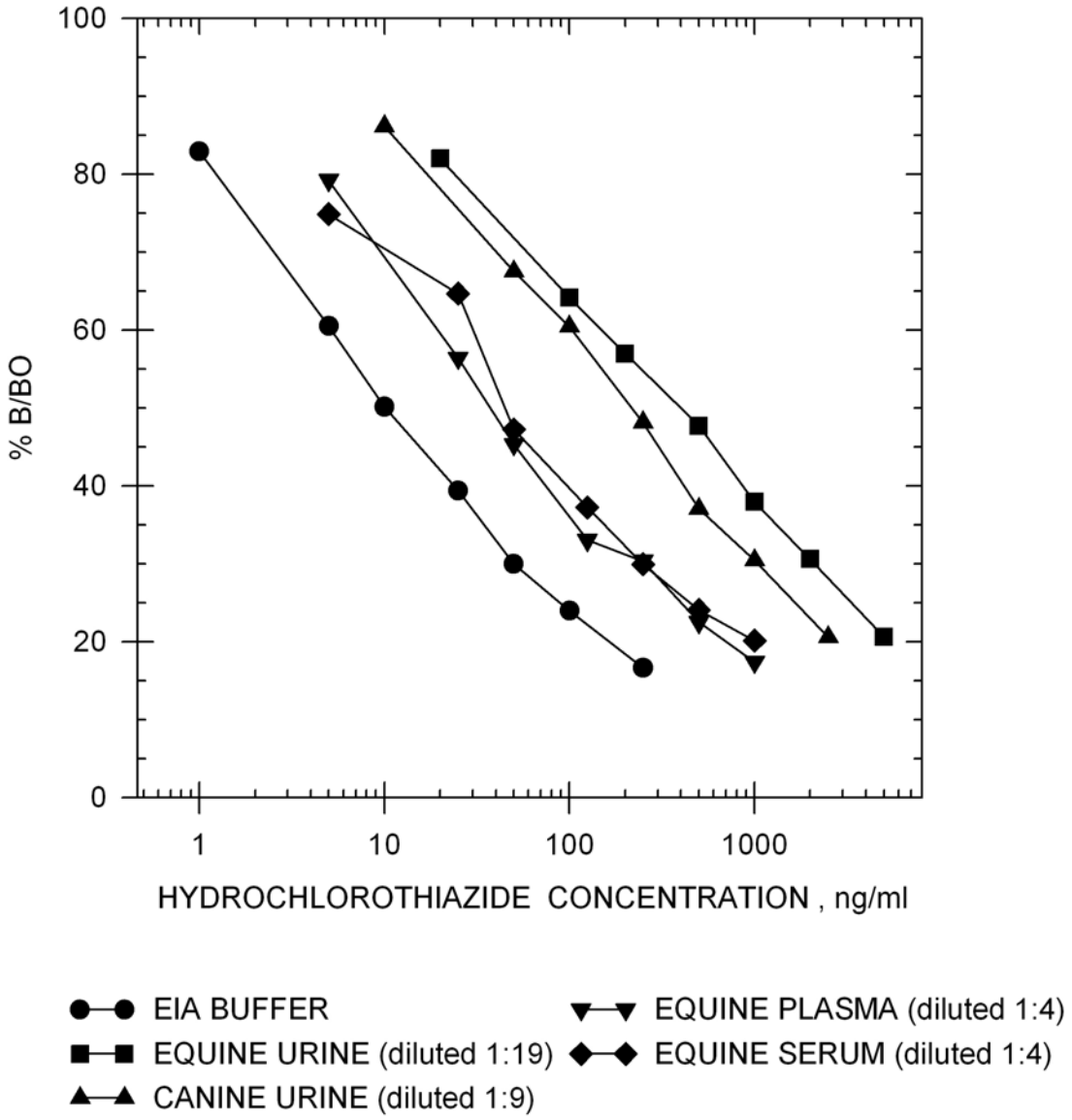
Drug Standard Curve Comparison in EIA Buffer



HYDROCHLOROTHIAZIDE STANDARD CURVES

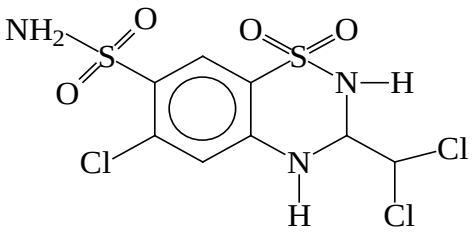
Hydrochlorothiazide

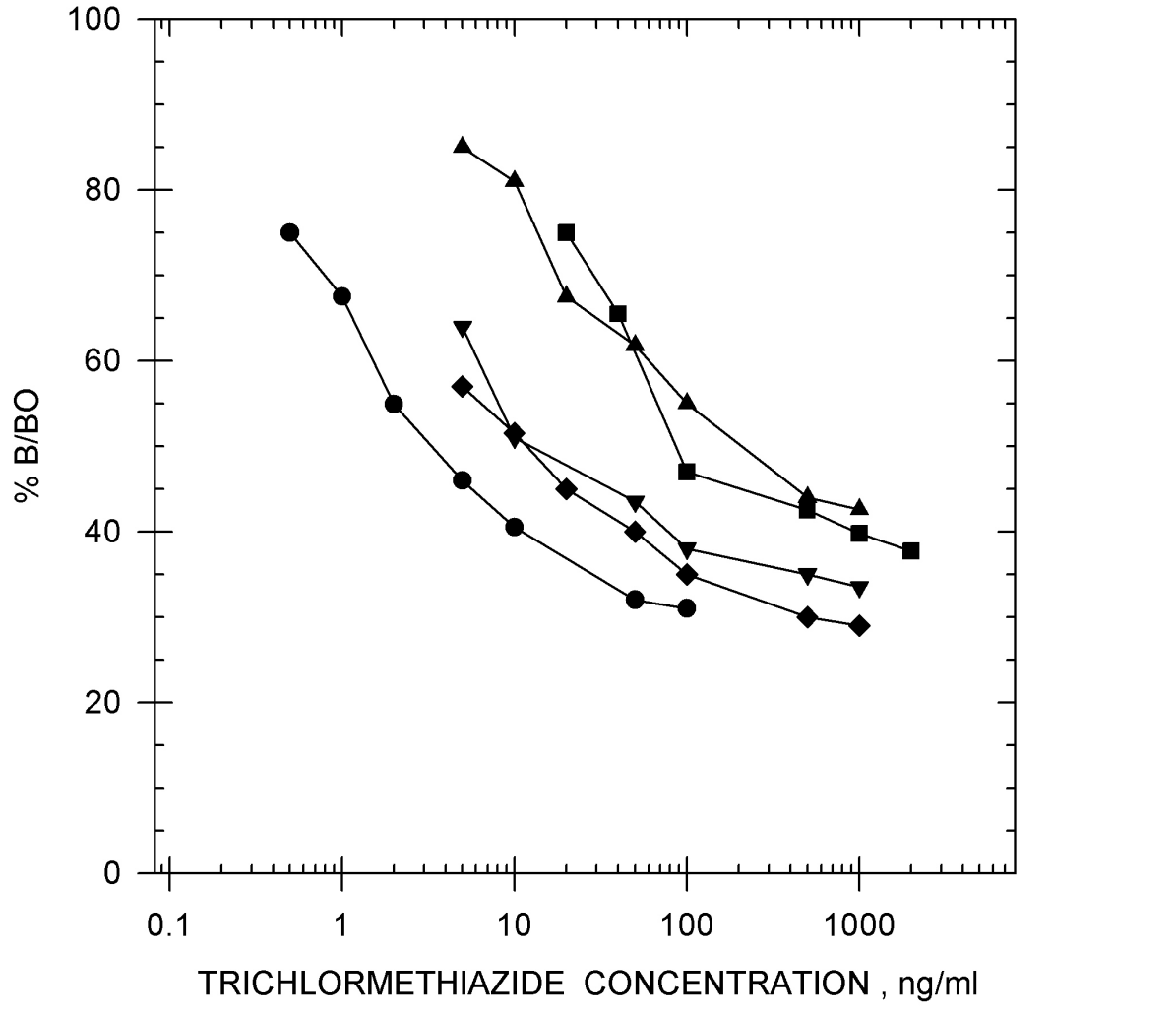




HYDROCHLOROTHIAZIDE STANDARD CURVES

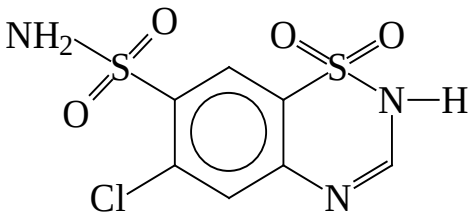
Trichlormethiazide

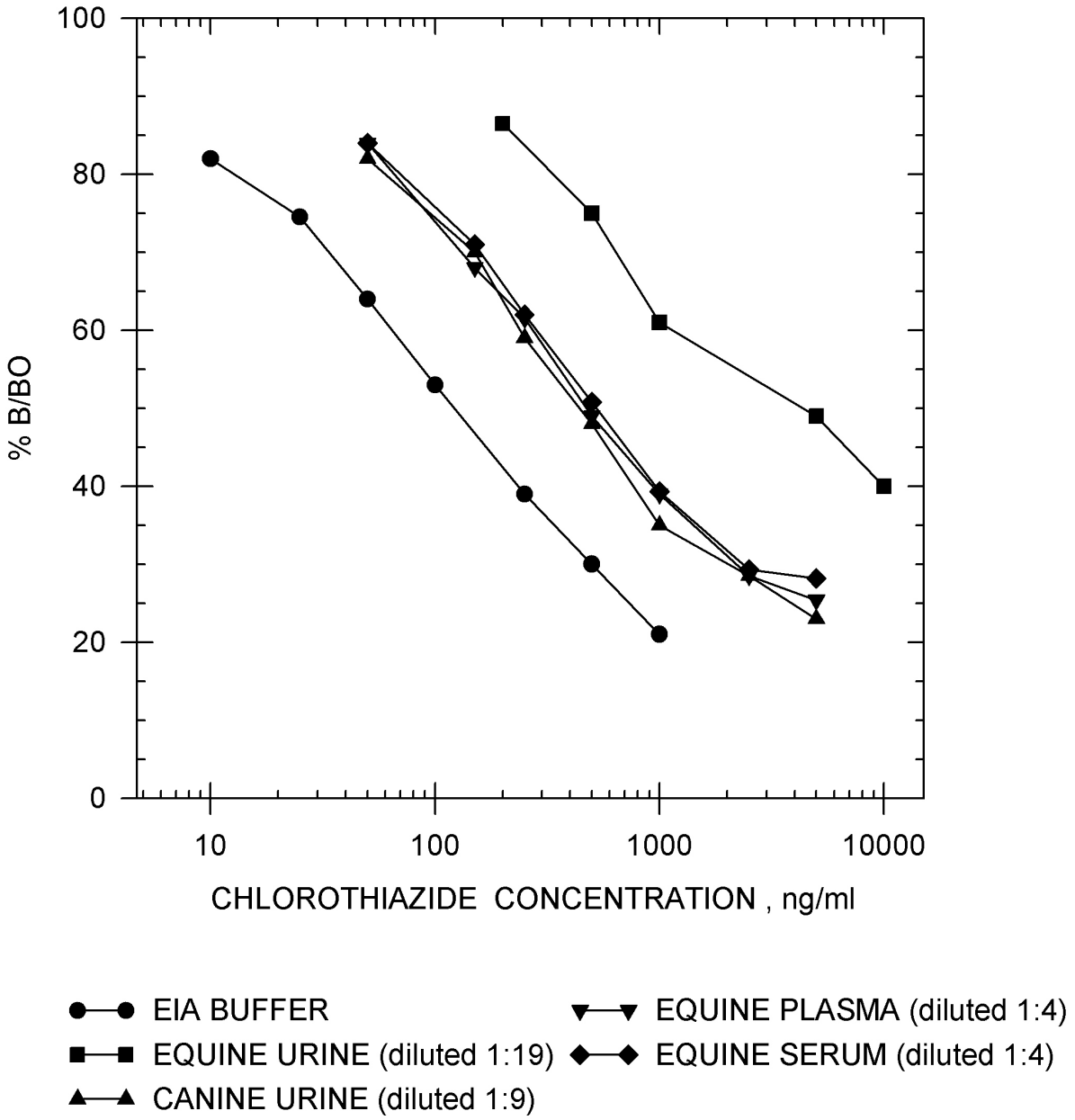




HYDROCHLOROTHIAZIDE STANDARD CURVES

Chlorothiazide

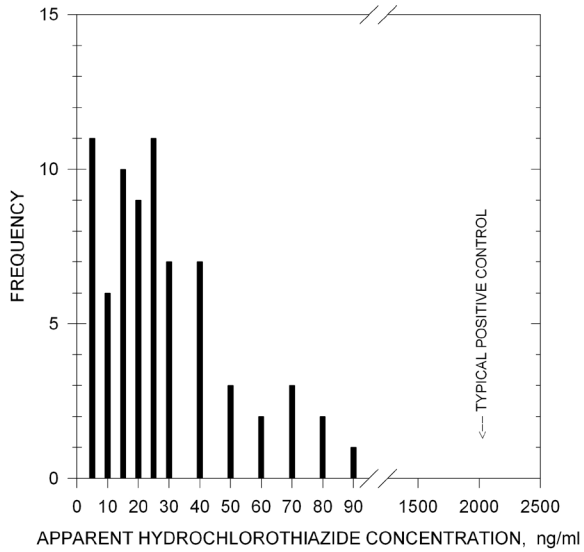




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 72 post-race equine urine samples, diluted 1:19, has shown no background levels above 83 ng/ml.

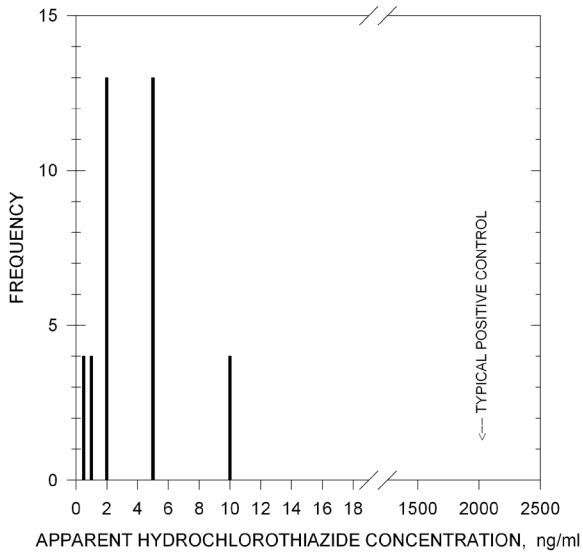
Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 38 post-race canine urine samples, diluted 1:9, has shown no background levels above 9 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.



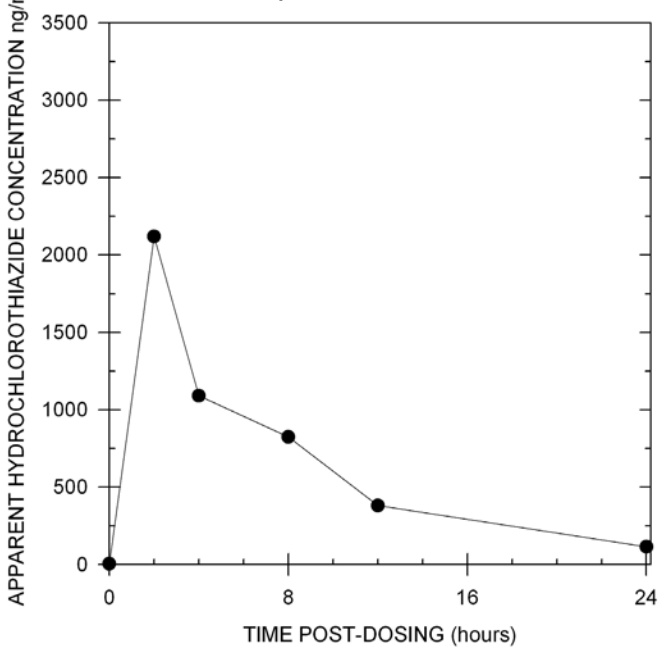
ADDITIONAL BACKGROUND LEVELS

Sample Treatment: A 1:4 dilution (i.e. 1 part sample to 4 parts EIA buffer) may be necessary to reduce natural backgrounds.

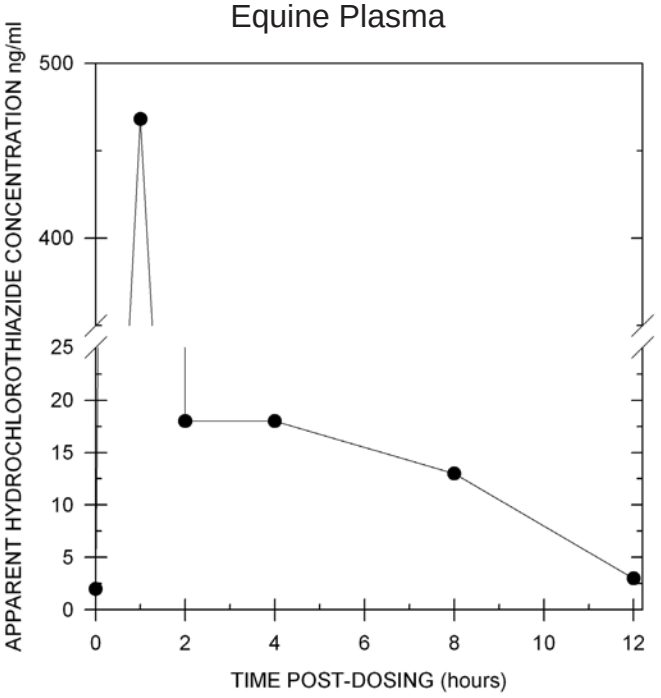
TYPICAL DURATION OF DETECTION

Equine Urine and Plasma: An administration of 125 mg IV Hydrochlorothiazide was given to one horse. Urine samples were diluted 1:19 with EIA according to the recommended dilution and then diluted an additional 1:5 to backfit into the standard curve. Plasma samples were diluted 1:4 with EIA according to the recommended dilution and then diluted 1:1 to backfit into the standard curve.

Equine Urine



Equine Plasma



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Trichlormethiazide	206%
Hydrochlorothiazide	100%
Chlorothiazide	8%
Furosemide	0.24%
Methylene Blue	0.01%

Acepromazine	<0.01%	Meperidine	<0.01%
Acetaminophen	<0.01%	Metaproterenol	<0.01%
Acetylsalicylic Acid	<0.01%	Methadone	<0.01%
Amitriptyline	<0.01%	Methaqualone	<0.01%
Ascorbic Acid	<0.01%	Methocarbamol	<0.01%
Benzoic Acid	<0.01%	Methylprednisolone	<0.01%
Caffeine	<0.01%	Nalorphine	<0.01%
E-amino-n-Caproic Acid	<0.01%	Naproxen	<0.01%
Chlordiazepoxide	<0.01%	Niacinamide	<0.01%
Chlorpromazine	<0.01%	Nicotine	<0.01%
Clenbuterol	<0.01%	Nortriptyline	<0.01%
Codeine	<0.01%	Orphenadrine	<0.01%
Cotinine	<0.01%	Oxyphenbutazone	<0.01%
Dexamethasone	<0.01%	PCP	<0.01%
Dextromethorphan	<0.01%	Penicillin G-Potassium	<0.01%
Diclofenac	<0.01%	Penicillin G-Procaine	<0.01%
Dimethyl Sulfoxide	<0.01%	Pentoxifylline	<0.01%
Dipyrone	<0.01%	Phenothiazine	<0.01%
Doxepin	<0.01%	Phenylbutazone	<0.01%
Ephedrine	<0.01%	Polyethylene Glycol	<0.01%
Erythromycin	<0.01%	Prednisolone	<0.01%
Ethyl p-amino-benzoate	<0.01%	Primadone	<0.01%
Fenoprofen	<0.01%	Procainamide	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Folic Acid	<0.01%	Promazine	<0.01%
Folinic Acid	<0.01%	Pseudoephedrine	<0.01%
Gemfibrozil	<0.01%	Pyrantel	<0.01%
Gentisic Acid	<0.01%	Pyrilamine	<0.01%
Glipizide	<0.01%	Pyrimethamine	<0.01%
L-Glutamic Acid	<0.01%	Quinidine	<0.01%
Glutethimide	<0.01%	Quinine	<0.01%
Glycopyrrolate	<0.01%	Salbutamol	<0.01%
Heparin	<0.01%	Salicylamide	<0.01%
Hippuric Acid	<0.01%	Salicylic Acid	<0.01%
Hordenine	<0.01%	Theophylline	<0.01%
Hydrocortisone	<0.01%	Thiamine	<0.01%
Ibuprofen	<0.01%	Trimethoprim	<0.01%
Imipramine	<0.01%	Trimipramine	<0.01%
Isoxsuprine	<0.01%	Uric Acid	<0.01%
Lidocaine			

ENHANCED KIT

HYDROMORPHONE

Product #106610-1 & 106615-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Codeine	0.25 ng/ml
Hydromorphone	0.25 ng/ml
Levorphanol	0.25 ng/ml
Morphine	0.25 ng/ml
Dihydrocodeine	0.29 ng/ml
Ethylmorphine	0.3 ng/ml
Heroin	0.3 ng/ml
Hydrocodone	0.4 ng/ml
Thebaine	2.0 ng/ml
Levallorphan	7.0 ng/ml
Oxymorphone	25.0 ng/ml
Oxycodone	45.0 ng/ml
Nalorphine	60.0 ng/ml

I-50 in Equine Urine

Codeine	0.35 ng/ml
Hydromorphone	0.30 ng/ml
Levorphanol	0.25 ng/ml
Morphine	0.20 ng/ml
Ethylmorphine	0.45 ng/ml
Heroin	0.35 ng/ml
Hydrocodone	0.25 ng/ml
Thebaine	2.10 ng/ml
Levallorphan	11.0 ng/ml

I-50 in Canine Urine

Codeine	0.38 ng/ml
Hydromorphone	0.30 ng/ml
Levorphanol	0.30 ng/ml
Morphine	0.35 ng/ml
Ethylmorphine	0.55 ng/ml
Heroin	0.25 ng/ml
Hydrocodone	0.45 ng/ml
Thebaine	4.0 ng/ml
Levallorphan	35.0 ng/ml

I-50 in Equine Plasma

Codeine	0.50 ng/ml
Hydromorphone	0.30 ng/ml
Levorphanol	0.60 ng/ml
Morphine	0.20 ng/ml
Ethylmorphine	0.30 ng/ml
Heroin	0.55 ng/ml
Hydrocodone	0.40 ng/ml
Thebaine	4.50 ng/ml
Levallorphan	150 ng/ml

I-50 in Equine Serum

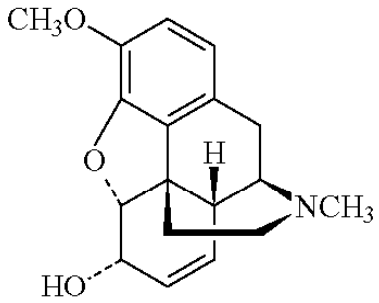
Codeine	0.40 ng/ml
Hydromorphone	0.35 ng/ml
Levorphanol	0.50 ng/ml
Morphine	0.30 ng/ml
Ethylmorphine	0.60 ng/ml
Heroin	0.45 ng/ml
Hydrocodone	0.55 ng/ml
Thebaine	3.50 ng/ml
Levallorphan	200 ng/ml

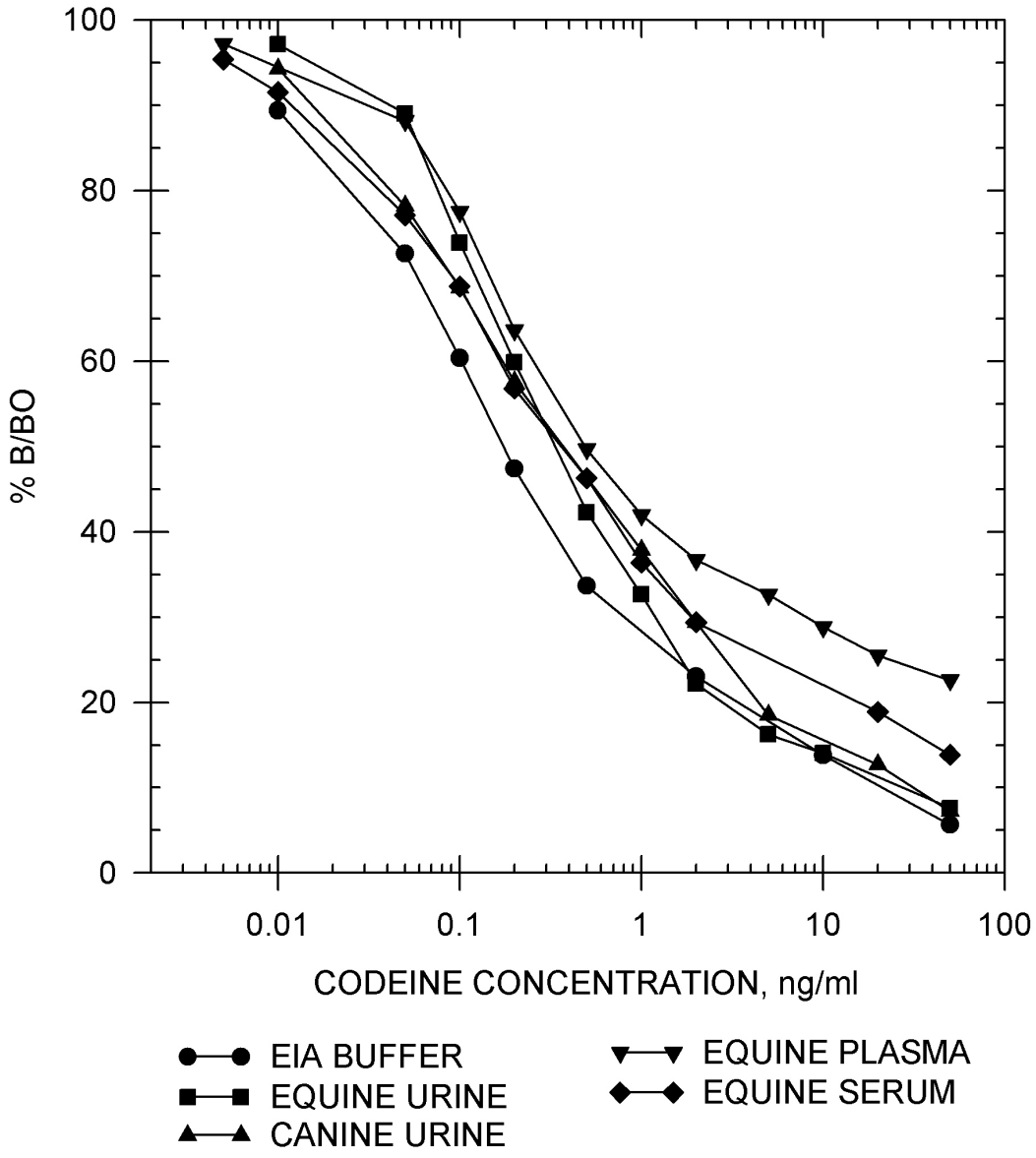
Precision:

Intra-assay	5.54%
Inter-assay	6.40%

HYDROMORPHONE STANDARD CURVES

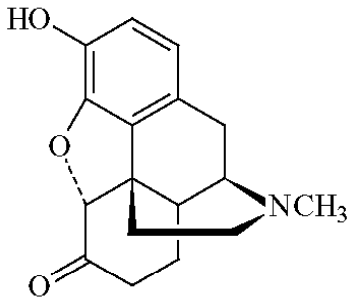
Codeine

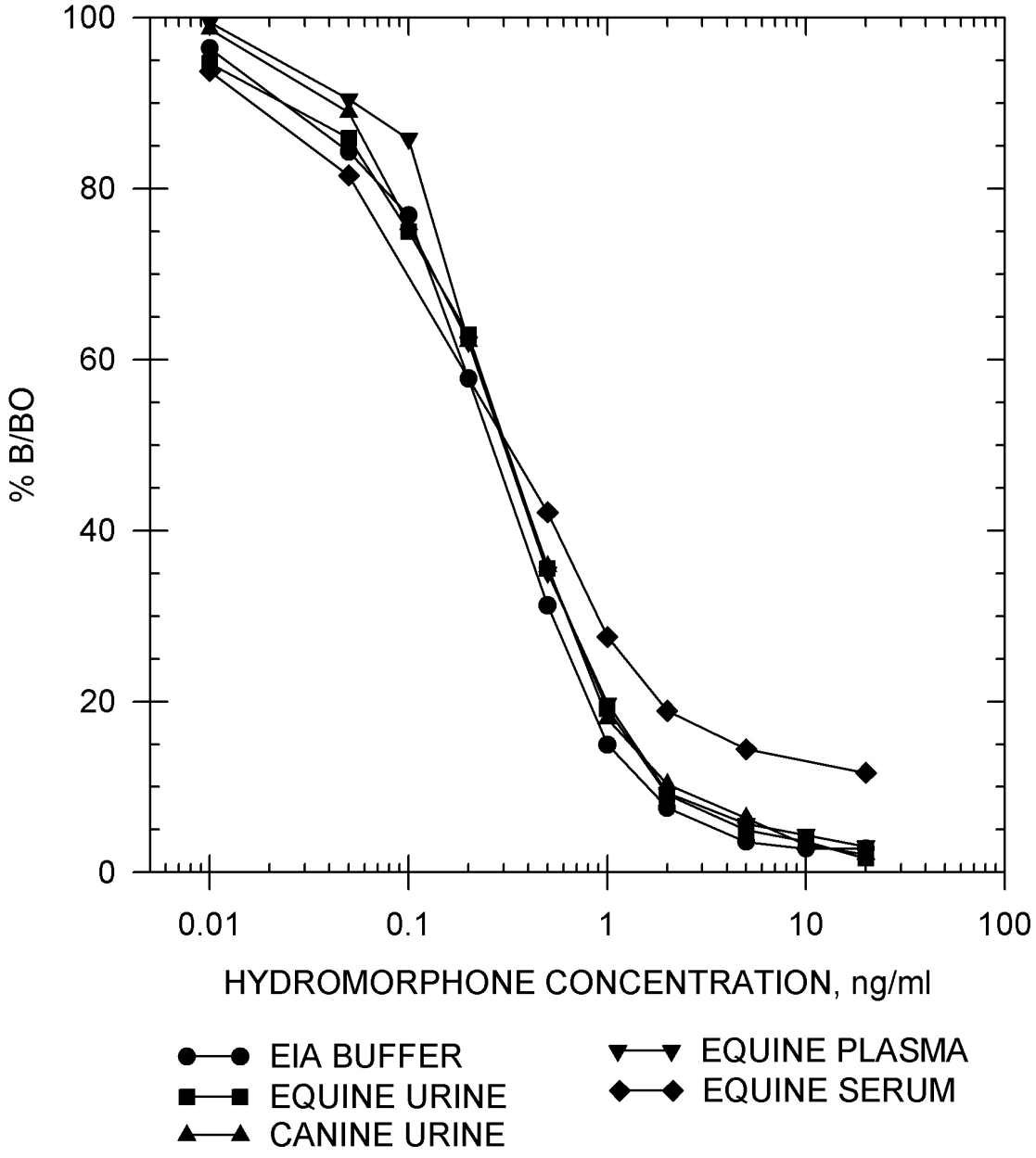




HYDROMORPHONE STANDARD CURVES

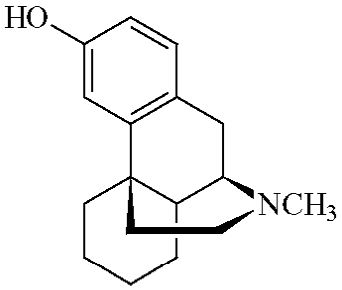
Hydromorphone

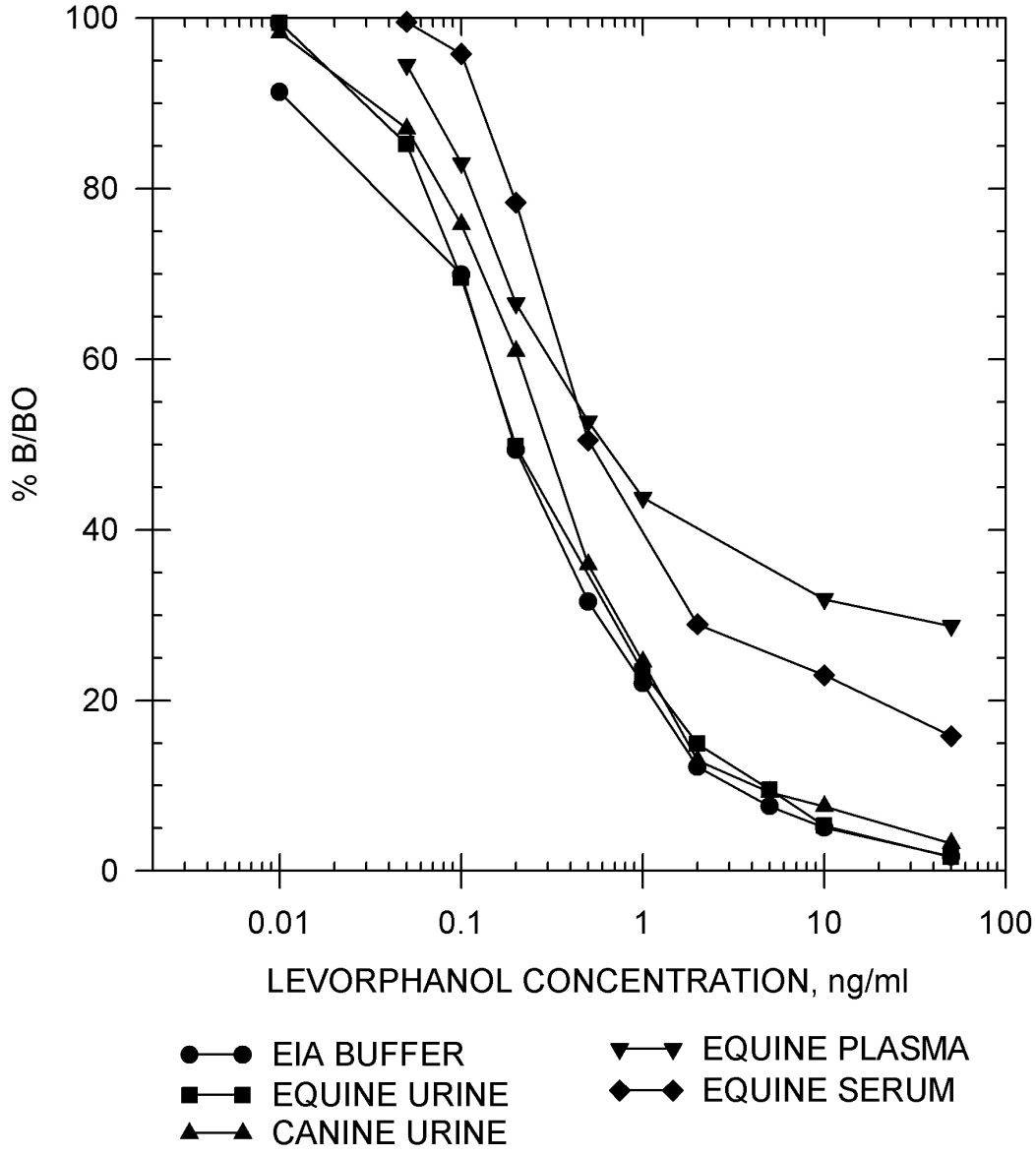




HYDROMORPHONE STANDARD CURVES

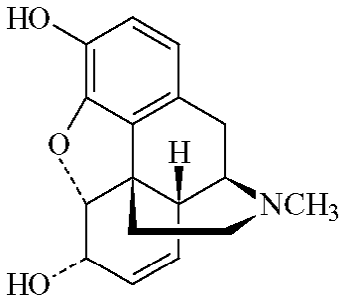
Levorphanol

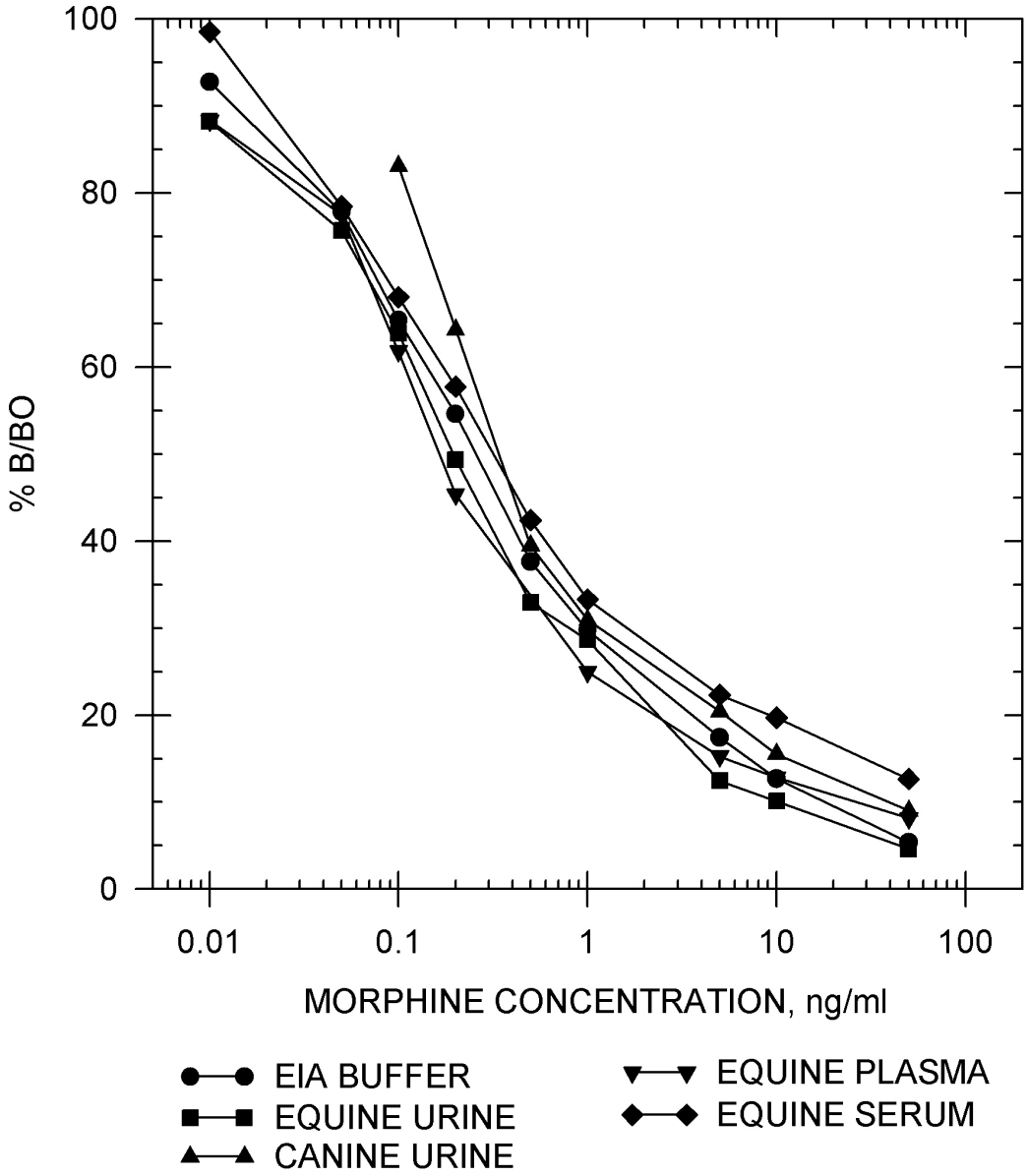




HYDROMORPHONE STANDARD CURVES

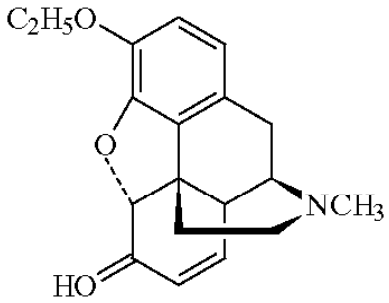
Morphine

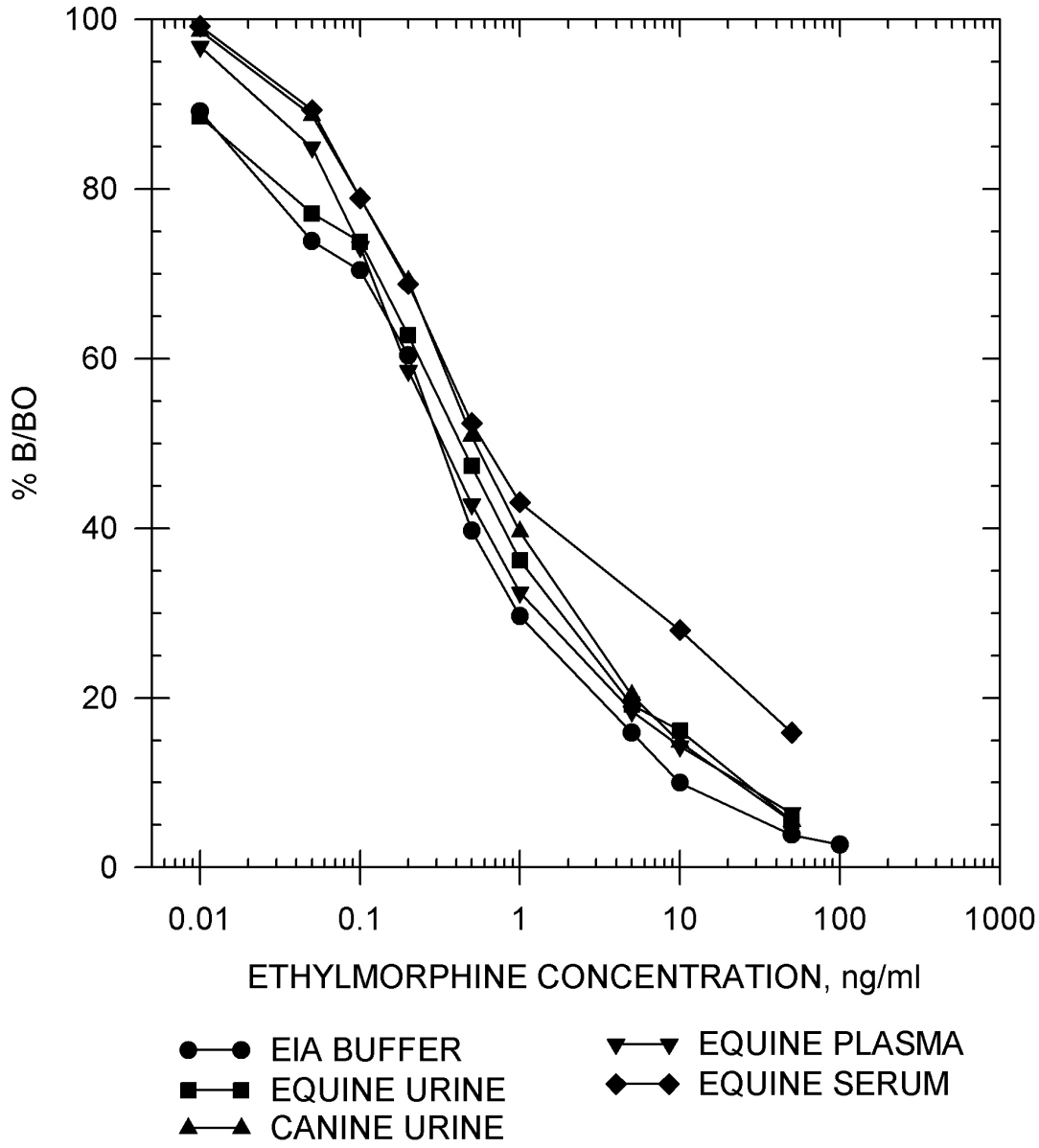




HYDROMORPHONE STANDARD CURVES

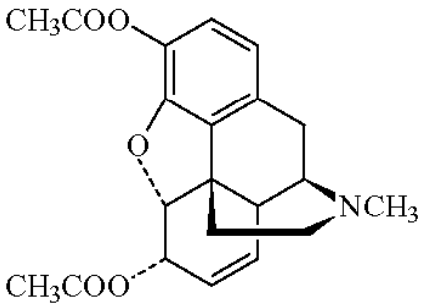
Ethylmorphine

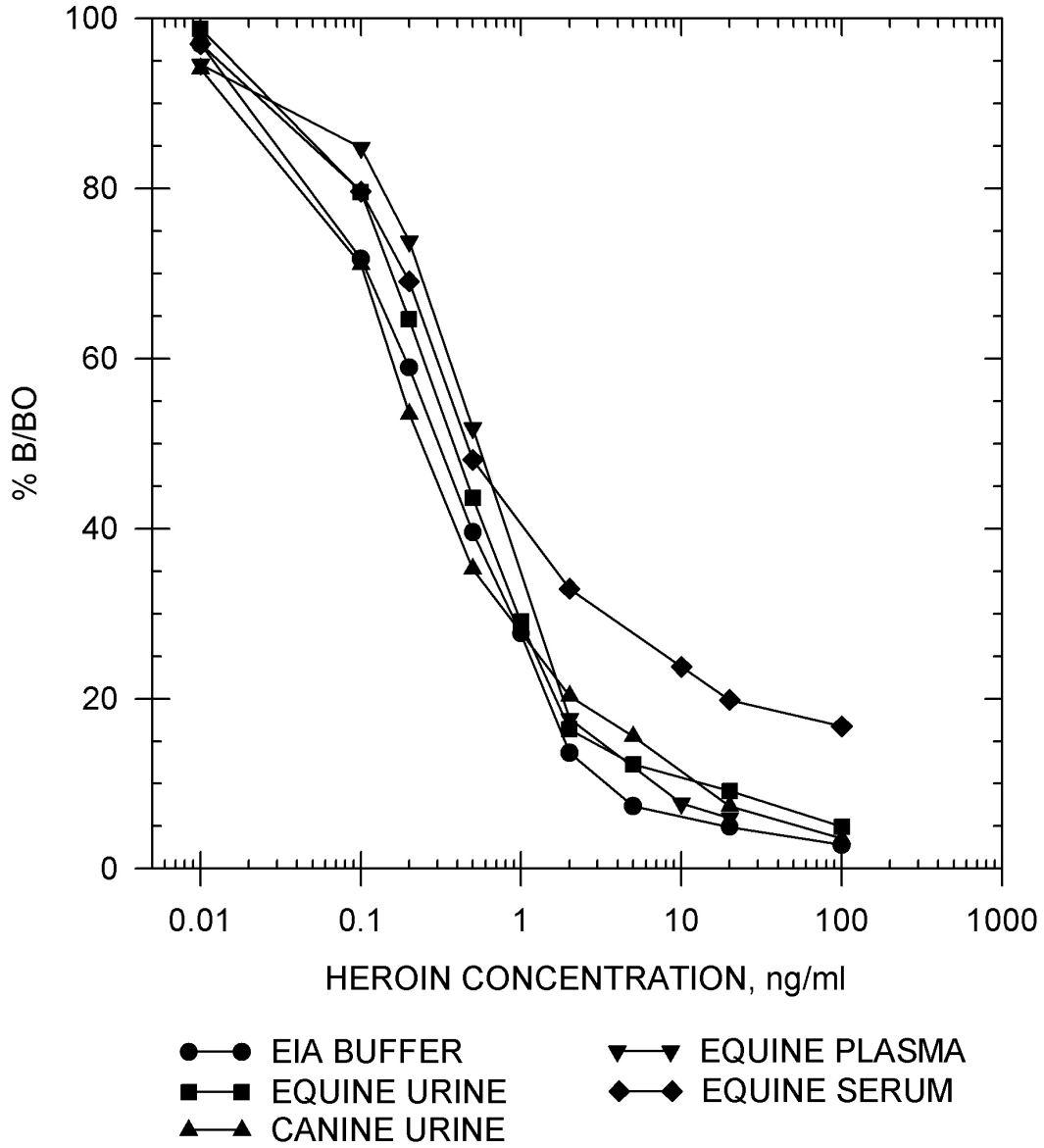




HYDROMORPHONE STANDARD CURVES

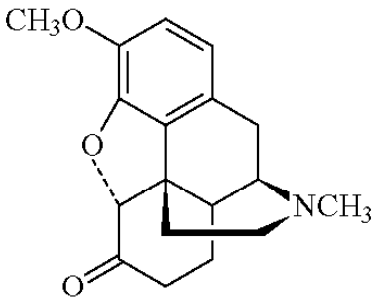
Heroin

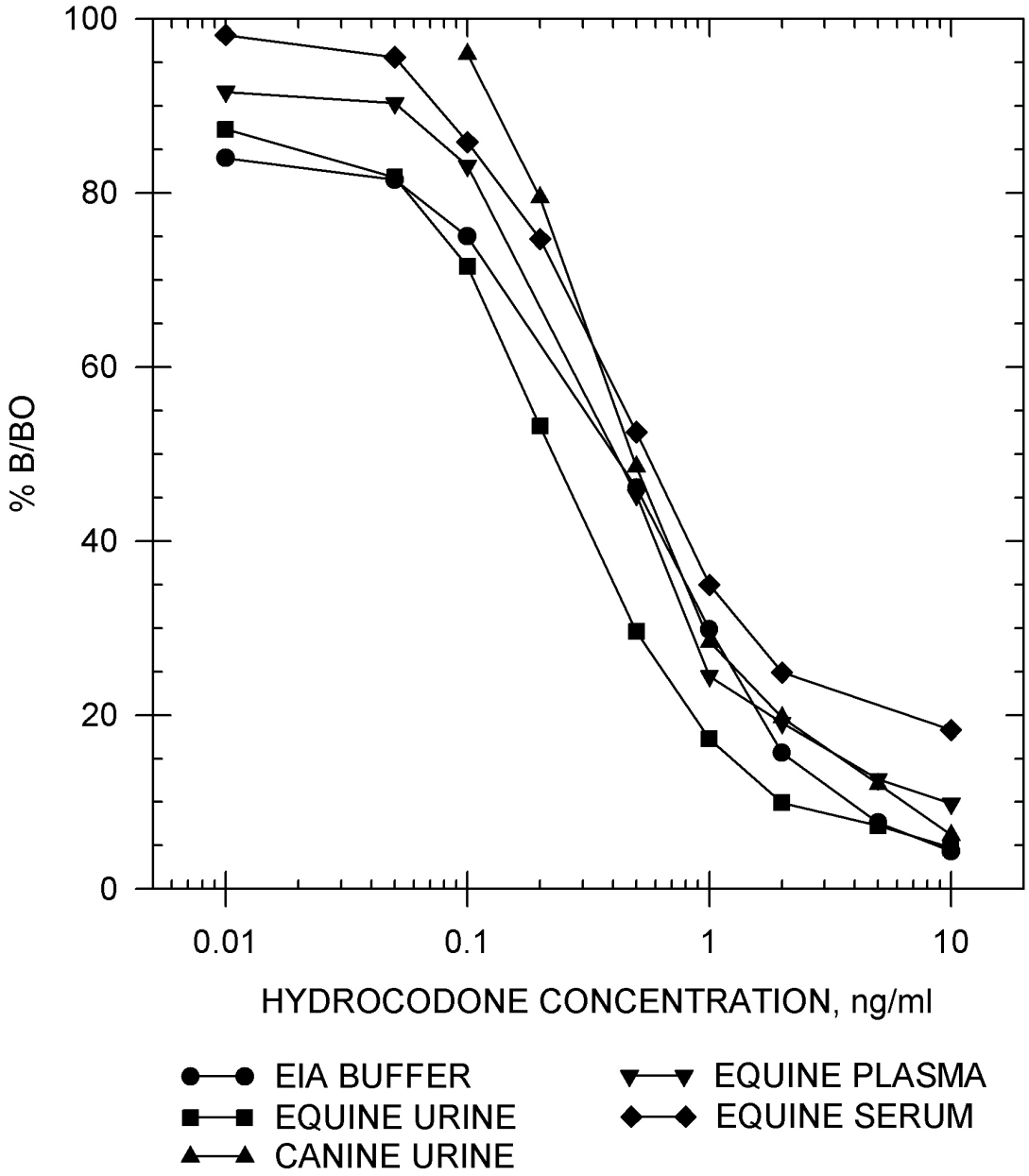




HYDROMORPHONE STANDARD CURVES

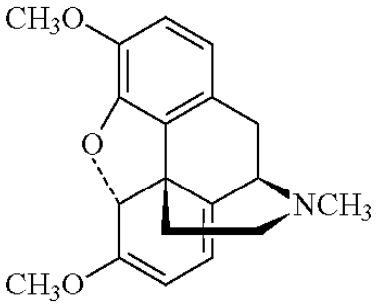
Hydrocodone

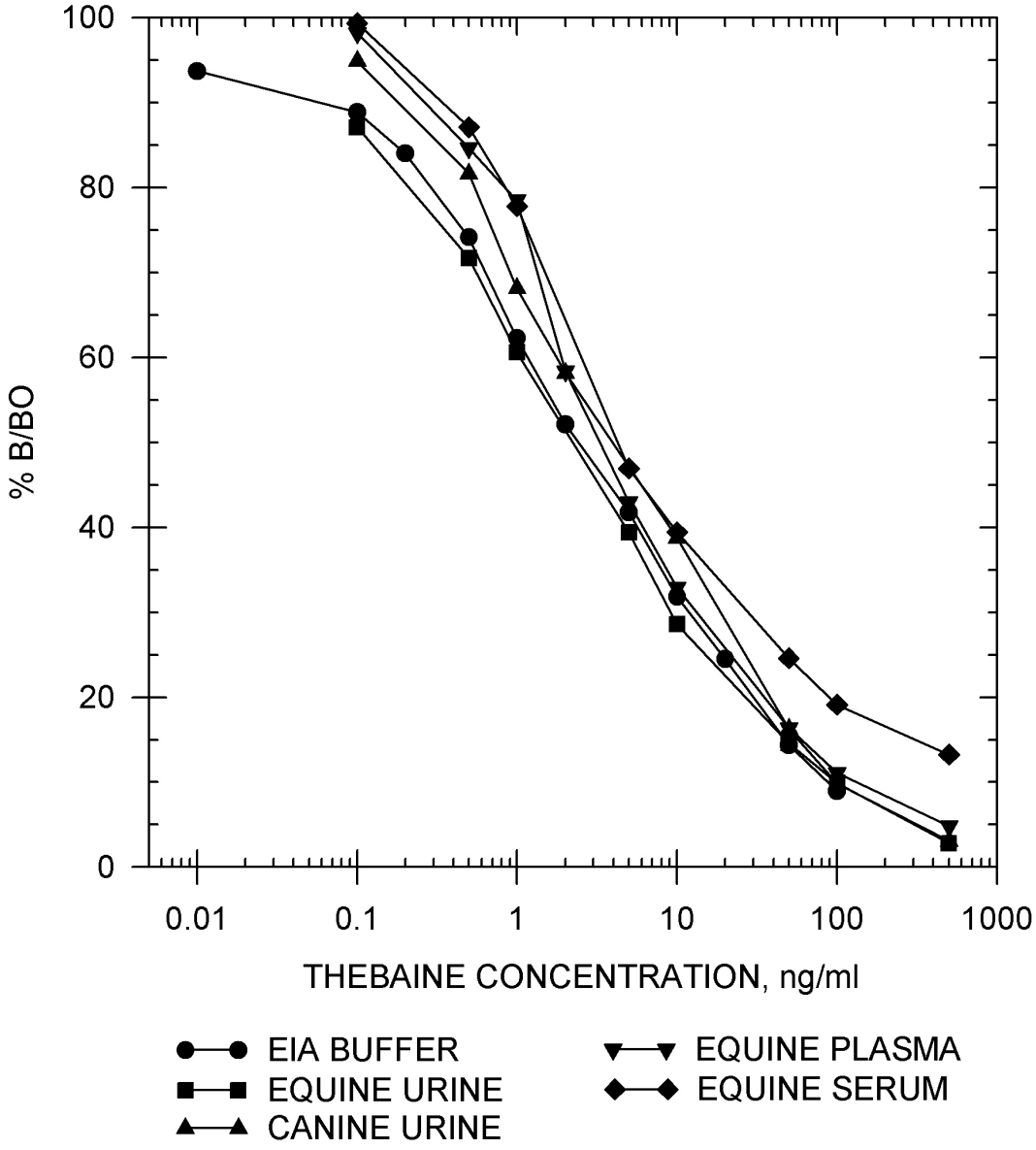




HYDROMORPHONE STANDARD CURVES

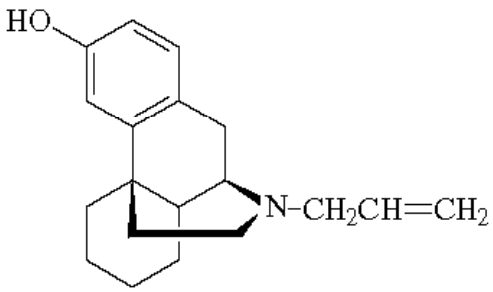
Thebaine

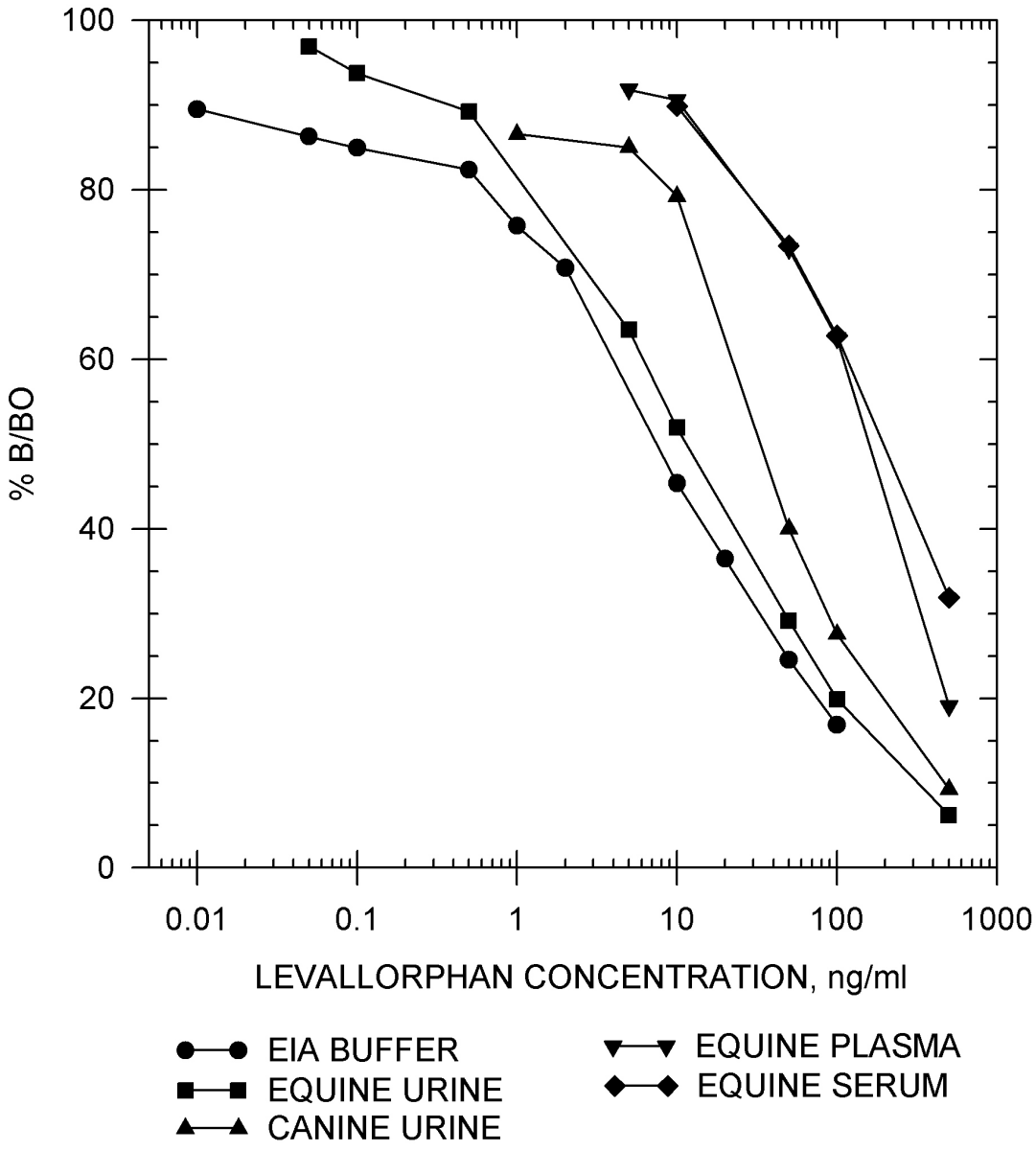




HYDROMORPHONE STANDARD CURVES

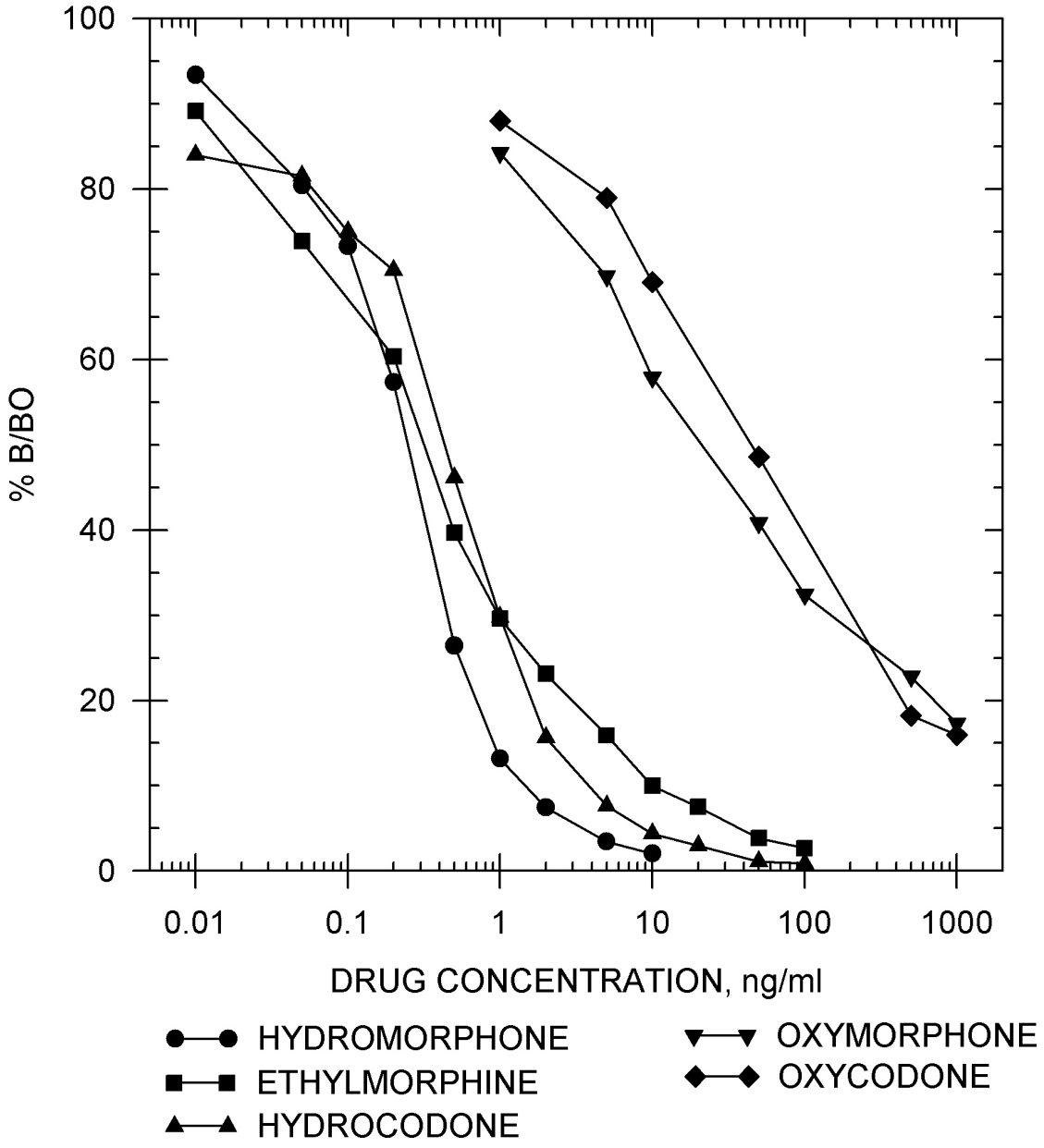
Levallorphan





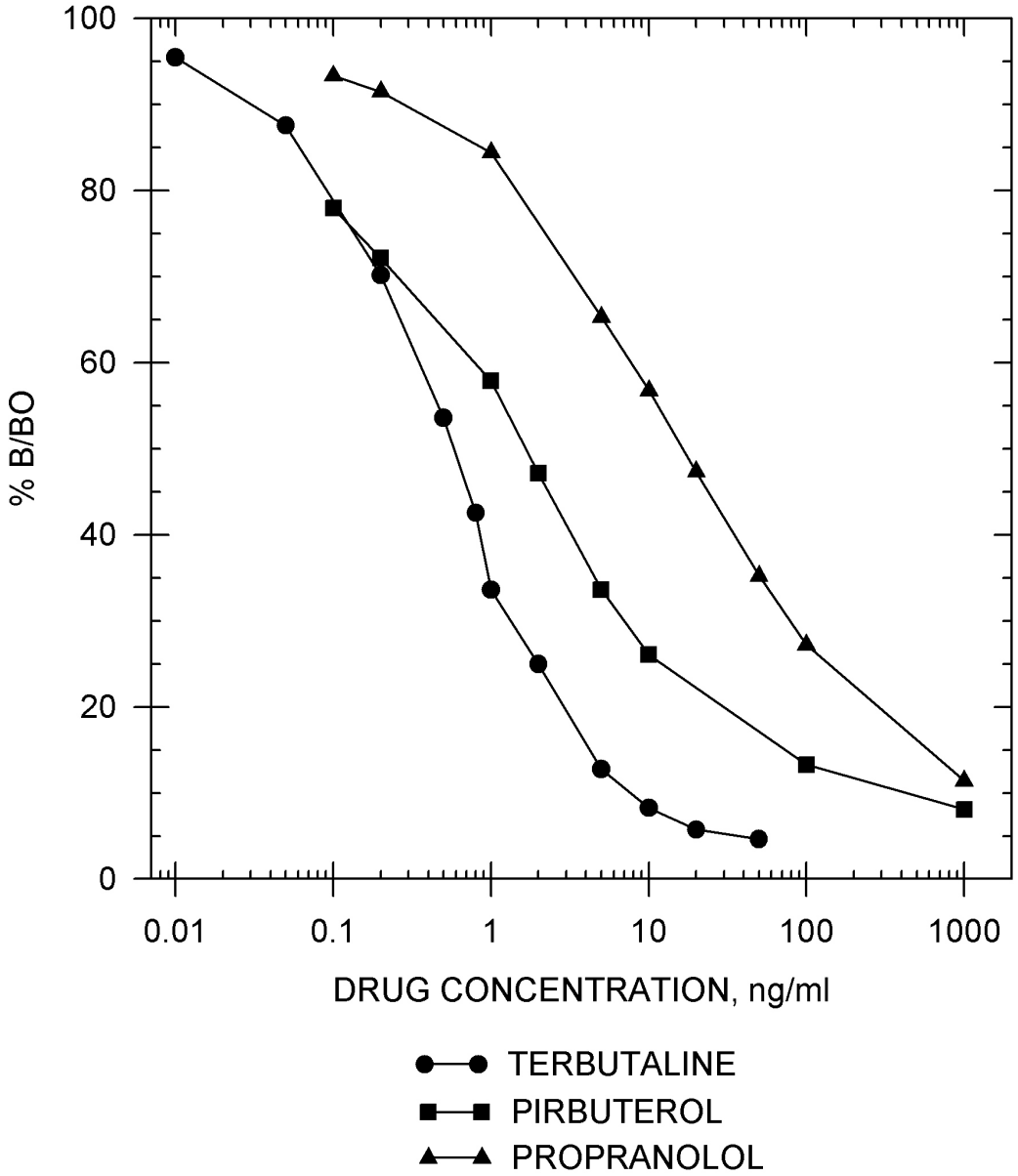
HYDROMORPHONE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



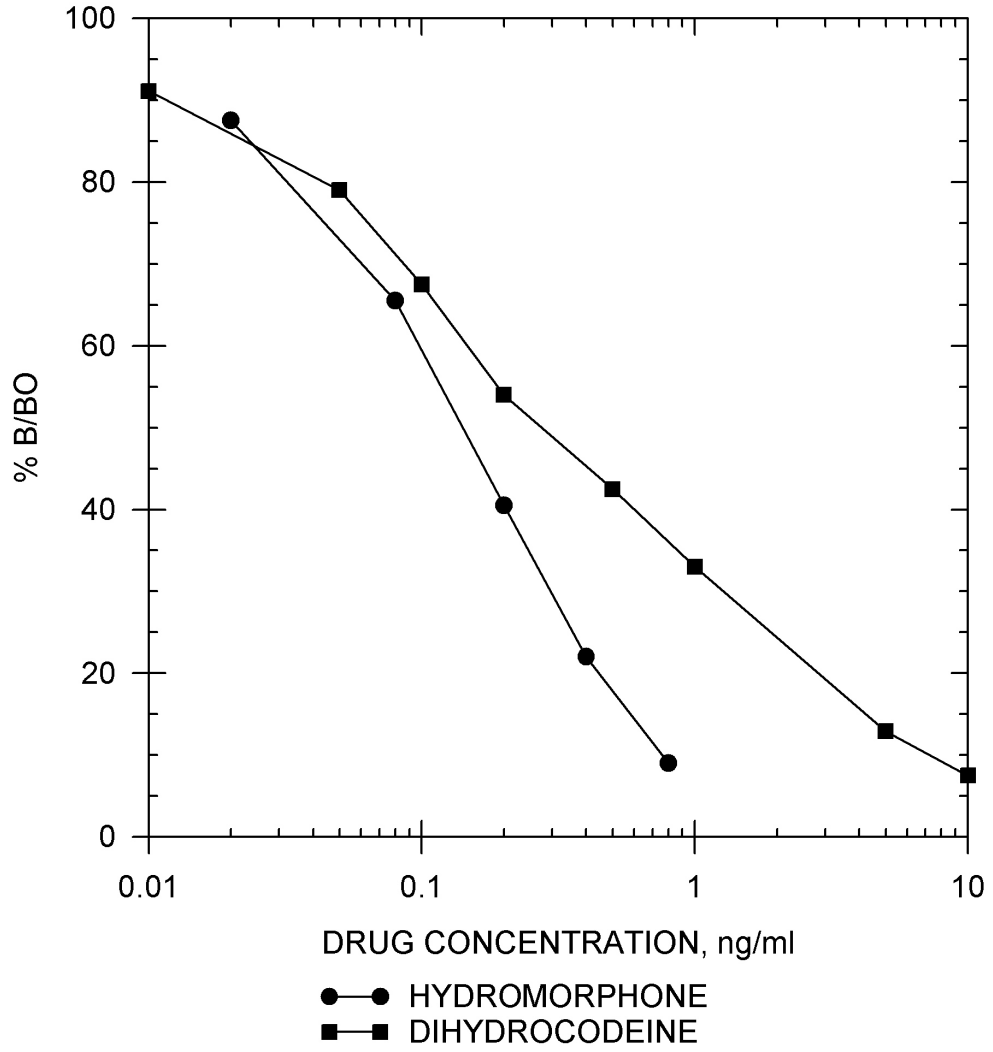
HYDROMORPHONE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



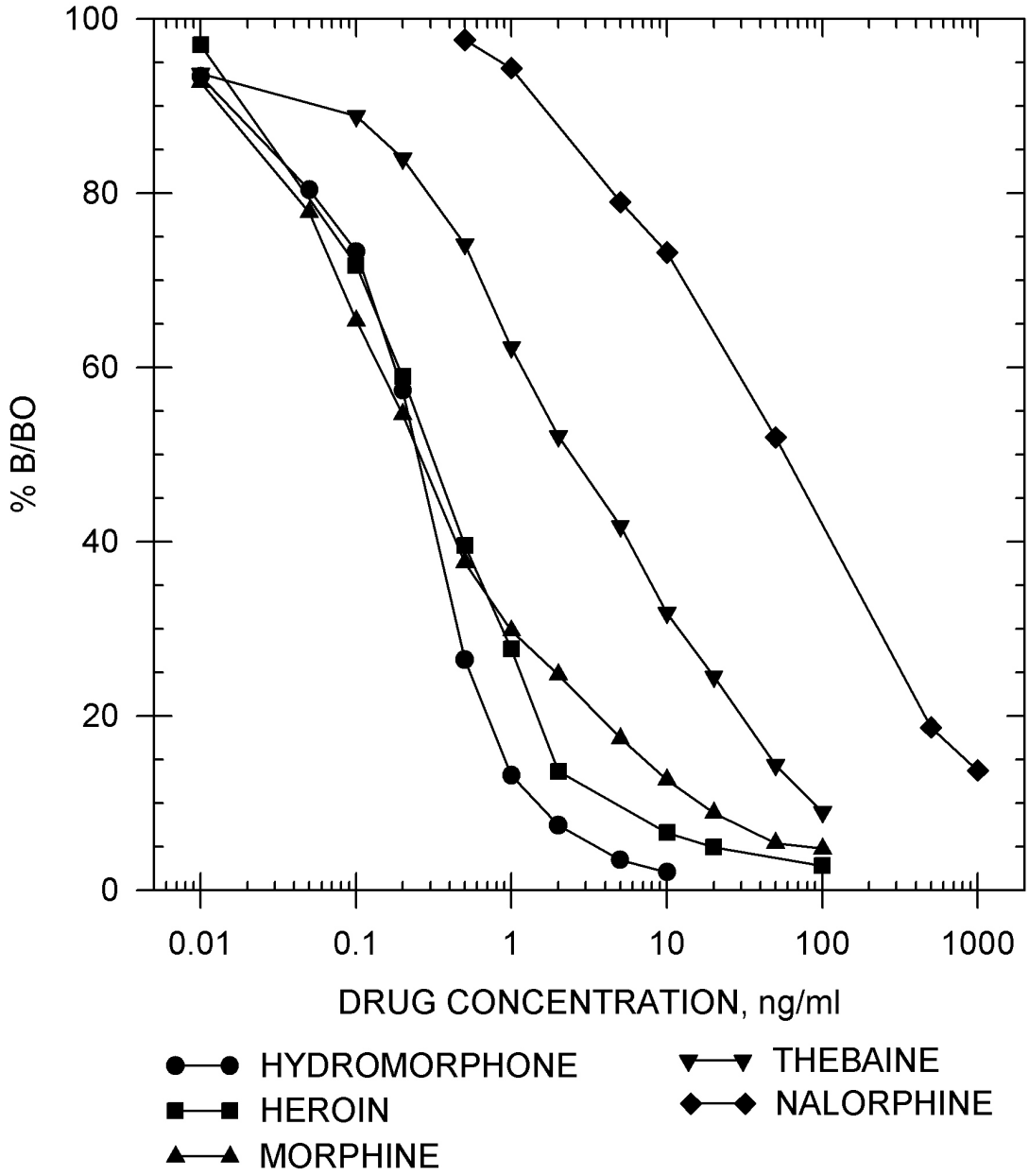
HYDROMORPHONE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



HYDROMORPHONE STANDARD CURVES

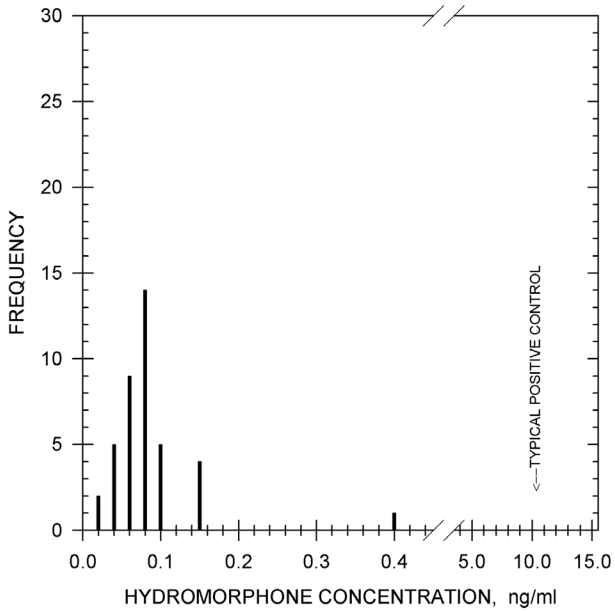
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.4 ng/ml.

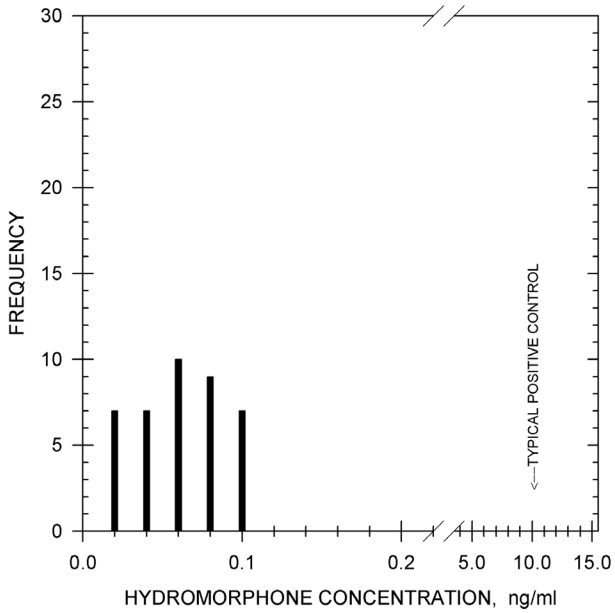
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.1 ng/ml.

Sample Treatment: No sample dilution is necessary.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Codeine	100%
Hydromorphone	100%
Levorphanol	100%
Morphine	100%
Ethylmorphine	83%
Heroin	83%
Hydrocodone	63%
Dihydrocodeine	41%
Thebaine	13%
Levallorphan	4%
Oxymorphone	1%
Oxycodone	0.6%
Nalorphine	0.4%
Norcodeine	0.1%
Normorphine	0.03%
Dextromethorphan	0.02%
Naloxone	0.02%
Imipramine	0.01%
Meperidine	0.01%
Noroxymorphone	0.01%

Acepromazine*	<0.01%	Fenoprofen	<0.01%	Niacinamide	<0.01%
Acetaminophen	<0.01%	Fentanyl	<0.01%	Nortriptyline	<0.01%
Alfentanil	<0.01%	Flunixin	<0.01%	Orphenadrine	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Furosemide	<0.01%	Oxyphenbutazone	<0.01%
Amitriptyline	<0.01%	Gemfibrozil	<0.01%	Penicillin G-Potassium	<0.01%
Anileridine	<0.01%	Gentisic Acid	<0.01%	Penicillin G-Procaine	<0.01%
Apomorphine*	<0.01%	Glipizide	<0.01%	Pentazocine	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Glutethimide	<0.01%	Pentoxifylline	<0.01%
Aspirin	<0.01%	Glycopyrrolate	<0.01%	Phencyclidine	<0.01%
Buprenorphine	<0.01%	Hordenine	<0.01%	Phenothiazine	<0.01%
Butorphanol	<0.01%	Hydrocortisone	<0.01%	Phenylbutazone	<0.01%
Carfentanil	<0.01%	Hydromorphone-3β-D-		Polyethylene Glycol	<0.01%
Chlordiazepoxide	<0.01%	Glucuronide	<0.01%	Prednisolone	<0.01%
Chlorpromazine	<0.01%	Ibuprofen	<0.01%	Primadone	<0.01%
Clenbuterol	<0.01%	Isoxsuprine	<0.01%	Procainamide	<0.01%
Cotinine	<0.01%	Lidocaine	<0.01%	Procaine	<0.01%
Dexamethasone	<0.01%	Lofentanil	<0.01%	Promazine*	<0.01%
Dextromoramide	<0.01%	Metaproterenol	<0.01%	Pyrantel	<0.01%
Dezocine	<0.01%	Methadone*	<0.01%	Pyrilamine	<0.01%
Diclofenac	<0.01%	Methaqualone	<0.01%	Quinidine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methocarbamol	<0.01%	Quinine	<0.01%
Diprenorphine	<0.01%	Methylene Blue	<0.01%	Salbutamol	<0.01%
Dipyrone	<0.01%	6α-Methylprednisolone	<0.01%	Salicylamide	<0.01%
Doxepin	<0.01%	Mitragynine	<0.01%	Salicylic Acid	<0.01%
Erythromycin	<0.01%	Morphine-3β-D-Glucuronide	<0.01%	Sufentanil	<0.01%
Ethyl p-Amino-Benzoate		Nalbuphine	<0.01%	Theophylline	<0.01%
(Benzocaine)	<0.01%	Naloxone*	<0.01%	Thiamine	<0.01%
Etorphine	<0.01%	Naproxen	<0.01%	Trimipramine	<0.01%

*Compounds experienced some reaction up to 10 μg/ml but still had less than 0.01% cross-reactivity.

ENHANCED KIT
HYDROXYZINE

Product #105710 &
105715 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Hydroxyzine	0.1 ng/ml	Diphenhydramine	4.8 ng/ml
Cetirizine	0.3 ng/ml	Flunarizine	16 ng/ml
Chlorphenoxamine	1.6 ng/ml	Cinnarizine	21 ng/ml
Cyclizine	2.1 ng/ml	Orphenadrine	35 ng/ml
Meclizine	4.3 ng/ml	Chlorpheniramine	41 ng/ml

I-50 in Equine Urine (Diluted 1:3)

Hydroxyzine	0.6 ng/ml
Cetirizine	1.8 ng/ml
Chlorphenoxamine	3.2 ng/ml
Cyclizine	8.5 ng/ml
Meclizine	83 ng/ml
Diphenhydramine	18 ng/ml
Flunarizine	188 ng/ml
Cinnarizine	235 ng/ml
Orphenadrine	219 ng/ml
Chlorpheniramine	160 ng/ml

I-50 in Canine Urine (Diluted 1:5)

Hydroxyzine	0.8 ng/ml
Cetirizine	1.1 ng/ml
Chlorphenoxamine	12 ng/ml
Cyclizine	6.6 ng/ml
Meclizine	92 ng/ml
Diphenhydramine	31 ng/ml
Flunarizine	213 ng/ml
Cinnarizine	258 ng/ml
Orphenadrine	232 ng/ml
Chlorpheniramine	240 ng/ml

I-50 in Equine Plasma

Hydroxyzine	0.2 ng/ml
Cetirizine	0.4 ng/ml
Chlorphenoxamine	7.5 ng/ml
Cyclizine	1.5 ng/ml
Meclizine	25 ng/ml
Diphenhydramine	5.0 ng/ml
Flunarizine	36 ng/ml
Cinnarizine	50 ng/ml
Orphenadrine	33 ng/ml
Chlorpheniramine	34 ng/ml

I-50 in Equine Serum

Hydroxyzine	1.2 ng/ml
Cetirizine	0.5 ng/ml
Chlorphenoxamine	220 ng/ml
Cyclizine	2.5 ng/ml
Meclizine	152 ng/ml
Diphenhydramine	14 ng/ml
Flunarizine	65 ng/ml
Cinnarizine	82 ng/ml
Orphenadrine	51 ng/ml
Chlorpheniramine	360 ng/ml

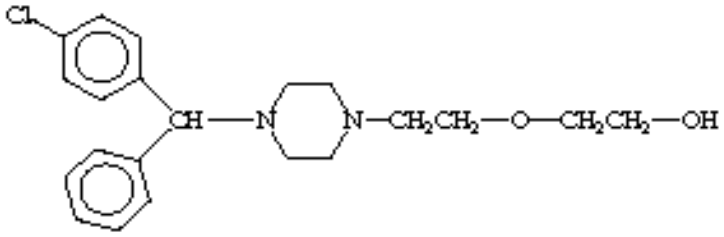
Precision:

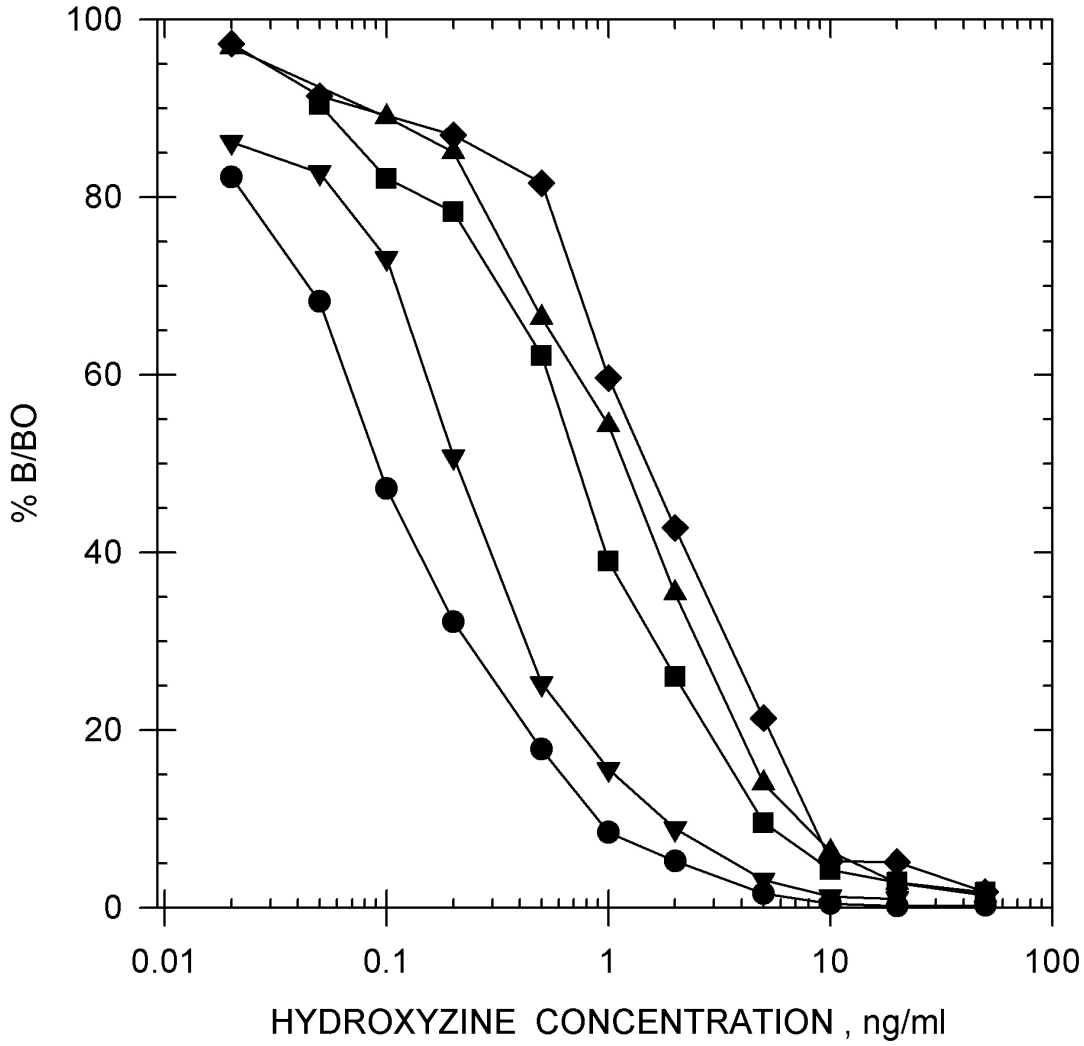
Intra-assay	4.51%
Inter-assay	3.31%

Note: Measuring wavelength was 650 nm**.**

HYDROXYZINE STANDARD CURVES

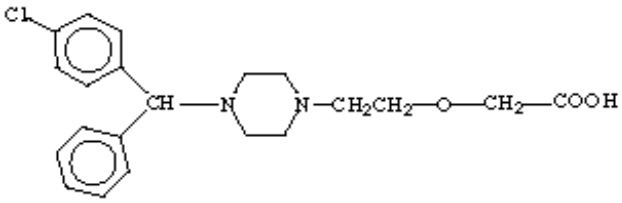
Hydroxyzine

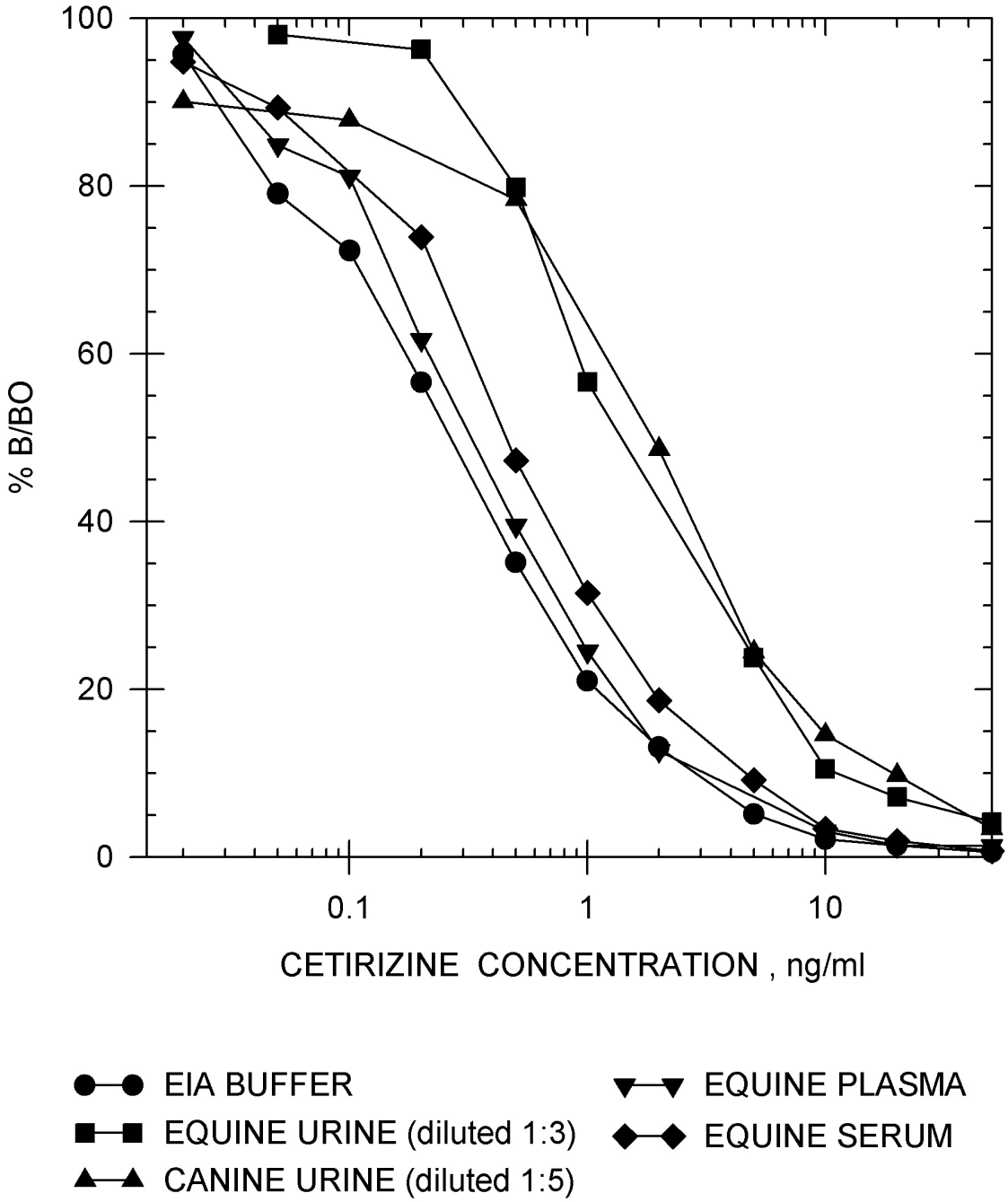




HYDROXYZINE STANDARD CURVES

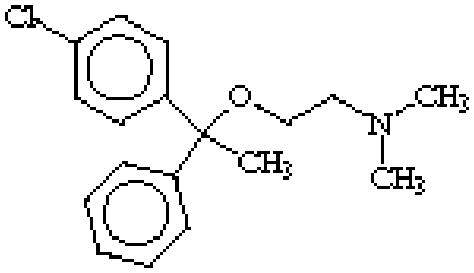
Cetirizine

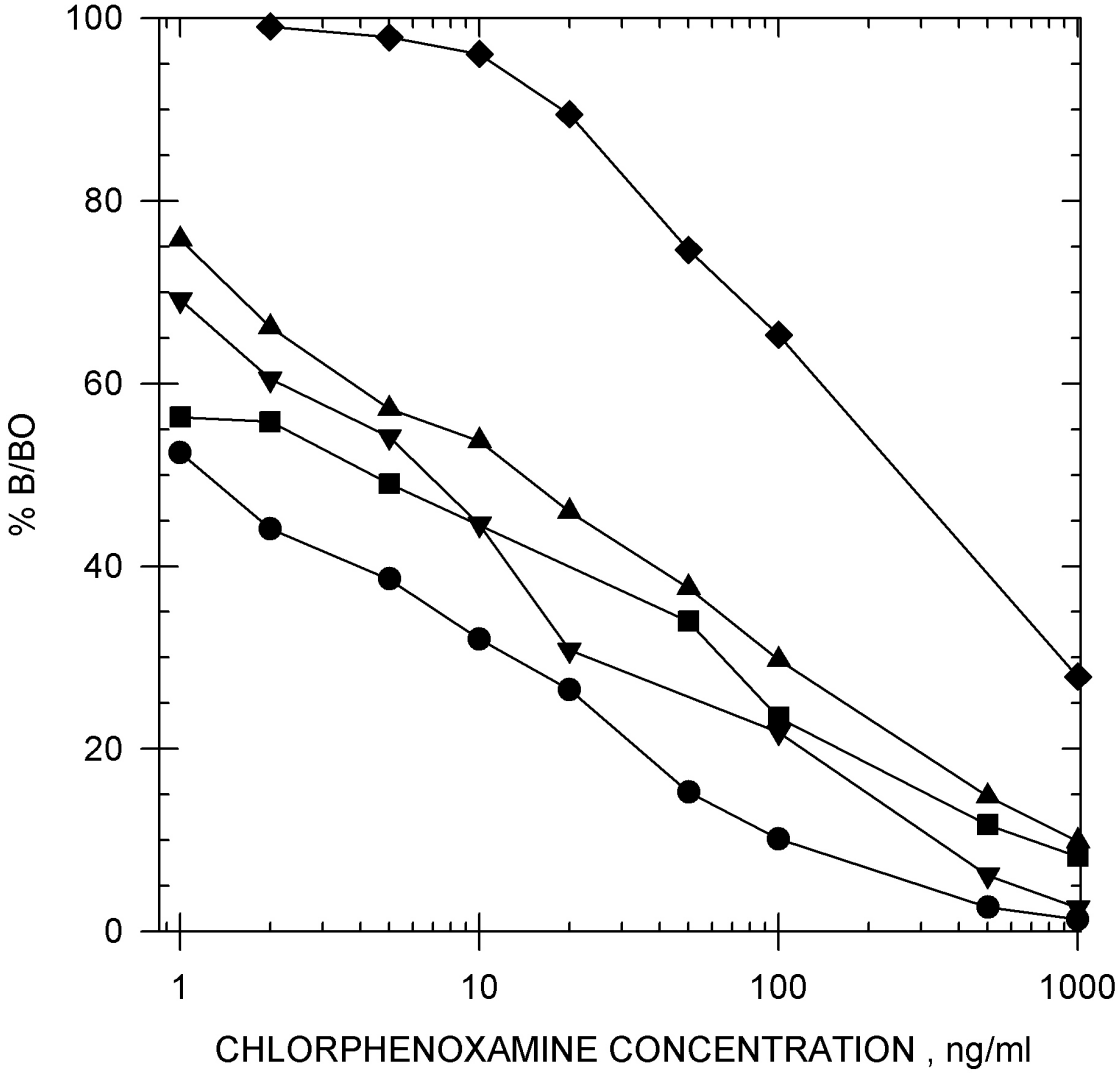




HYDROXYZINE STANDARD CURVES

Chlorphenoxamine

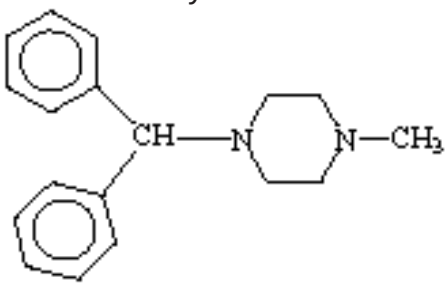


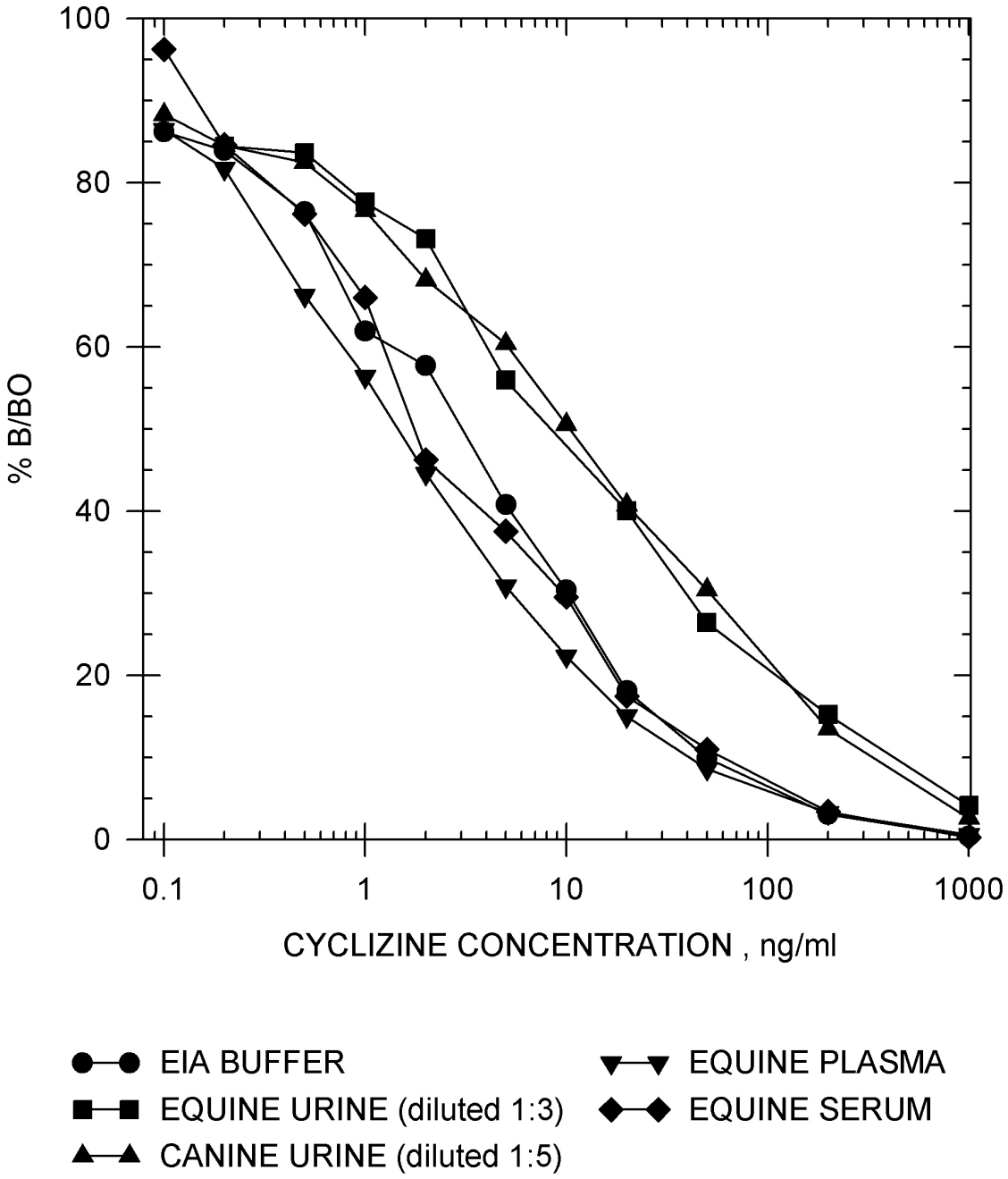


EIA BUFFER
EQUINE URINE (diluted 1:3)
CANINE URINE (diluted 1:5)
EQUINE PLASMA
EQUINE SERUM

HYDROXYZINE STANDARD CURVES

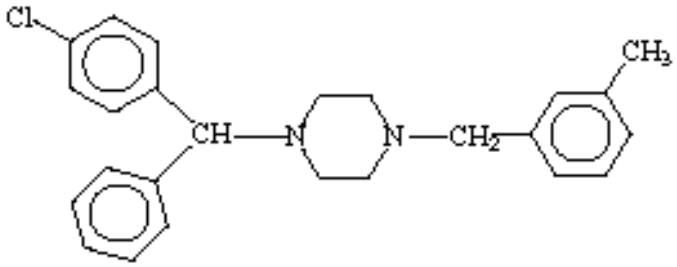
Cyclizine

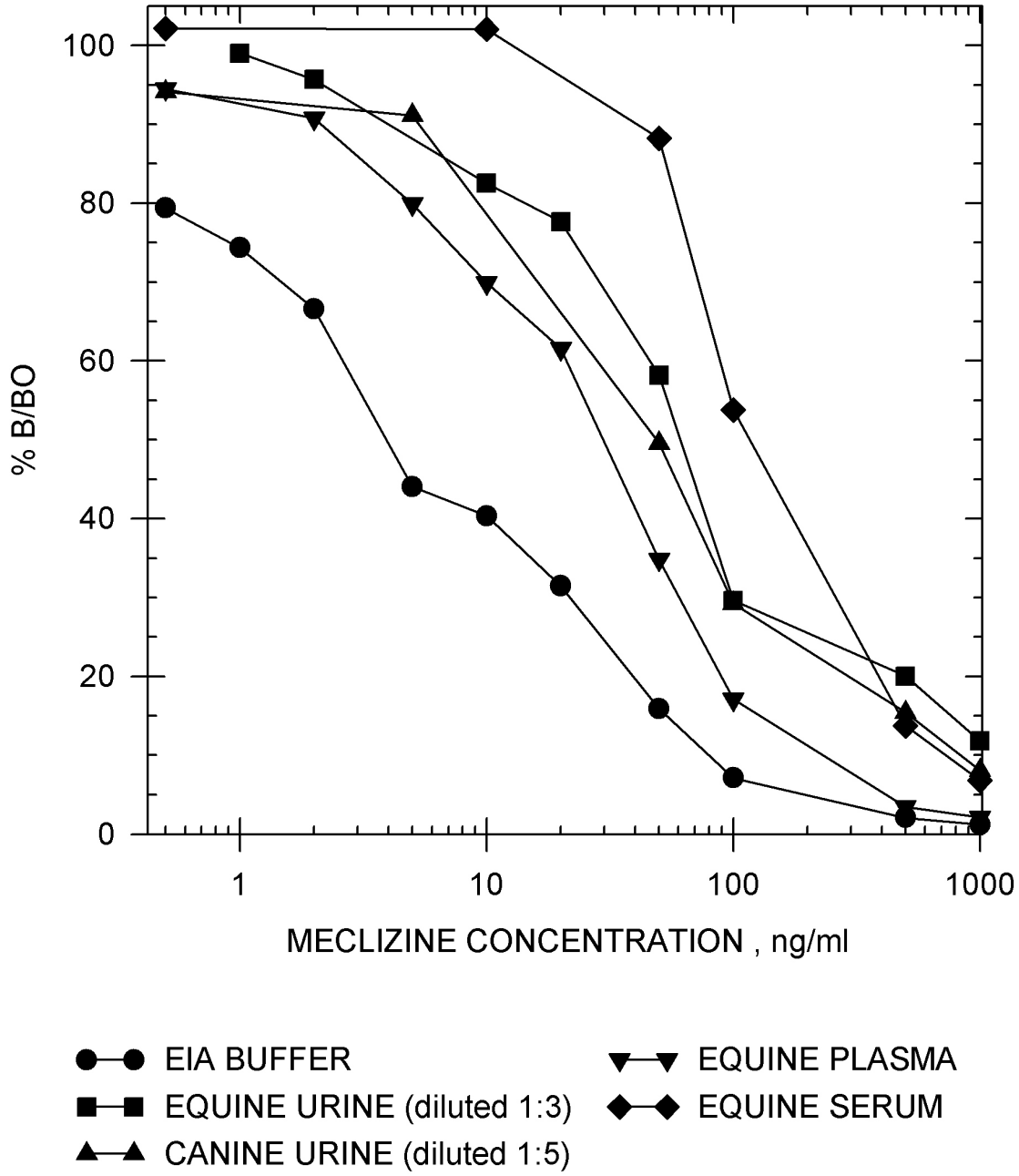




HYDROXYZINE STANDARD CURVES

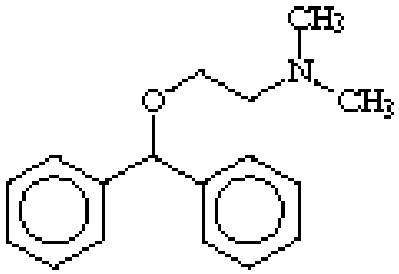
Meclizine

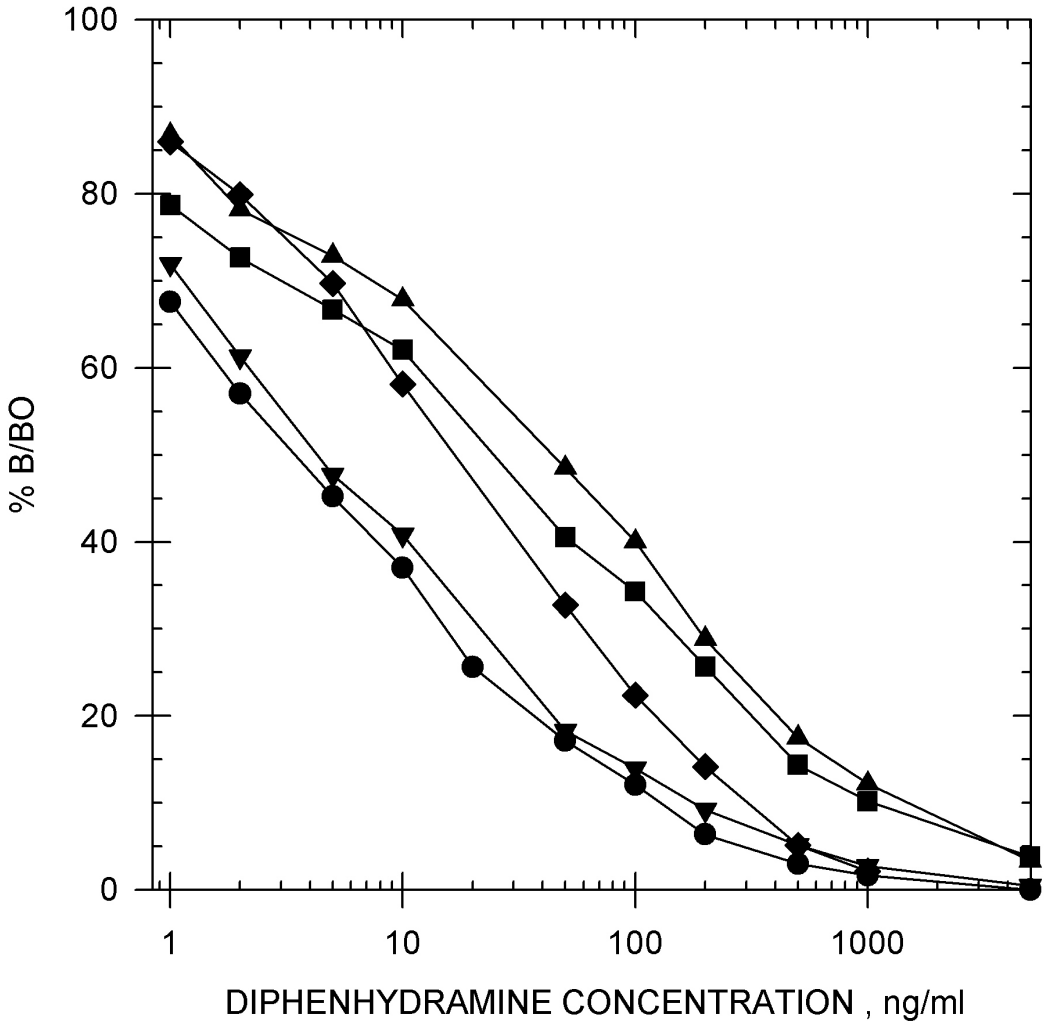




HYDROXYZINE STANDARD CURVES

Diphenhydramine

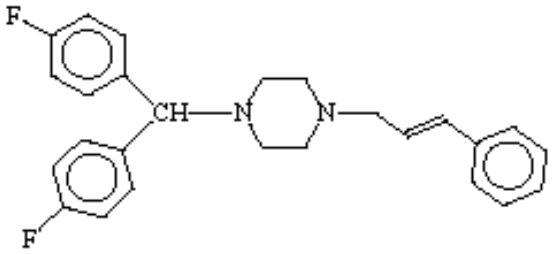


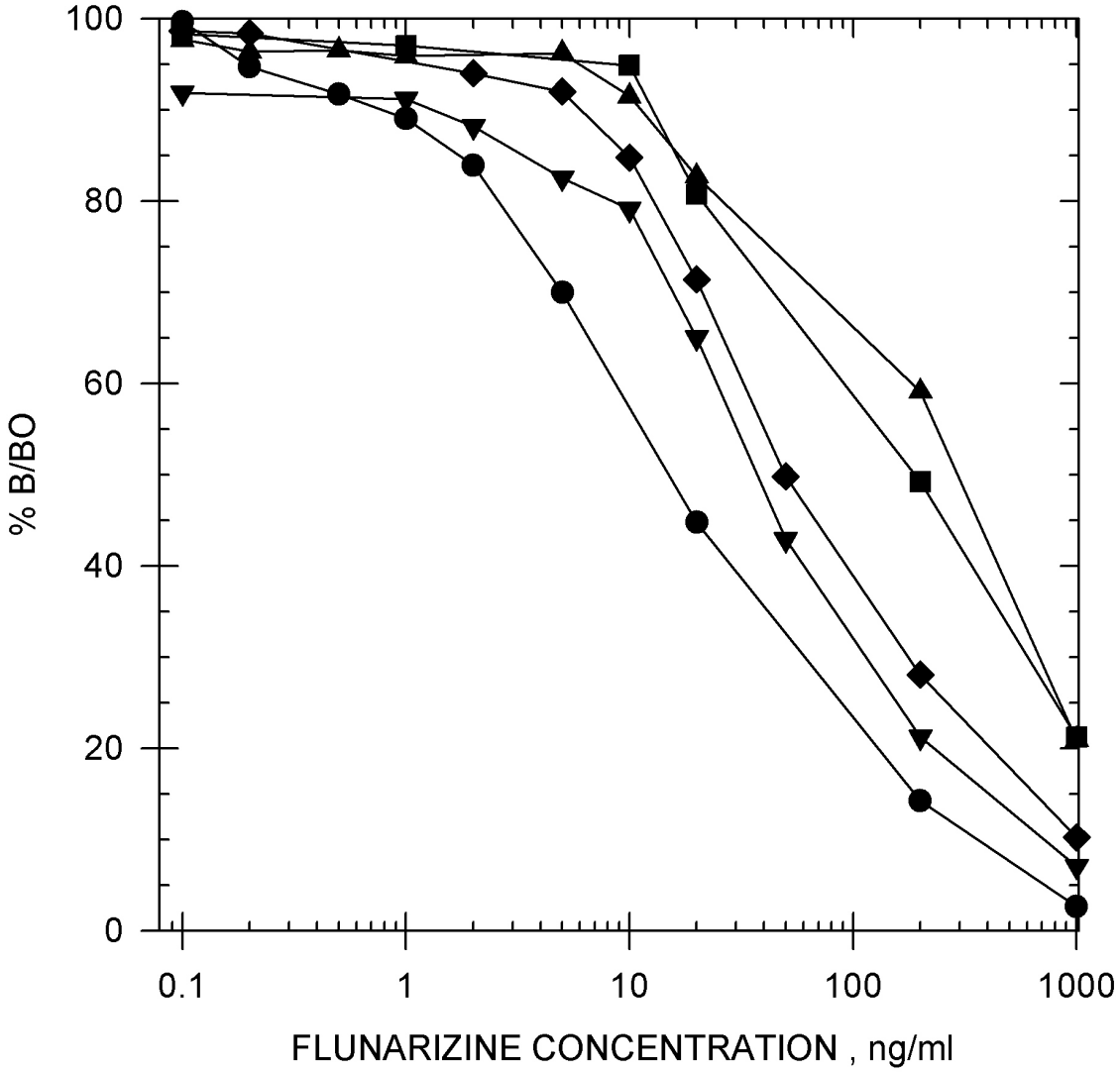


EIA BUFFER
EQUINE URINE (diluted 1:3)
CANINE URINE (diluted 1:5)
EQUINE PLASMA
EQUINE SERUM

HYDROXYZINE STANDARD CURVES

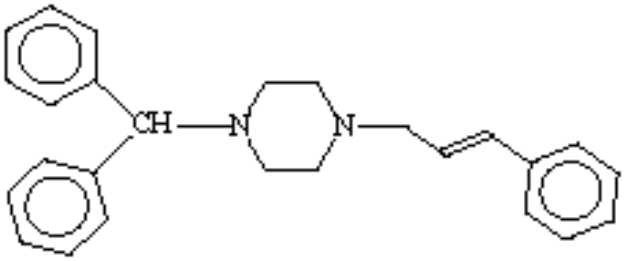
Flunarizine

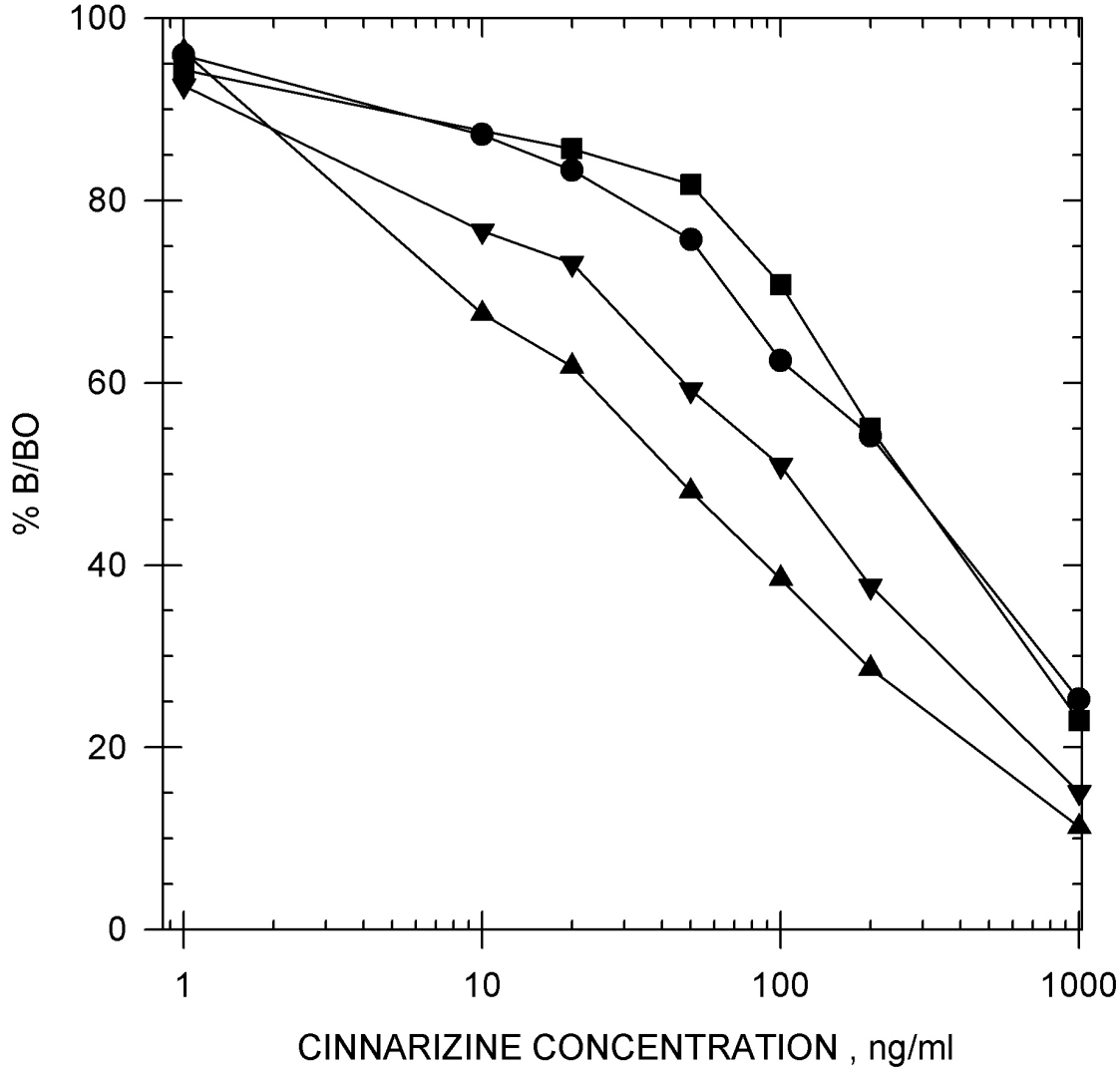




HYDROXYZINE STANDARD CURVES

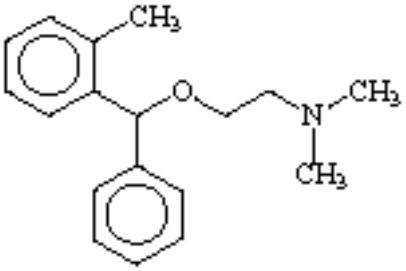
Cinnarizine

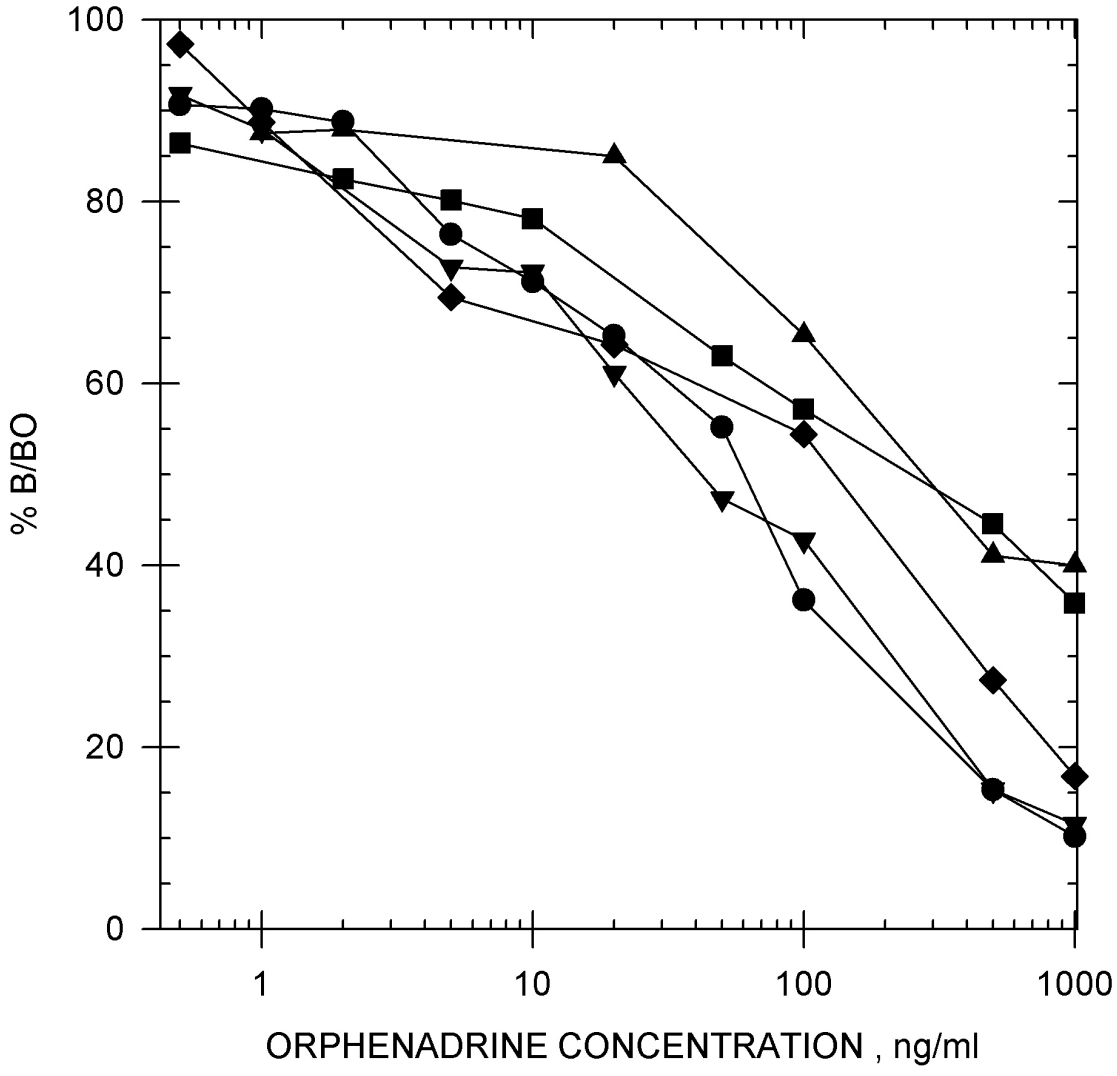




HYDROXYZINE STANDARD CURVES

Orphenadrine

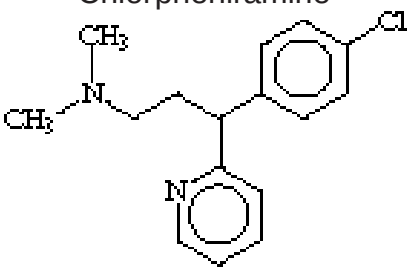


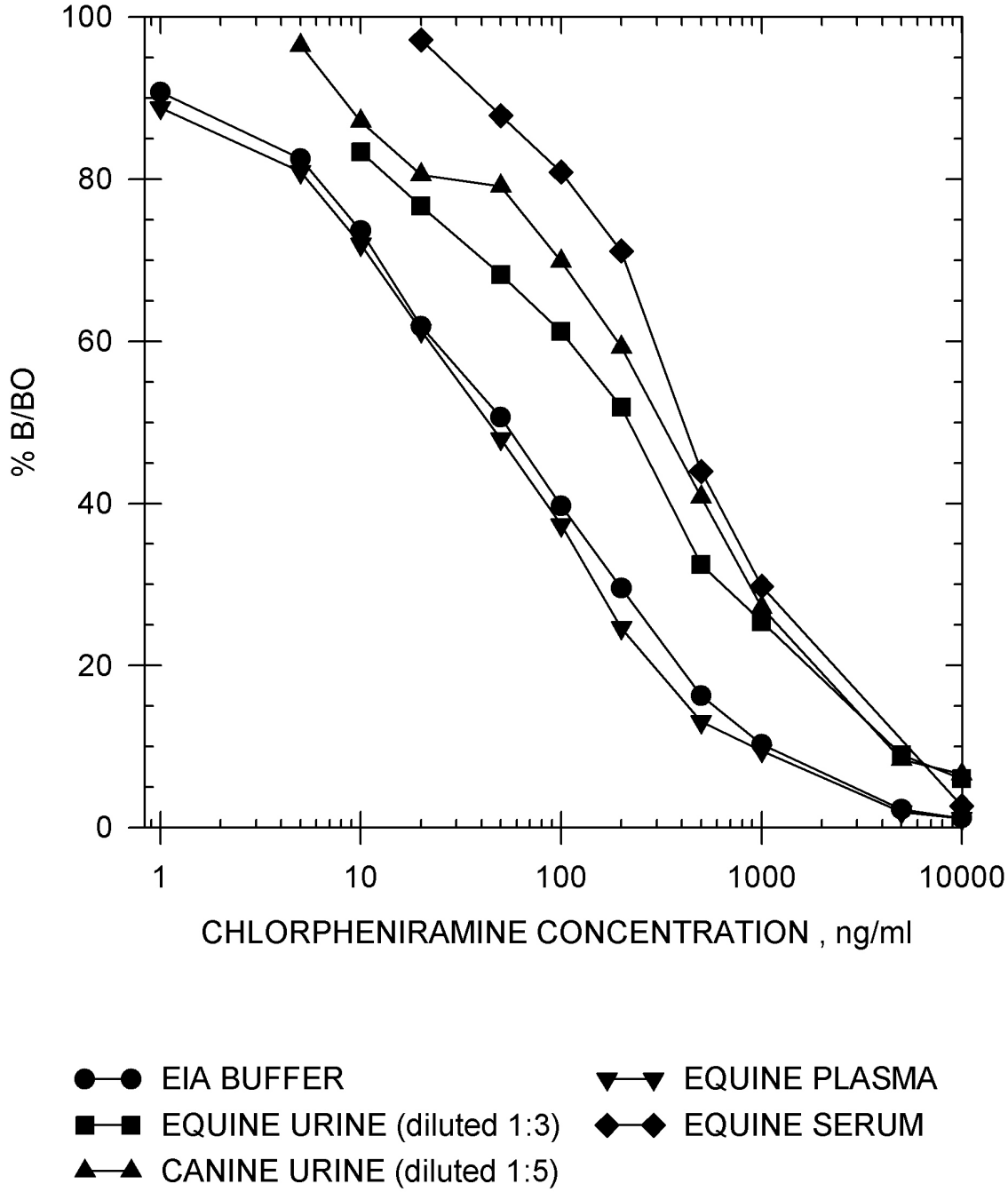


EIA BUFFER
EQUINE URINE (diluted 1:3)
CANINE URINE (diluted 1:5)
EQUINE PLASMA
EQUINE SERUM

HYDROXYZINE STANDARD CURVES

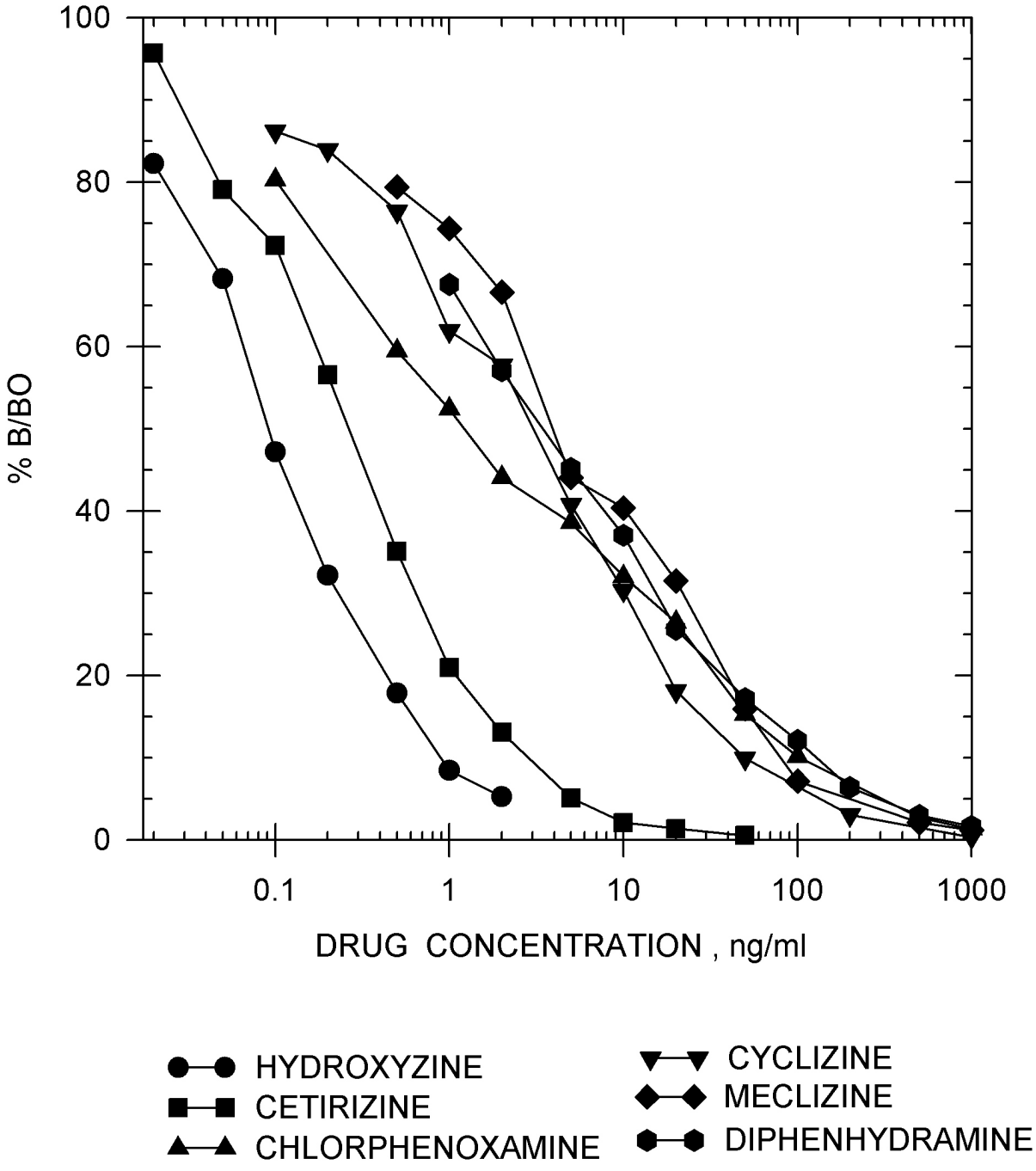
Chlorpheniramine





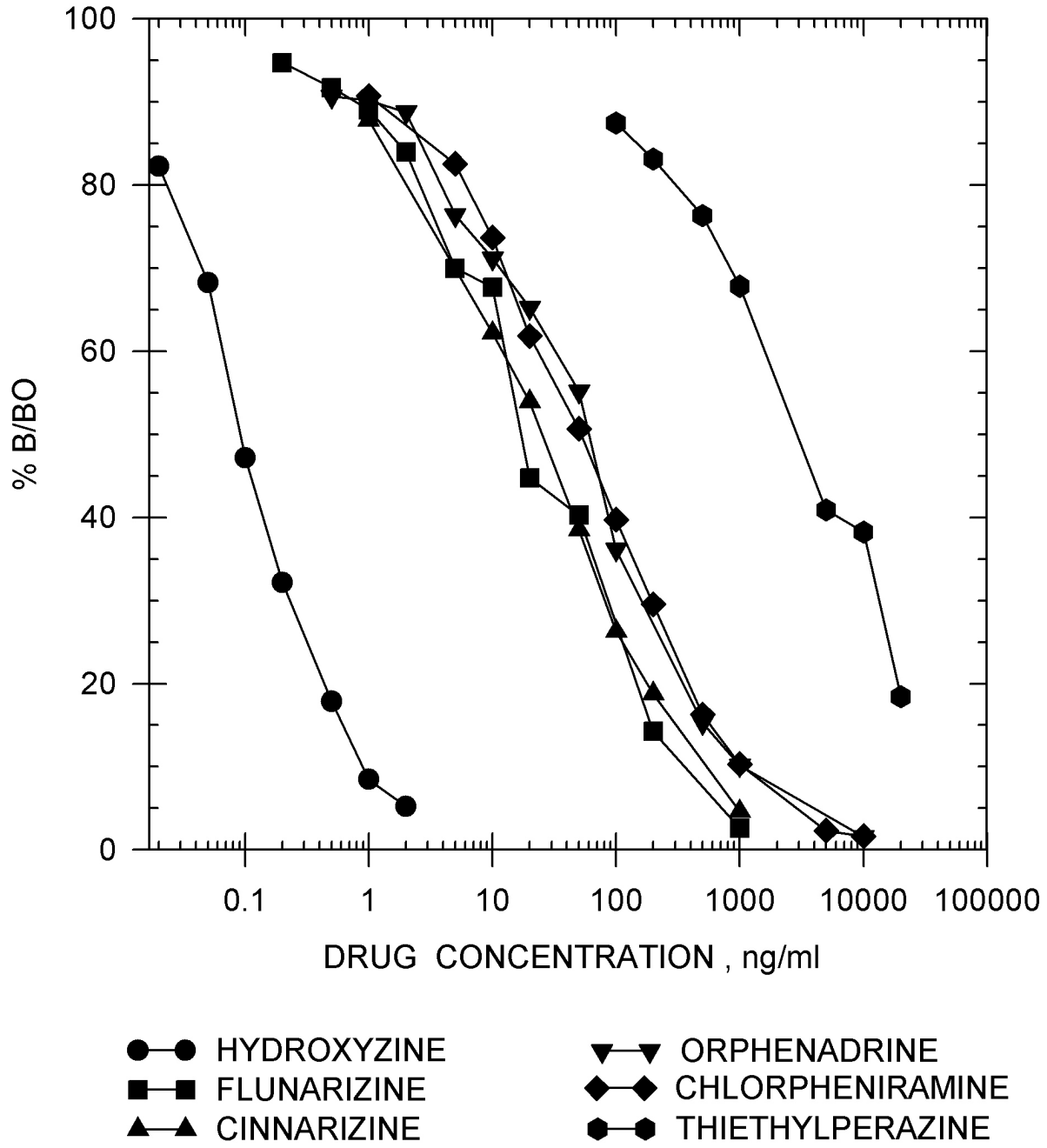
HYDROXYZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



HYDROXYZINE STANDARD CURVES

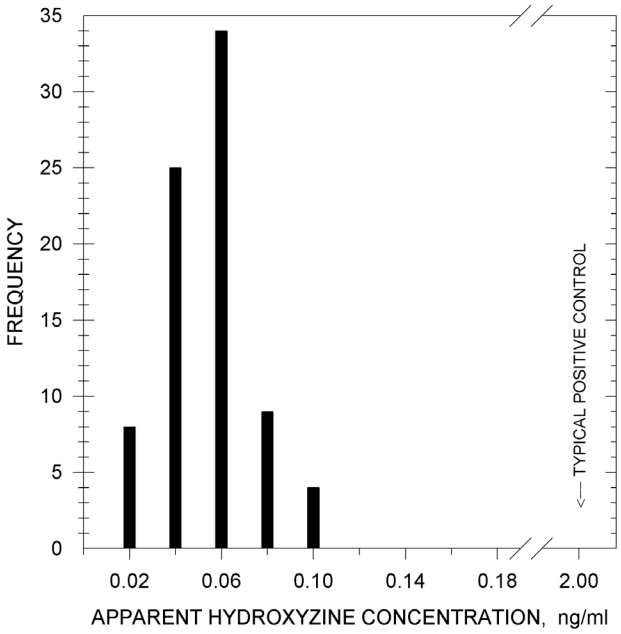
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:3, has shown no background levels above 0.09 ng/ml.

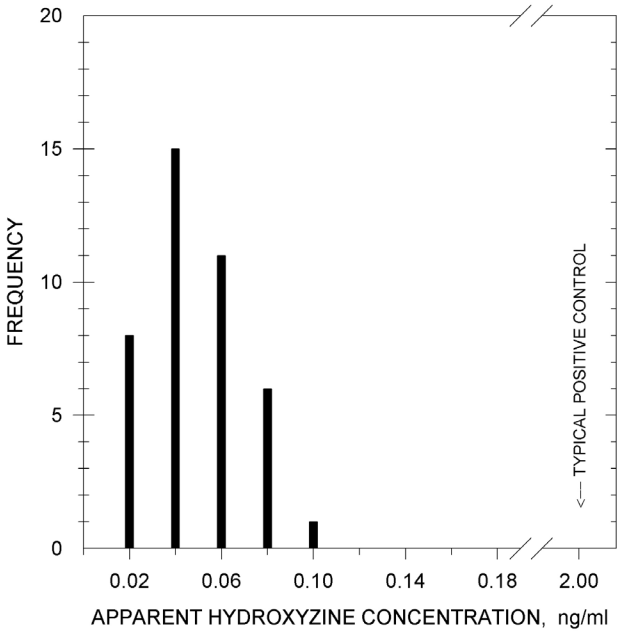
Sample Treatment: A dilution of 1:3 (i.e. 1 part urine to 3 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 41 post-race canine urine samples, diluted 1:5, has shown no background levels above 0.10 ng/ml.

Sample Treatment: A dilution of 1:5 (i.e. 1 part urine to 5 parts EIA buffer) will reduce natural backgrounds.

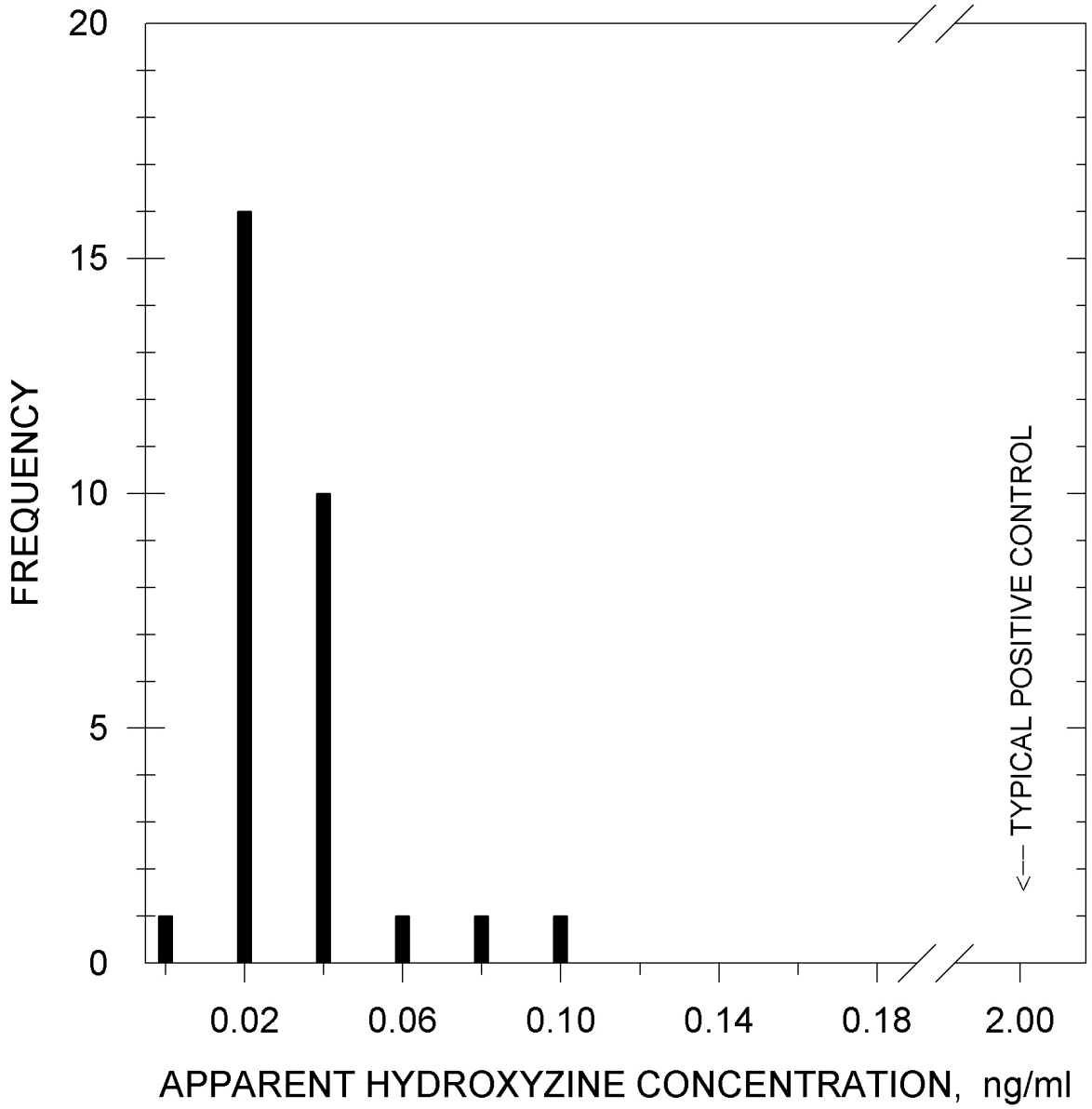


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 30 post-race equine plasma samples has shown no background levels above 0.09 ng/ml.

Sample Treatment: No dilution is necessary to reduce natural backgrounds.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.

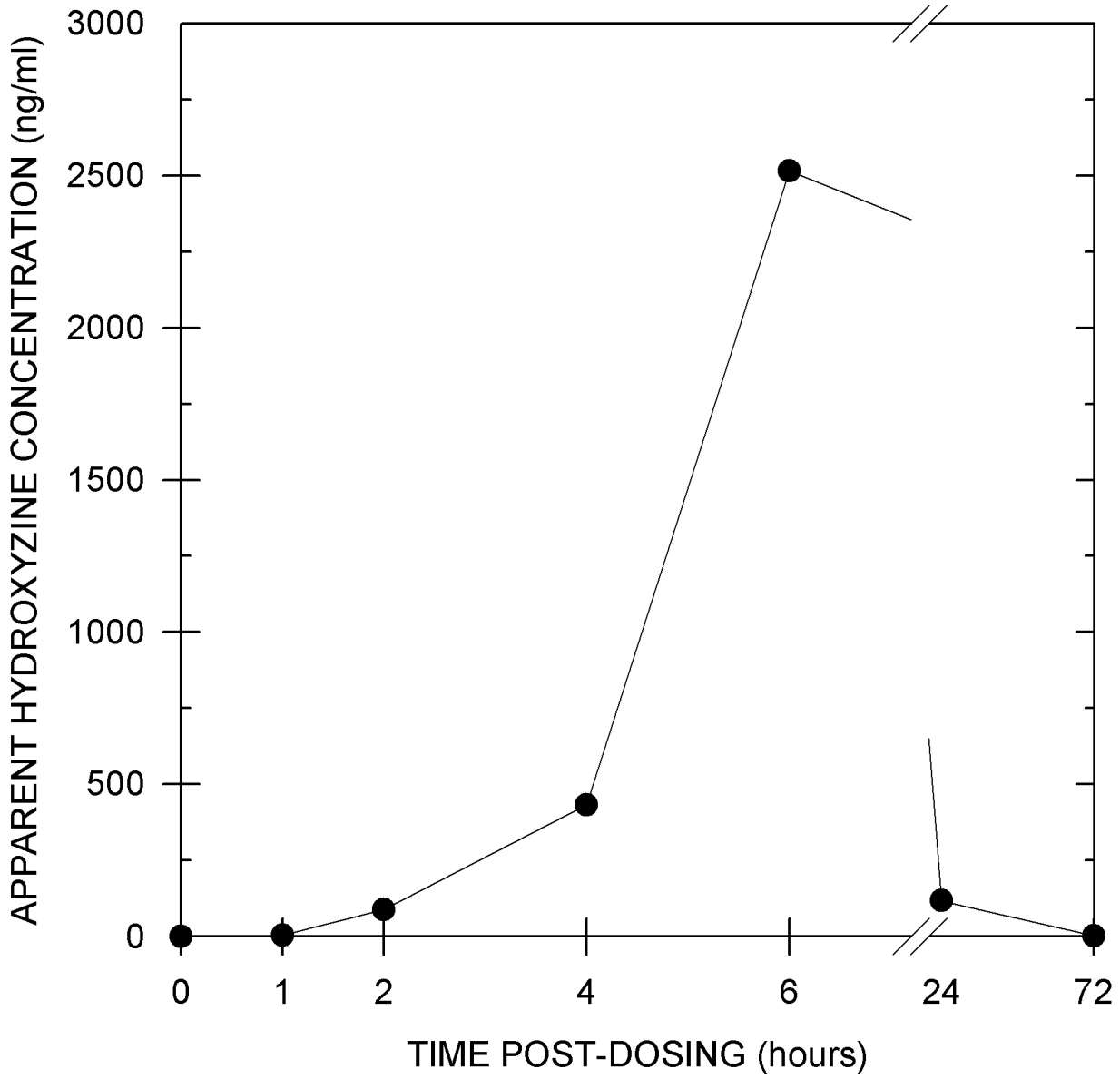


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 500 mg of hydroxyzine orally to one horse, the presence of this drug was detected for at least 24 hours in equine urine. All samples were diluted 1:3 in EIA Buffer before testing according to the recommended sample treatment.

Because the post-dose time points 1 through 72 hours exceeded the range of the assay, samples 1 and 72 hour were diluted 1:100 in EIA buffer while samples 2, 4, 6 and 24 hour were diluted 1:1000. The points were back-calculated to the recommended 1:3 dilution.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Hydroxyzine	100%	Chlorpromazine	0.07%
Cetirizine	37%	Perphenazine	0.07%
Chlorphenoxamine	6.4%	Imipramine	0.07%
Cyclizine	4.8%	Amitriptyline	0.06%
Meclizine	2.4%	Prochlorperazine	0.05%
Diphenhydramine	2.1%	Nortriptyline	0.05%
Fexofenadine	0.8%	Doxepin	0.04%
Flunarizine	0.6%	Trimipramine	0.03%
Cinnarizine	0.5%	Promazine	0.03%
Orphenadrine	0.3%	Thiordazine	0.02%
Chlorpheniramine	0.2%	Trifluoperazine	0.01%
Terfenadine	0.2%	Thiethylperazine	0.004%

Acepromazine	<0.01%	Gentisic Acid	<0.01%	Oxyphenbutazone	<0.01%
Acetaminophen	<0.01%	Glipizide	<0.01%	Penicillin G-Potassium	<0.01%
Acetylsalicylic Acid	<0.01%	L-Glutamic Acid	<0.01%	Penicillin G-Procaine	<0.01%
ε-Amino-n-caproic Acid	<0.01%	Glutethimide	<0.01%	Pentoxifylline	<0.01%
Amphetamine	<0.01%	Glycopyrrolate	<0.01%	Phencyclidine	<0.01%
Ascorbic Acid	<0.01%	Heparin	<0.01%	Phenothiazine	<0.01%
Benzoic Acid	<0.01%	Hippuric Acid	<0.01%	Phenylbutazone	<0.01%
Caffeine	<0.01%	Hordenine	<0.01%	Polyethylene Glycol	<0.01%
Chlordiazepoxide	<0.01%	Hydrocortisone	<0.01%	Prednisolone	<0.01%
Clenbuterol	<0.01%	Hydromorphone	<0.01%	Primidone	<0.01%
Codeine	<0.01%	Ibuprofen	<0.01%	Procainamide	<0.01%
Cotinine	<0.01%	Isoxsuprine	<0.01%	Procaine	<0.01%
Dexamethasone	<0.01%	Lidocaine	<0.01%	Pseudoephedrine	<0.01%
Dextromethorphan	<0.01%	Meperidine	<0.01%	Pyrantel	<0.01%
Diclofenac	<0.01%	Metaproterenol	<0.01%	Pyrilamine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methadone	<0.01%	Pyrimethamine	<0.01%
Dipyrone	<0.01%	Methamphetamine	<0.01%	Quinidine	<0.01%
Ephedrine	<0.01%	Methaqualone	<0.01%	Quinine	<0.01%
Erythromycin	<0.01%	Methocarbamol	<0.01%	Salbutamol	<0.01%
Ethyl p-aminobenzoate	<0.01%	Methylene Blue	<0.01%	Salicylamide	<0.01%
Fenprofen	<0.01%	Methylprednisolone	<0.01%	Salicylic Acid	<0.01%
Flunixin	<0.01%	Nalorphine	<0.01%	Theophylline	<0.01%
Folic Acid	<0.01%	Naproxen	<0.01%	Thiamine	<0.01%
Folinic Acid	<0.01%	Niacinamide	<0.01%	Trimethoprim	<0.01%
Furosemide	<0.01%	Nicotine	<0.01%	Uric Acid	<0.01%
Gemfibrozil	<0.01%	Oxycodone	<0.01%		

ENHANCED KIT
IBUPROFEN

Product #180210 & 180215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Ibuprofen 36 ng/mL

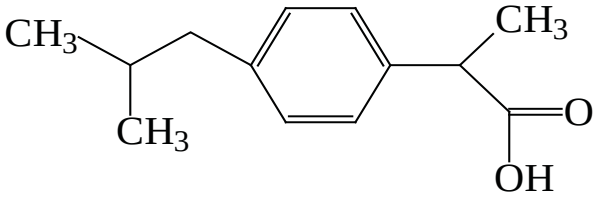
I-50 in Equine Urine (Diluted 1:9)	**I-50 in Canine Urine (Diluted 1:9)**
Ibuprofen 320 ng/mL	Ibuprofen 505 ng/mL
I-50 in Equine Serum (Diluted 1:1)	**I-50 in Equine Plasma (Diluted 1:1)**
Ibuprofen 204 ng/mL	Ibuprofen 291 ng/mL

Precision: Intra-Assay 6.09%
Inter-Assay 3.89%

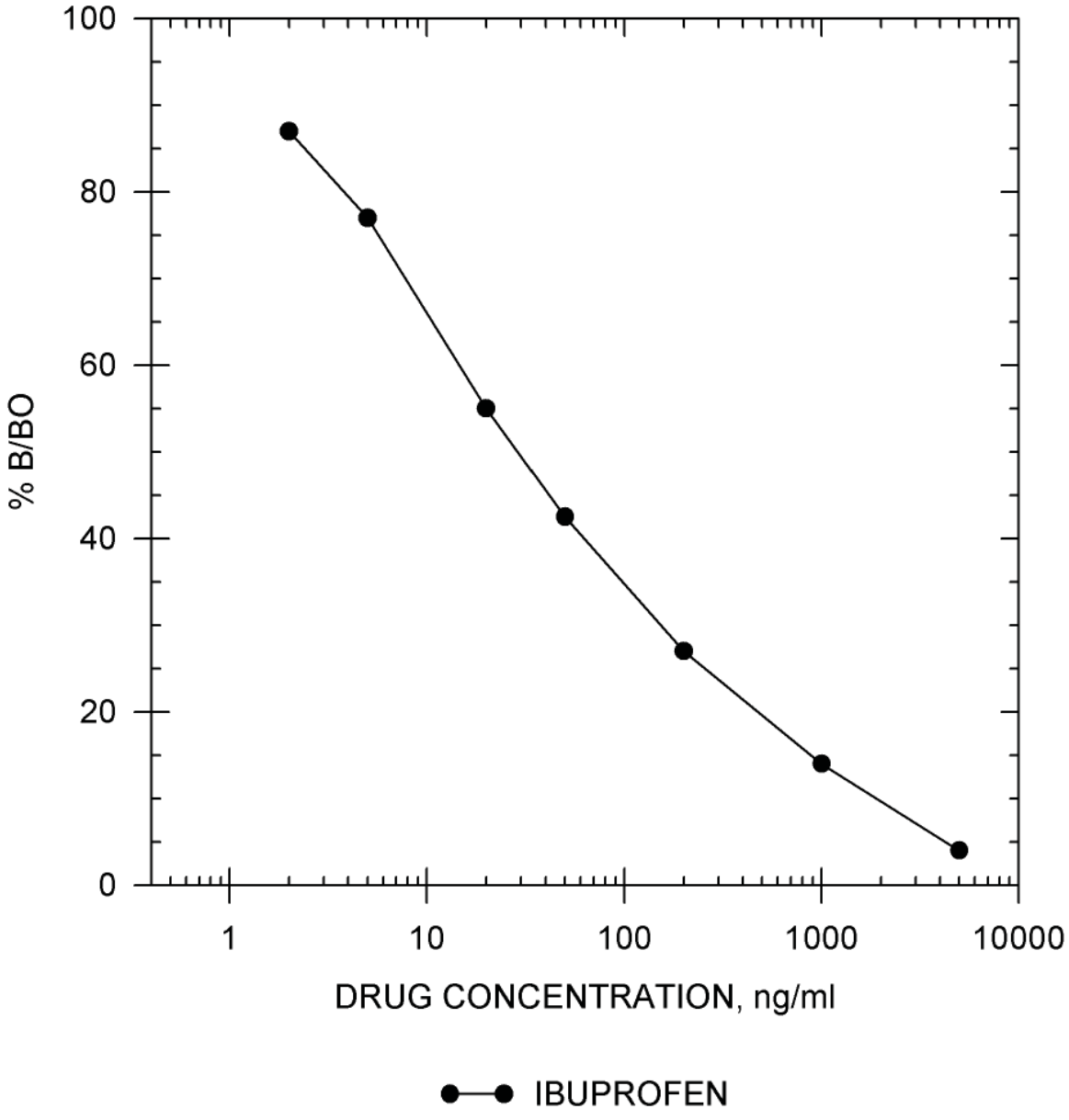
Note: Measuring wavelength was 650 nm.

IBUPROFEN STANDARD CURVES

Ibuprofen

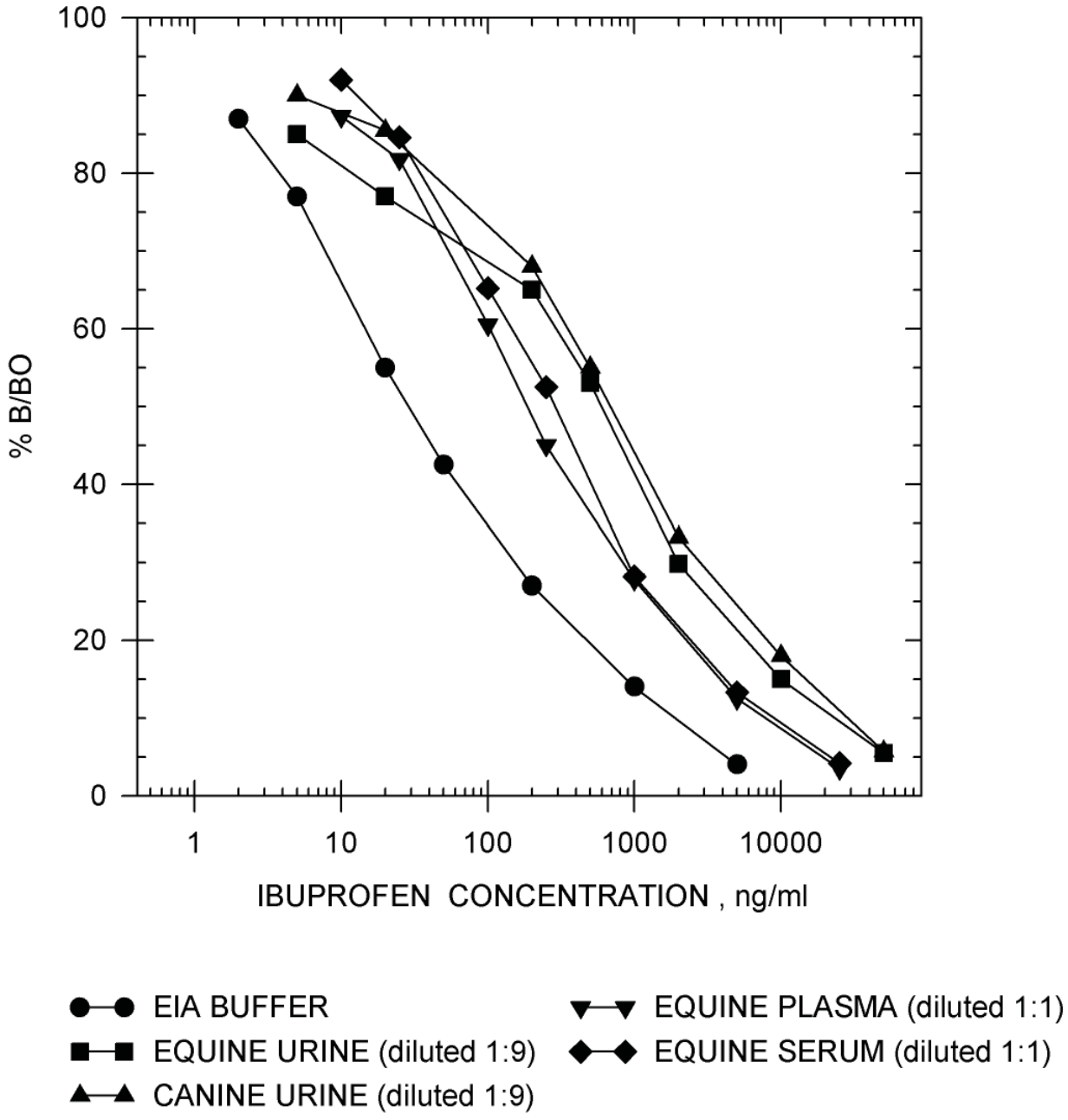


Drug Standard Curve Comparison in EIA Buffer



Rev 05/2011

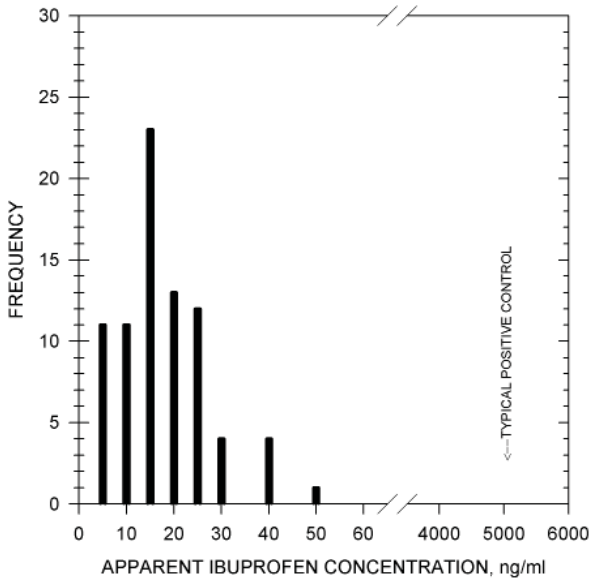
IBUPROFEN STANDARD CURVES



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 79 post-race equine urine samples, diluted 1:9, has shown no background levels above 48 ng/ml.

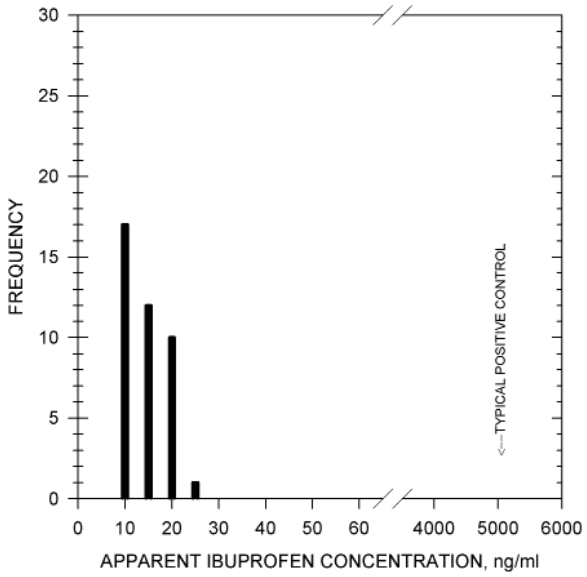
Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:9, has shown no background levels above 22 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.

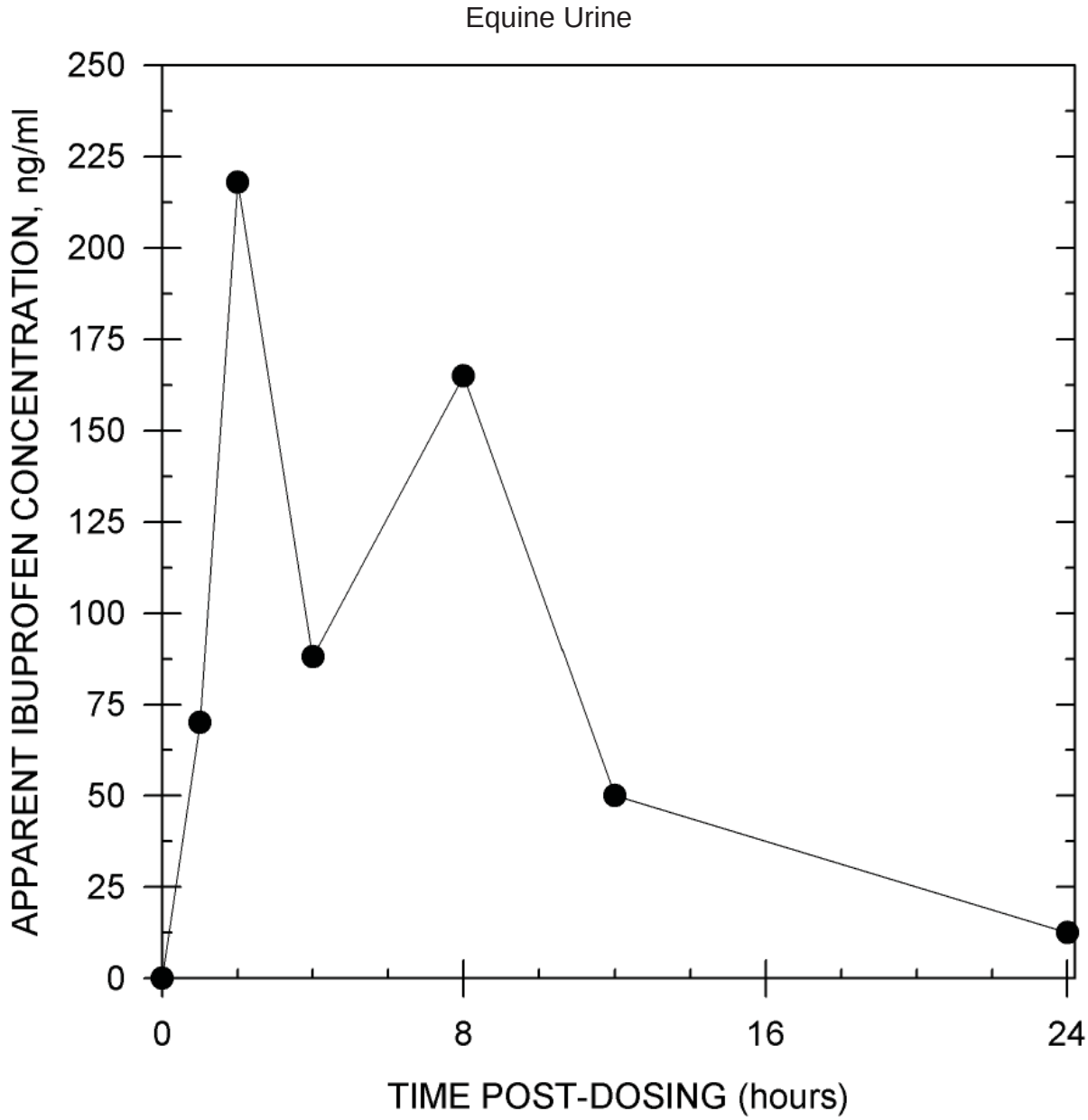


ADDITIONAL BACKGROUND LEVELS

Sample Treatment: A 1:1 dilution (i.e. 1 part sample to 1 parts EIA buffer) may be necessary to reduce natural backgrounds.

TYPICAL DURATION OF DETECTION

Equine Urine and Plasma: An administration of 11.2 g of Ibuprofen was given orally to one horse. Urine samples were diluted 1:9 with EIA according to the recommended dilution and then diluted an additional 1:1000 to backfit into the standard curve. Ibuprofen was detectable in equine urine for at least 24 hours post-administration. Plasma samples were diluted 1:1 with EIA according to the recommended dilutions. Ibuprofen was detectable in equine plasma for at least 12 hours post-administration.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Ibuprofen	100%
Flurbiprofen	0.3%
Fenoprofen	0.06%
Indoprofen	0.02%
Suprofen	0.01%

Acepromazine	<0.01%	Meperidine	<0.01%
Acetaminophen	<0.01%	Metaproterenol	<0.01%
Acetylsalicylic Acid	<0.01%	Methadone	<0.01%
Amitriptyline	<0.01%	Methaqualone	<0.01%
Ascorbic Acid	<0.01%	Methocarbamol	<0.01%
Benzoic Acid	<0.01%	Methylene Blue	<0.01%
Caffeine	<0.01%	Methylprednisolone	<0.01%
E-amino-n-Caproic Acid	<0.01%	Nalorphine	<0.01%
Chlordiazepoxide	<0.01%	Naproxen	<0.01%
Chlorpromazine	<0.01%	Niacinamide	<0.01%
Clenbuterol	<0.01%	Nicotine	<0.01%
Codeine	<0.01%	Nortriptyline	<0.01%
Cotinine	<0.01%	Orphenadrine	<0.01%
Dexamethasone	<0.01%	Oxyphenbutazone	<0.01%
Dextromethorphan	<0.01%	PCP	<0.01%
Diclofenac	<0.01%	Penicillin G-Potassium	<0.01%
Dimethyl Sulfoxide	<0.01%	Penicillin G-Procaine	<0.01%
Dipyrone	<0.01%	Pentoxifylline	<0.01%
Doxepin	<0.01%	Phenothiazine	<0.01%
Ephedrine	<0.01%	Phenylbutazone	<0.01%
Erythromycin	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-amino-benzoate	<0.01%	Prednisolone	<0.01%
Flunixin	<0.01%	Primadone	<0.01%
Folic Acid	<0.01%	Procainamide	<0.01%
Folinic Acid	<0.01%	Procaine	<0.01%
Furosemide	<0.01%	Promazine	<0.01%
Gemfibrozil	<0.01%	Pseudoephedrine	<0.01%
Gentisic Acid	<0.01%	Pyrantel	<0.01%
Glipizide	<0.01%	Pyrilamine	<0.01%
L-Glutamic Acid	<0.01%	Pyrimethamine	<0.01%
Glutethimide	<0.01%	Quinidine	<0.01%
Glycopyrrolate	<0.01%	Quinine	<0.01%
Heparin	<0.01%	Salbutamol	<0.01%
Hippuric Acid	<0.01%	Salicylamide	<0.01%
Hordenine	<0.01%	Salicylic Acid	<0.01%
Hydrocortisone	<0.01%	Tenoxicam	<0.01%
Imipramine	<0.01%	Theophylline	<0.01%
Indomethacin	<0.01%	Thiamine	<0.01%
Isoxsuprine	<0.01%	Trimethoprim	<0.01%
Ketoprofen	<0.01%	Trimipramine	<0.01%
Lidocaine	<0.01%	Uric Acid	<0.01%
Mefenamic Acid	<0.01%		

ENHANCED KIT
IPRATROPIUM/ATROPINE

Product #107110 &
107115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Ipratropium	0.15 ng/ml
Atropine	0.17 ng/ml

I-50 in Equine Urine (Diluted 1:4)

Ipratropium	1.25 ng/ml
Atropine	0.87 ng/ml

I-50 in Canine Urine (Diluted 1:2)

Ipratropium	0.49 ng/ml
Atropine	0.46 ng/ml

I-50 in Equine Plasma (neat)

Ipratropium	1.17 ng/ml
Atropine	1.46 ng/ml

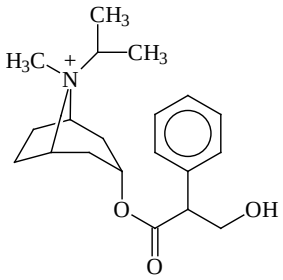
I-50 in Equine Serum (neat)

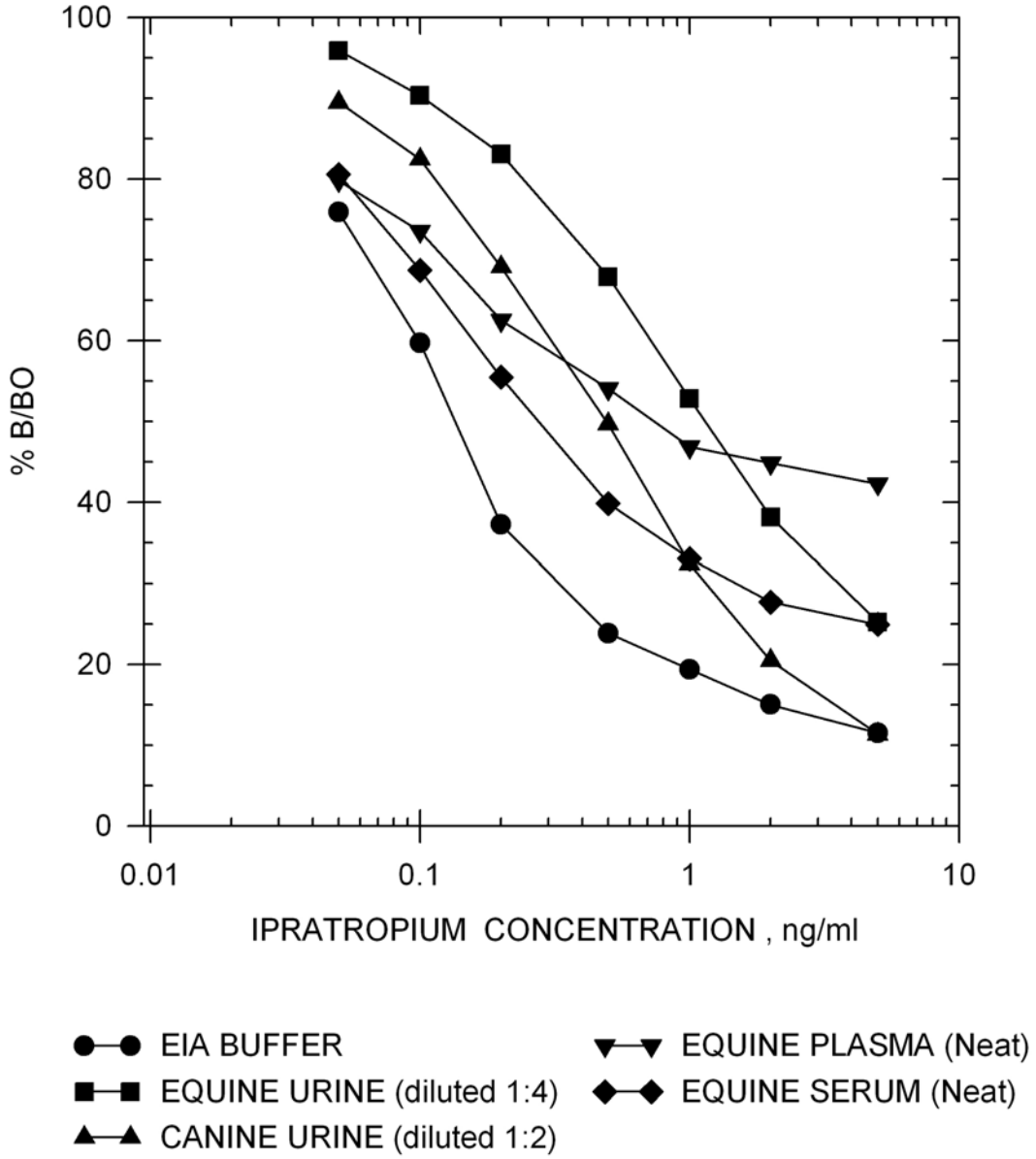
Ipratropium	0.32 ng/ml
Atropine	0.32 ng/ml

Note: Measuring wavelength was 650 nm.

IPRATROPIUM/ATROPINE STANDARD CURVES

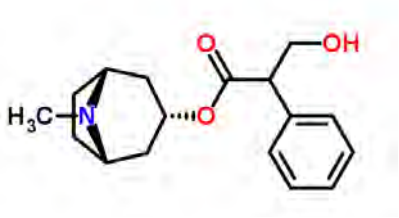
Ipratropium

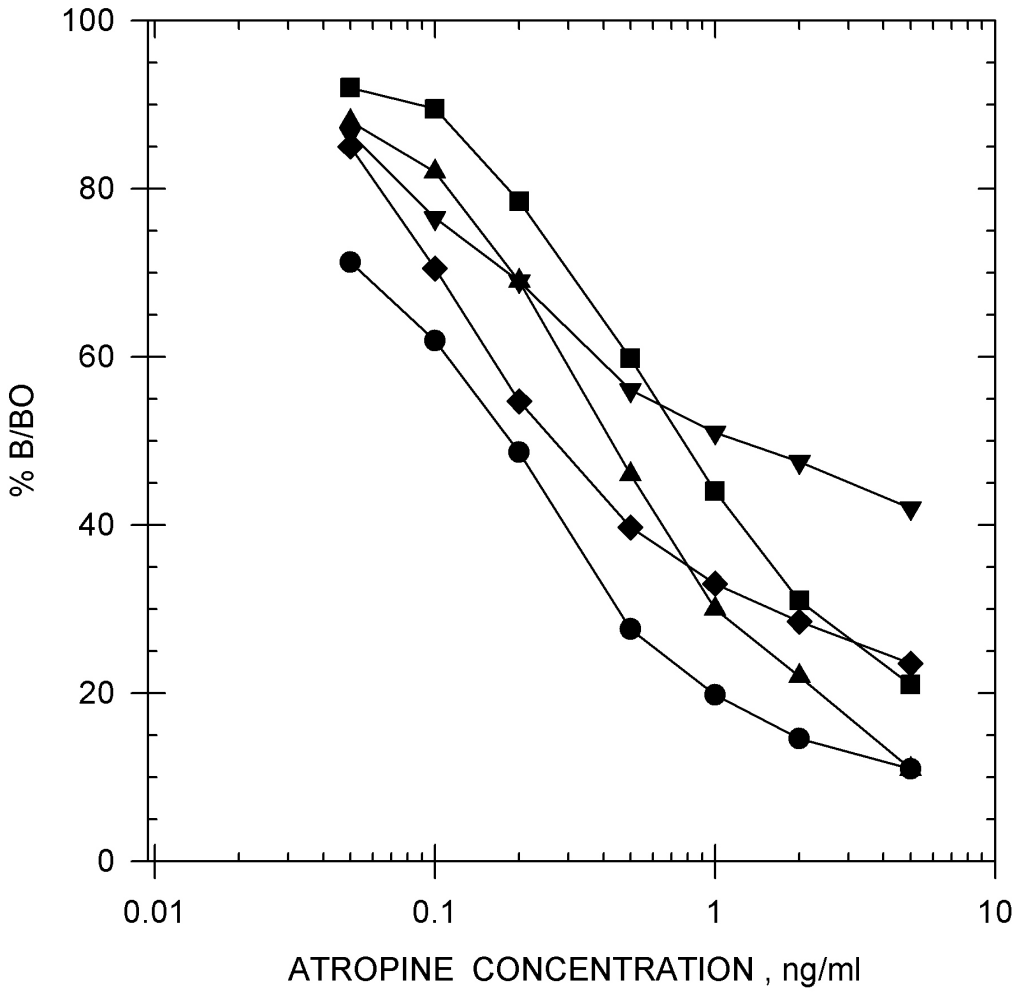




IPRATROPIUM/ATROPINE STANDARD CURVES

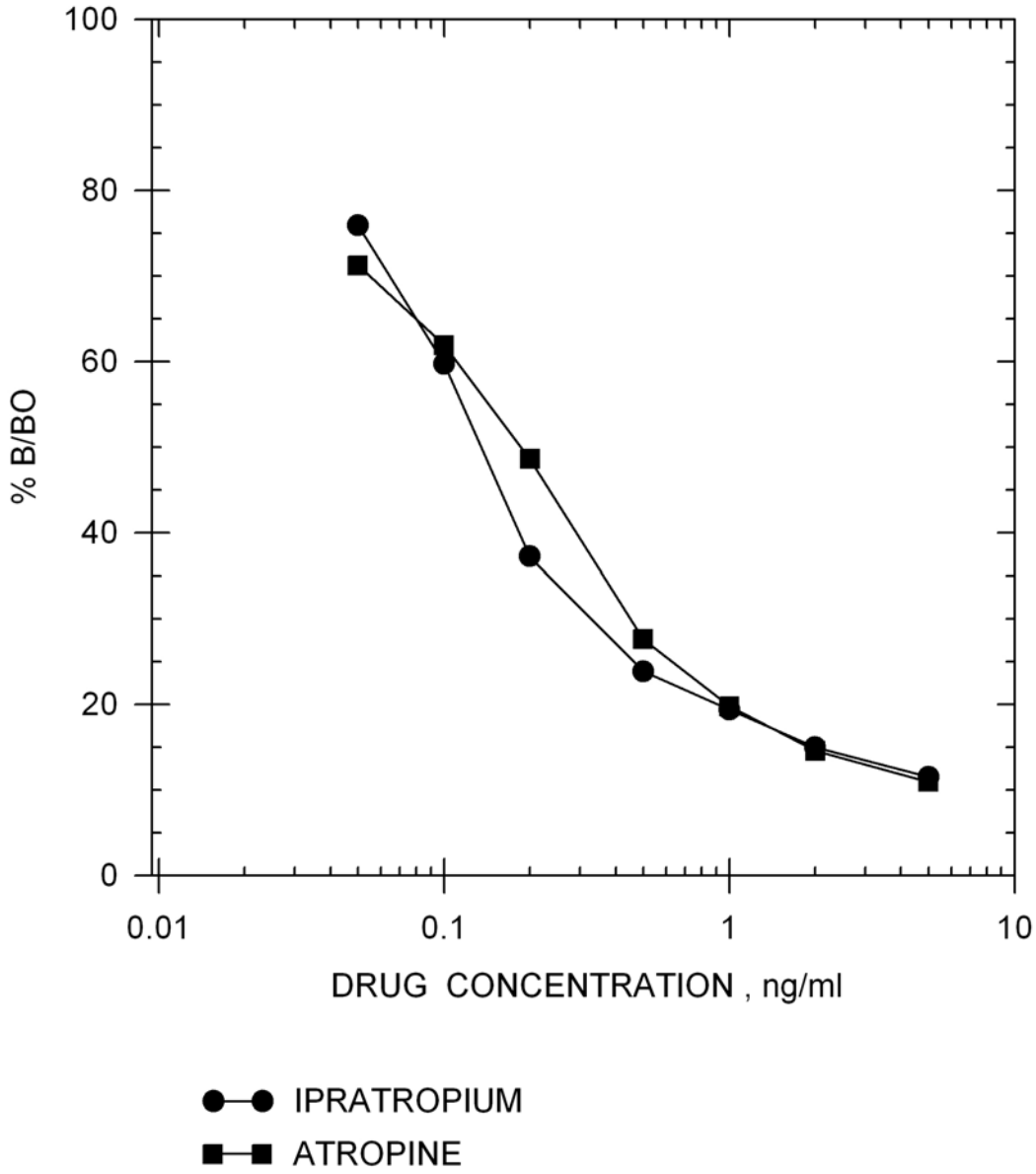
Atropine





IPRATROPIUM/ATROPINE STANDARD CURVES

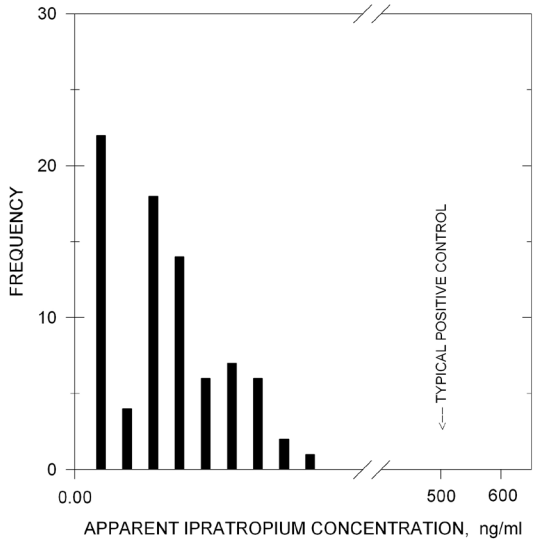
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:4, has shown no background levels above 0.09 ng/ml.

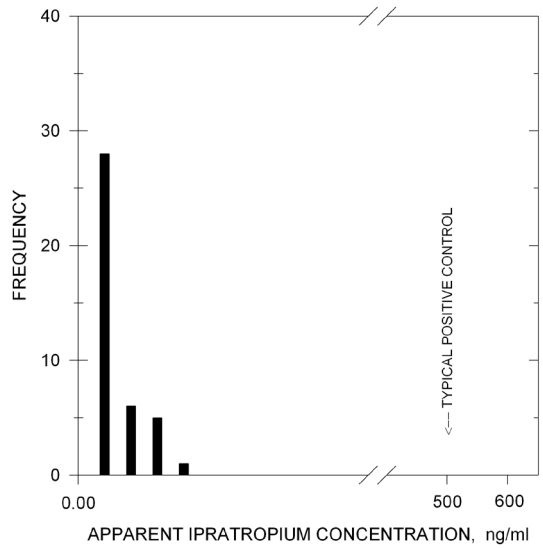
Sample Treatment: A dilution of 1:4 (i.e. 1 part urine to 4 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:2, has shown no background levels above 0.04 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part urine to 2 parts EIA buffer) will reduce natural backgrounds.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Ipratropium	100%
Atropine	88%
4'Chloro-3-(diphenylmethoxy)-Tropane	0.30%
Scopolamine	0.03%
Aminobenztropine	0.02%
Scopolamine N-oxide	0.004%

Acepromazine	<0.01%	Gemfibrozil	<0.01%	Penicillin G-Procaine	<0.01%
Acetaminophen	<0.01%	Gentisic Acid	<0.01%	Pentoxifylline	<0.01%
Acetylsalicylic Acid	<0.01%	Glipizide	<0.01%	Phencyclidine (PCP)	<0.01%
ε-amino-n-caproic Acid	<0.01%	L-Glutamic Acid	<0.01%	Phenothiazine	<0.01%
Amitriptyline	<0.01%	Glutethimide	<0.01%	Phenylbutazone	<0.01%
Ascorbic Acid	<0.01%	Glycopyrrolate	<0.01%	Polyethylene Glycol	<0.01%
Belladonnine	<0.01%	Heparin	<0.01%	Prednisolone	<0.01%
Benzoic Acid	<0.01%	Hippuric Acid	<0.01%	Primidone	<0.01%
Caffeine	<0.01%	Hordenine	<0.01%	Procainamide	<0.01%
Chlordiazepoxide	<0.01%	Hydrocortisone	<0.01%	Procaine	<0.01%
Chlorpromazine	<0.01%	Ibuprofen	<0.01%	Promazine	<0.01%
Clenbuterol	<0.01%	Imipramine	<0.01%	Pseudoephedrine	<0.01%
Codeine	<0.01%	Isoxsuprine	<0.01%	Pyrantel	<0.01%
Cotinine	<0.01%	Lidocaine	<0.01%	Pyrimethamine	<0.01%
Dexamethasone	<0.01%	Meperidine	<0.01%	Quinidine	<0.01%
Dextromethorphan	<0.01%	Metaproterenol	<0.01%	Quinine	<0.01%
Diclofenac	<0.01%	Methadone	<0.01%	Salbutamol	<0.01%
Dimethyl Sulfoxide	<0.01%	Methaqualone	<0.01%	Salicylamide	<0.01%
Dipyrone	<0.01%	Methocarbamol	<0.01%	Theophylline	<0.01%
Doxepin	<0.01%	6α-Methylprednisolone	<0.01%	Thiamine	<0.01%
Ecgonine	<0.01%	Nalorphine	<0.01%	Trimethoprim	<0.01%
Ephedrine	<0.01%	Naproxen	<0.01%	Trimipramine	<0.01%
Erythromycin	<0.01%	Niacinamide	<0.01%	Tropane	<0.01%
Fenoprofen	<0.01%	Nicotine	<0.01%	3'Tropanylindole-3-Carboxylate	<0.01%
Flunixin	<0.01%	Nortriptyline	<0.01%	Tropic Acid	<0.01%
Folic Acid	<0.01%	Orphenadrine	<0.01%	Tropine	<0.01%
Folinic Acid	<0.01%	Oxyphenbutazone	<0.01%	Uric Acid	<0.01%
Furosemide	<0.01%	Penicillin G-Potassium	<0.01%		

ENHANCED KIT

ISOXSUPRINE

Product #102210 & 102215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Isoxsuprine	0.47 ng/ml
Nylidrin	1.71 ng/ml

I-50 in Equine Urine (Diluted 1:1)

Isoxsuprine	0.51 ng/ml
Nylidrin	3.41 ng/ml

I-50 in Canine Urine

Isoxsuprine	0.41 ng/ml
Nylidrin	6.36 ng/ml

I-50 in Equine Plasma

Isoxsuprine	0.44 ng/ml
Nylidrin	3.74 ng/ml

I-50 in Equine Serum

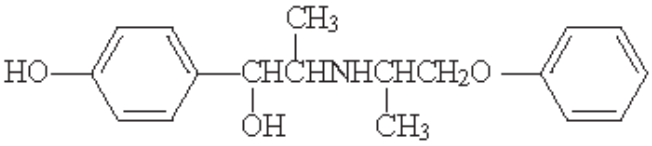
Isoxsuprine	0.44 ng/ml
Nylidrin	3.95 ng/ml

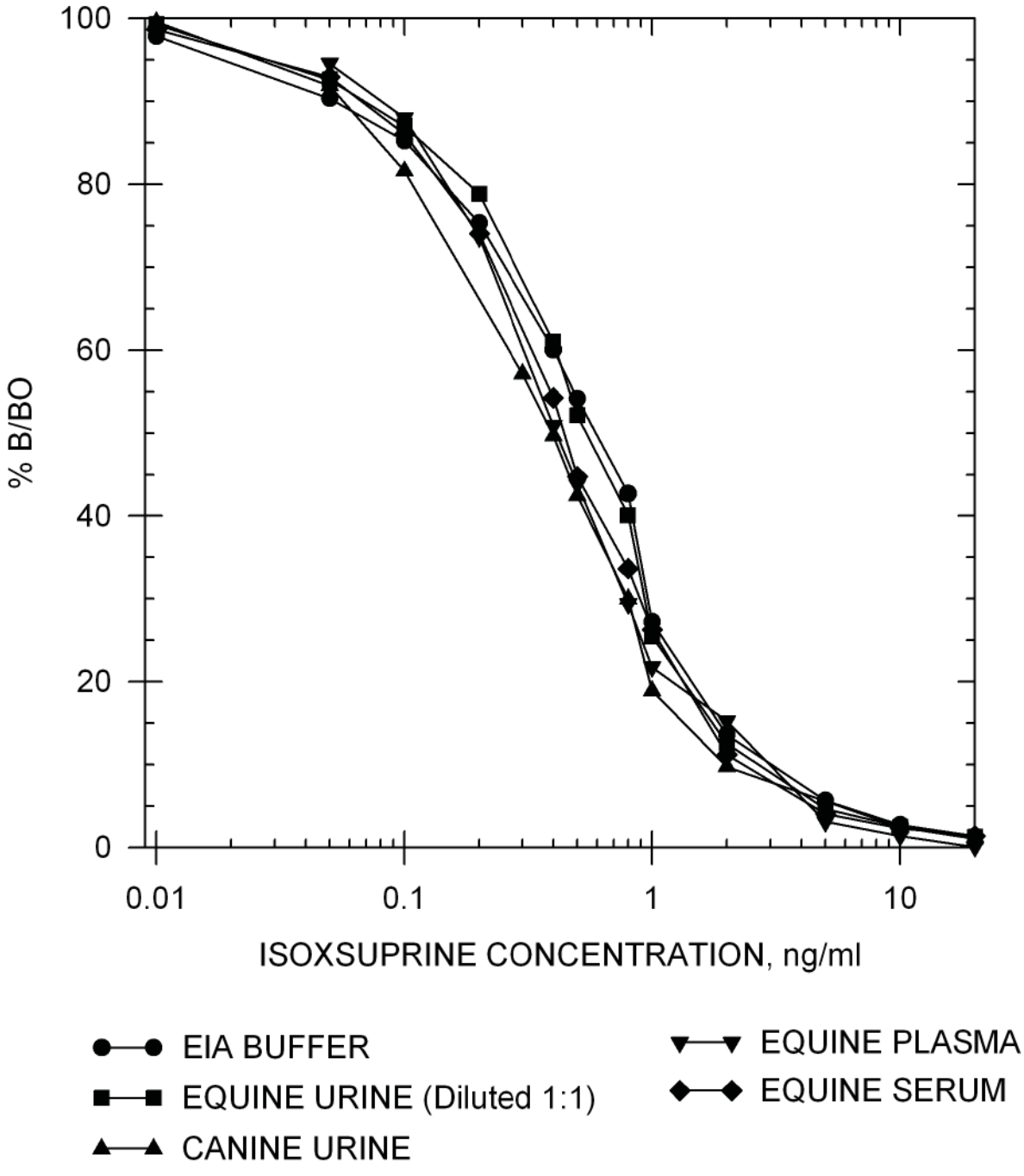
Precision:	Intra-assay	1.83%
	Inter-assay	8.96%

Note: Measuring wavelength was 650 nm**.**

ISOXSUPRINE STANDARD CURVES

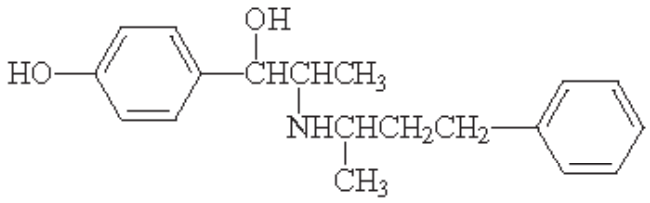
Isoxsuprine

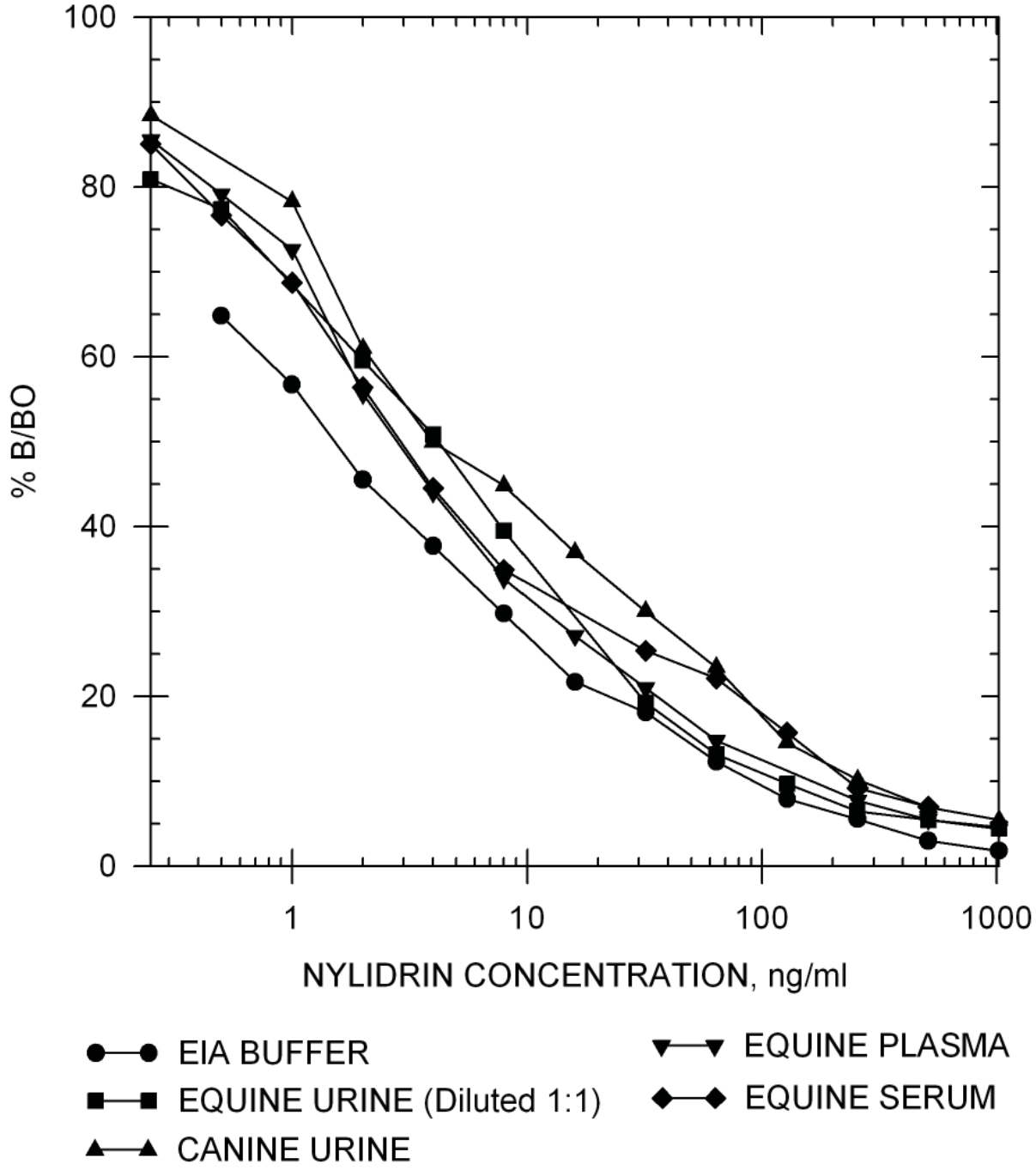




ISOXSUPRINE STANDARD CURVES

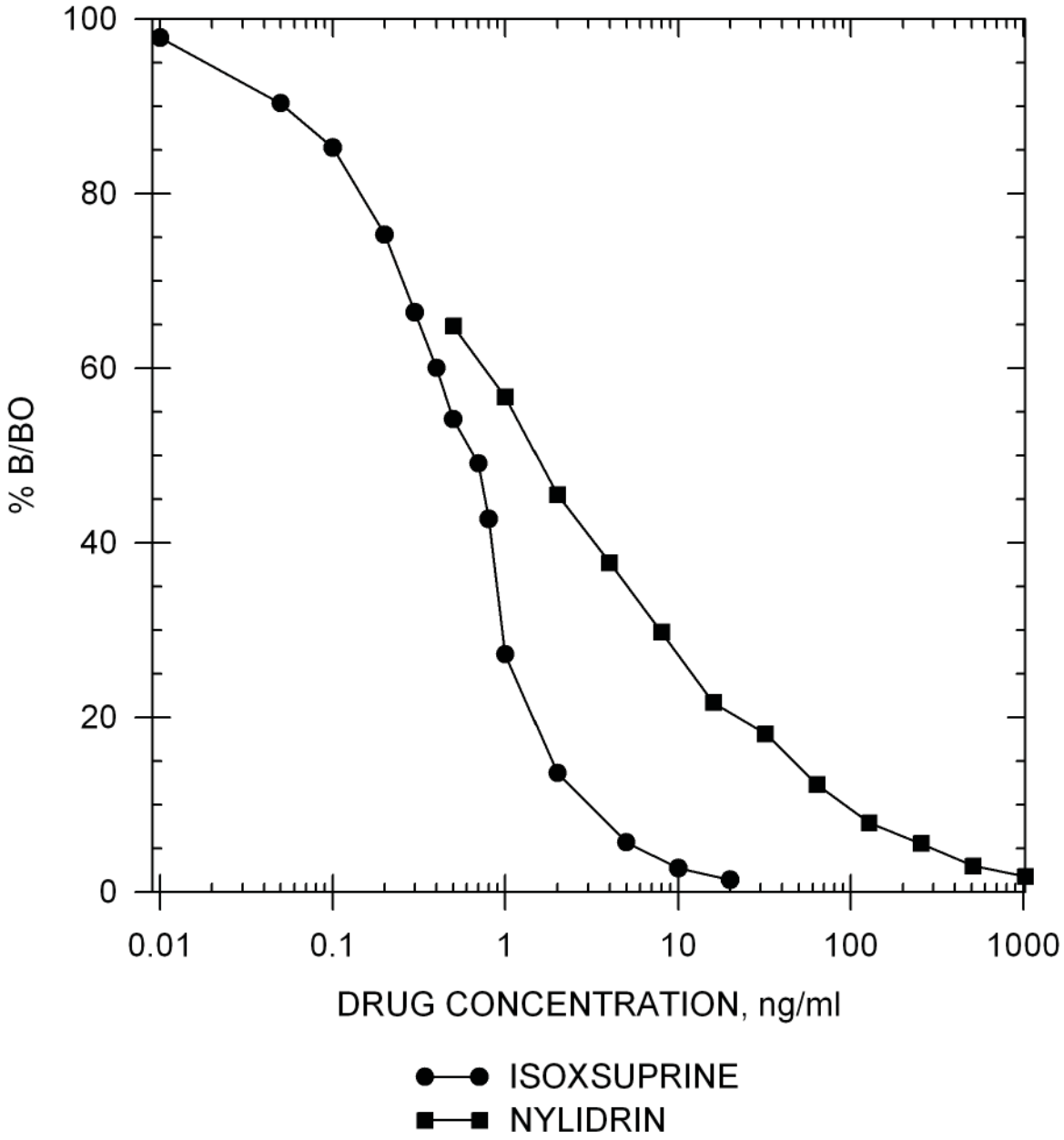
Nylidrin





ISOXSUPRINE STANDARD CURVES

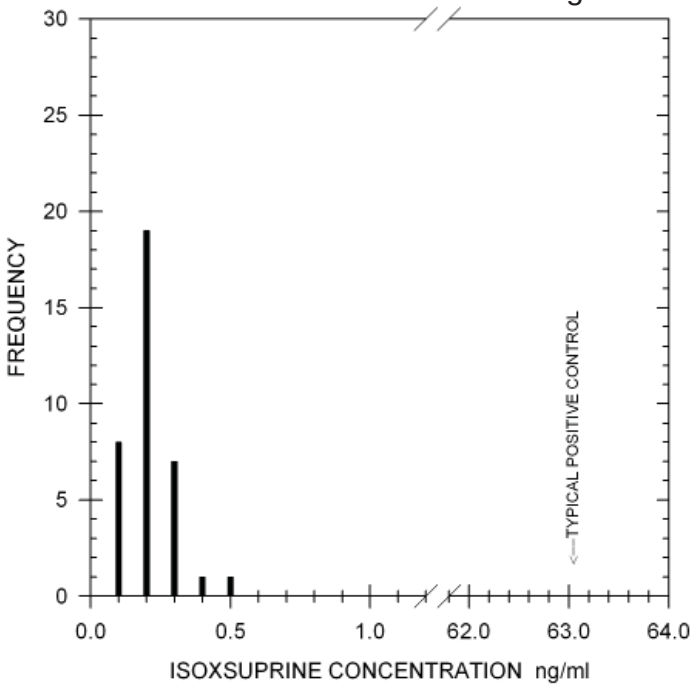
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 37 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.5 ng/ml.

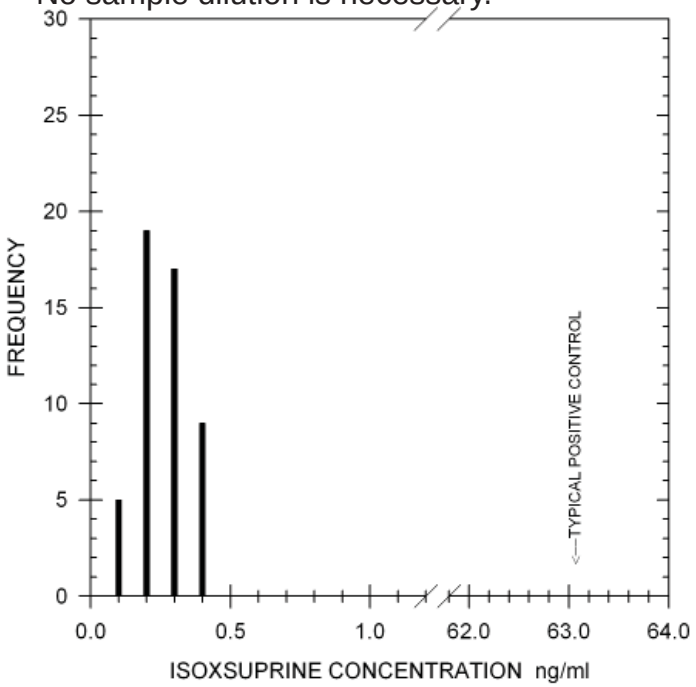
Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples has shown no background levels above 0.4 ng/ml.

Sample Treatment: No sample dilution is necessary.

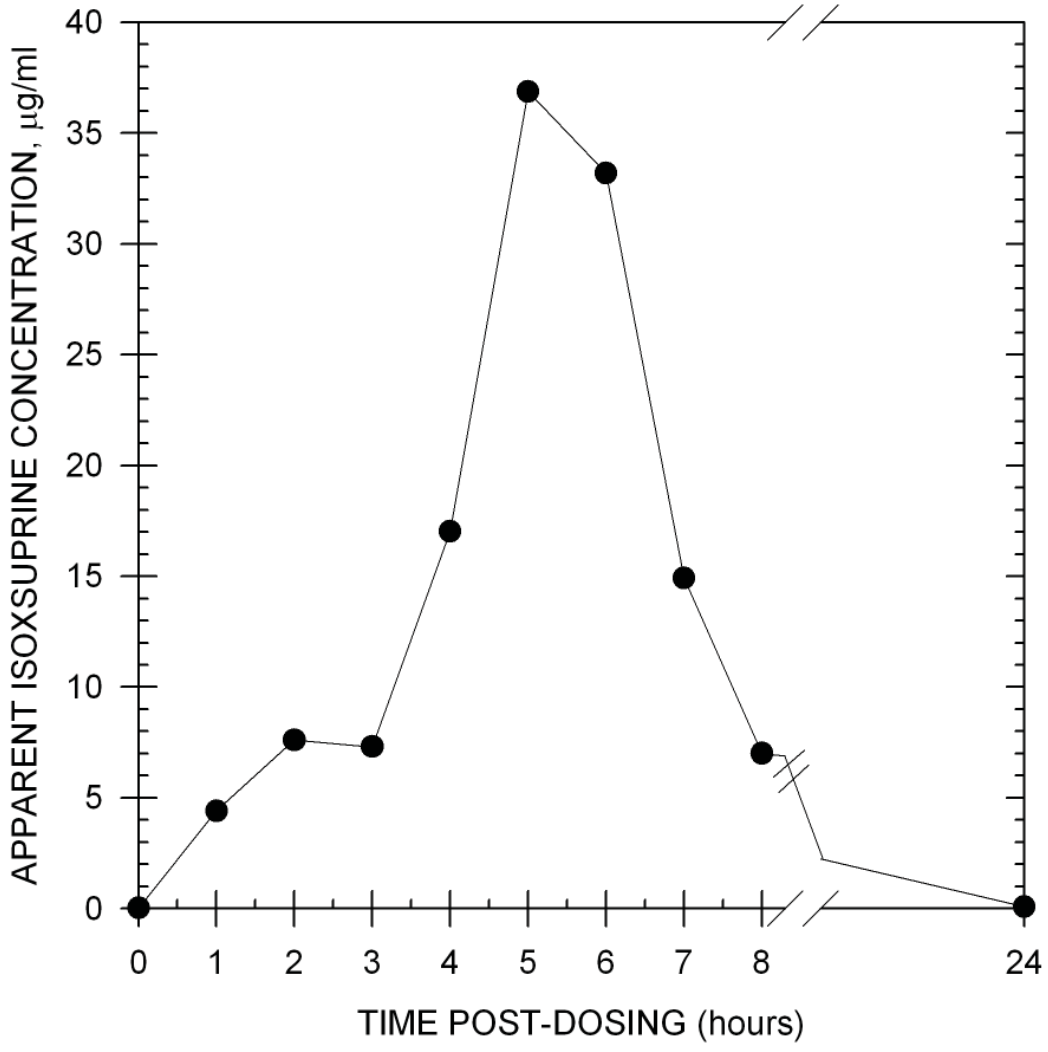


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 60 mg of isoxsuprine orally to one horse, the presence of this drug was detected for at least 24 hours in equine urine. Because all post-dose samples exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated to the recommended 1:1 sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Isoxsuprine	100%
Nylidrin	28%
Lobeline	0.02%

E-Amino-n-Caproic Acid	<0.01%	Methamphetamine	<0.01%
Amphetamine	<0.01%	Methocarbamol	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methoxyphenamine	<0.01%
Benzphetamine	<0.01%	Methylene Blue	<0.01%
1-Benzylpiperazine	<0.01%	6α-Methylprednisolone	<0.01%
Clenbuterol	<0.01%	Naproxen	<0.01%
Diclofenac	<0.01%	Niacinamide	<0.01%
Diethylpropion	<0.01%	Orphenadrine	<0.01%
Dimethyl Sulfoxide	<0.01%	Oxyphenbutazone	<0.01%
Dipyrone	<0.01%	Papaverine	<0.01%
Ephedrine	<0.01%	Pentifylline	<0.01%
Epinephrine	<0.01%	Pentoxifylline	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Phenothiazine	<0.01%
		Phenylbutazone	<0.01%
Fenoterol	<0.01%	Polyethylene Glycol	<0.01%
Flunixin	<0.01%	Prednisolone	<0.01%
Furosemide	<0.01%	Procaine	<0.01%
Glycopyrrolate	<0.01%	Pyrantel	<0.01%
Hordenine	<0.01%	Ritodrine	<0.01%
Hydrocortisone	<0.01%	Salbutamol	<0.01%
Ibuprofen	<0.01%	Salicylamide	<0.01%
Isoetharine	<0.01%	Salicylic Acid	<0.01%
Isoproterenol	<0.01%	Terbutaline	<0.01%
Mazindol	<0.01%	Theobromine	<0.01%
Metaproterenol	<0.01%	Theophylline	<0.01%
Metaraminol	<0.01%	Thiamine	<0.01%

ENHANCED KIT

KETAMINE

Product #109410
& 109415 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Ketamine	8 ng/ml
Norketamine	181 ng/ml

I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (Diluted 1:3)**	
Ketamine	95 ng/ml	Ketamine	41 ng/ml
Norketamine	1232 ng/ml	Norketamine	657 ng/ml
I-50 in Equine Plasma (Diluted 1:1)		**I-50 in Equine Serum**	
Ketamine	43 ng/ml	No data available	
Norketamine	304 ng/ml		

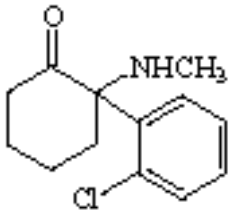
Precision:

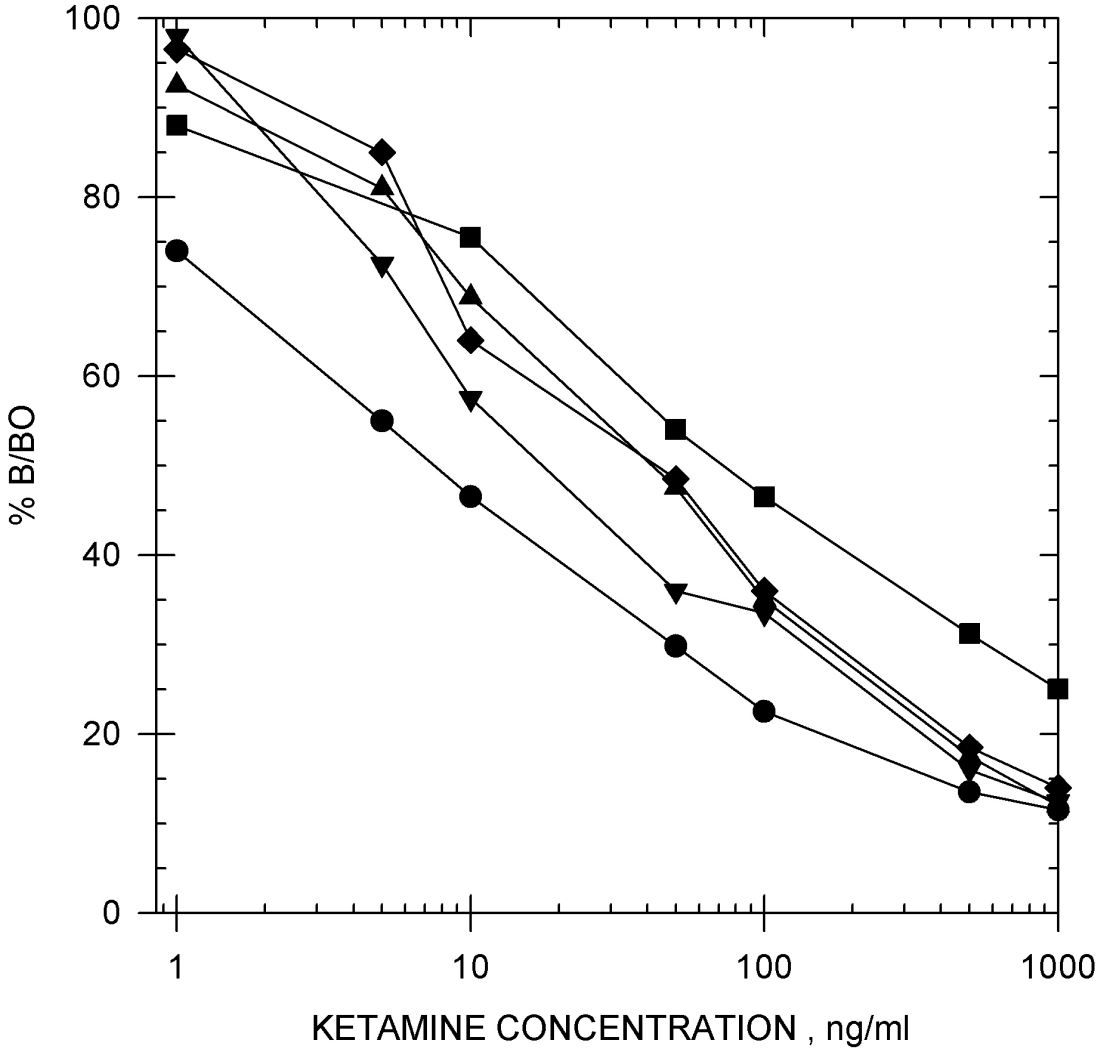
Intra-Assay	5.84%
Inter-Assay	4.54%

Note: Measuring wavelength was 650 nm.

KETAMINE STANDARD CURVES

Ketamine

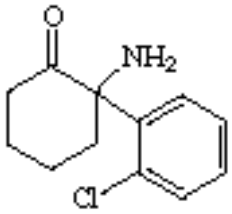


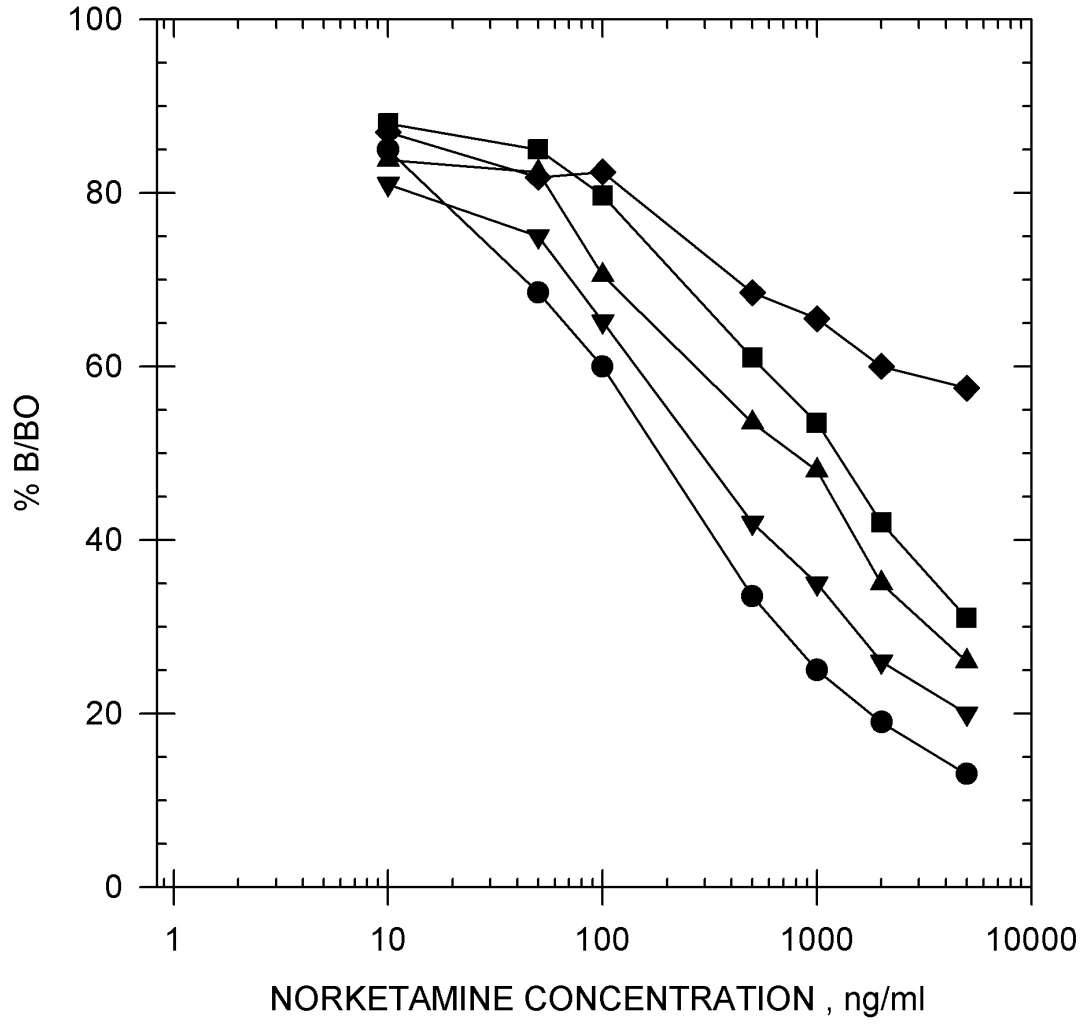


EIA BUFFER
EQUINE URINE (diluted 1:4)
CANINE URINE (diluted 1:3)
EQUINE PLASMA (diluted 1:1)
EQUINE SERUM (diluted 1:1)

KETAMINE STANDARD CURVES

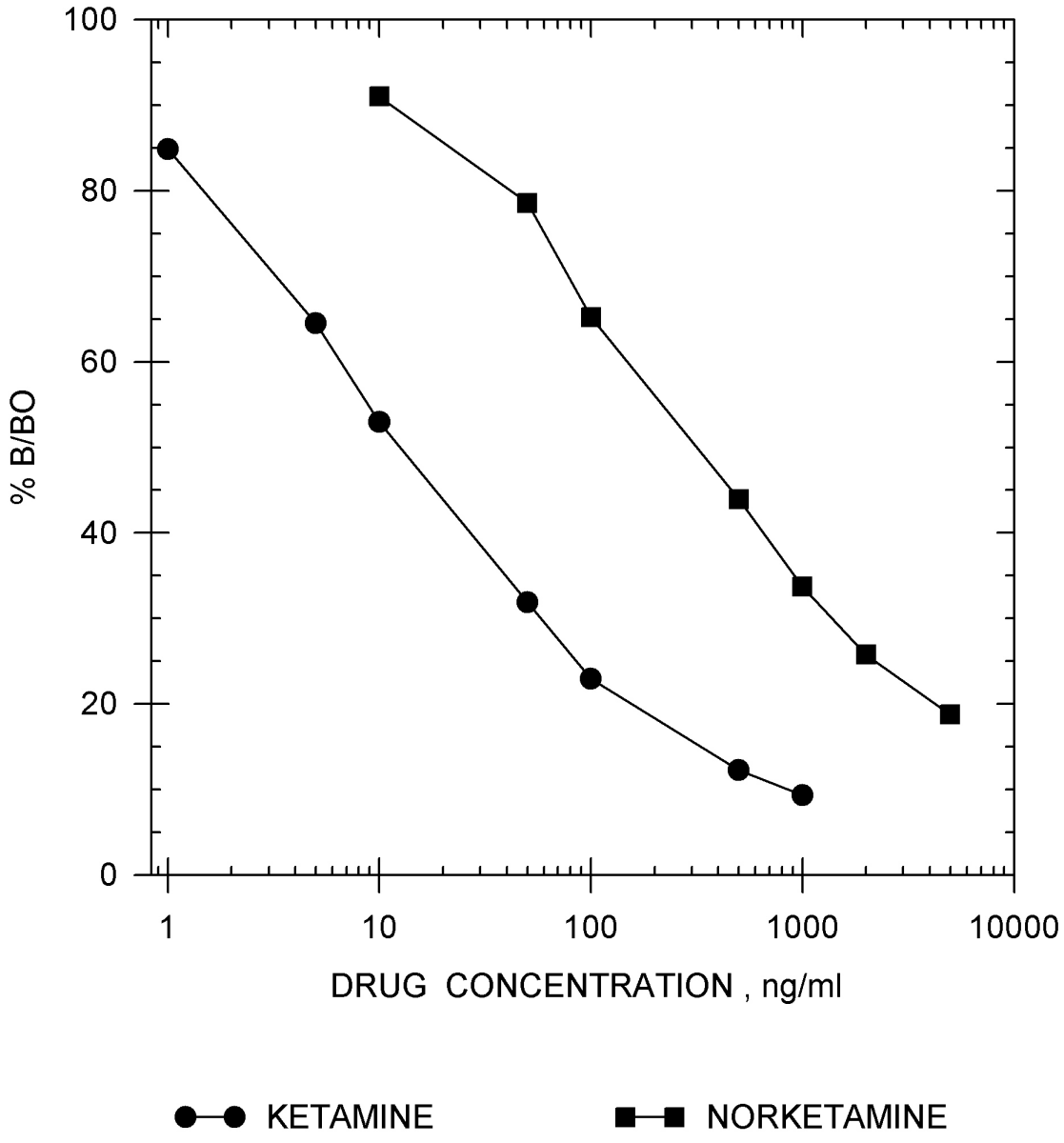
Norketamine





KETAMINE STANDARD CURVES

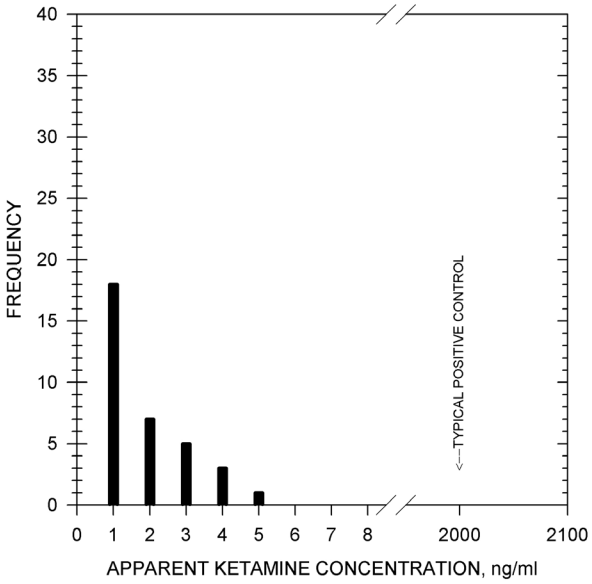
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 34 post-race equine urine samples, diluted 1:4, has shown no background levels above 4.9 ng/ml.

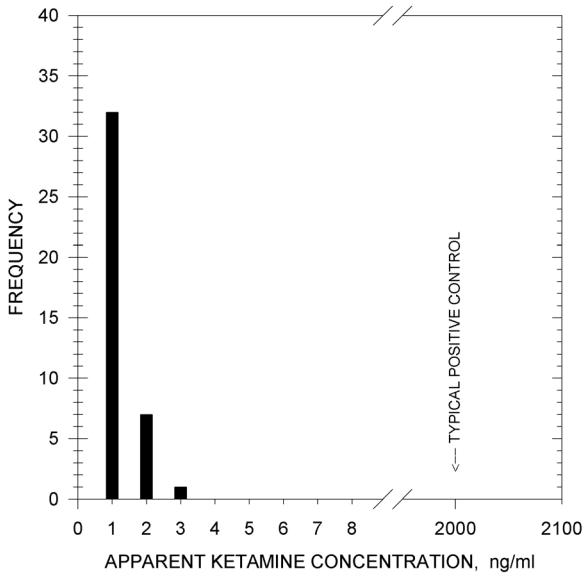
Sample Treatment: A dilution of 1:4 (i.e. 1 part urine to 4 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:3, has shown no background levels above 2.2 ng/ml.

Sample Treatment: A dilution of 1:3 (i.e. 1 part urine to 3 parts EIA buffer) will reduce natural backgrounds.

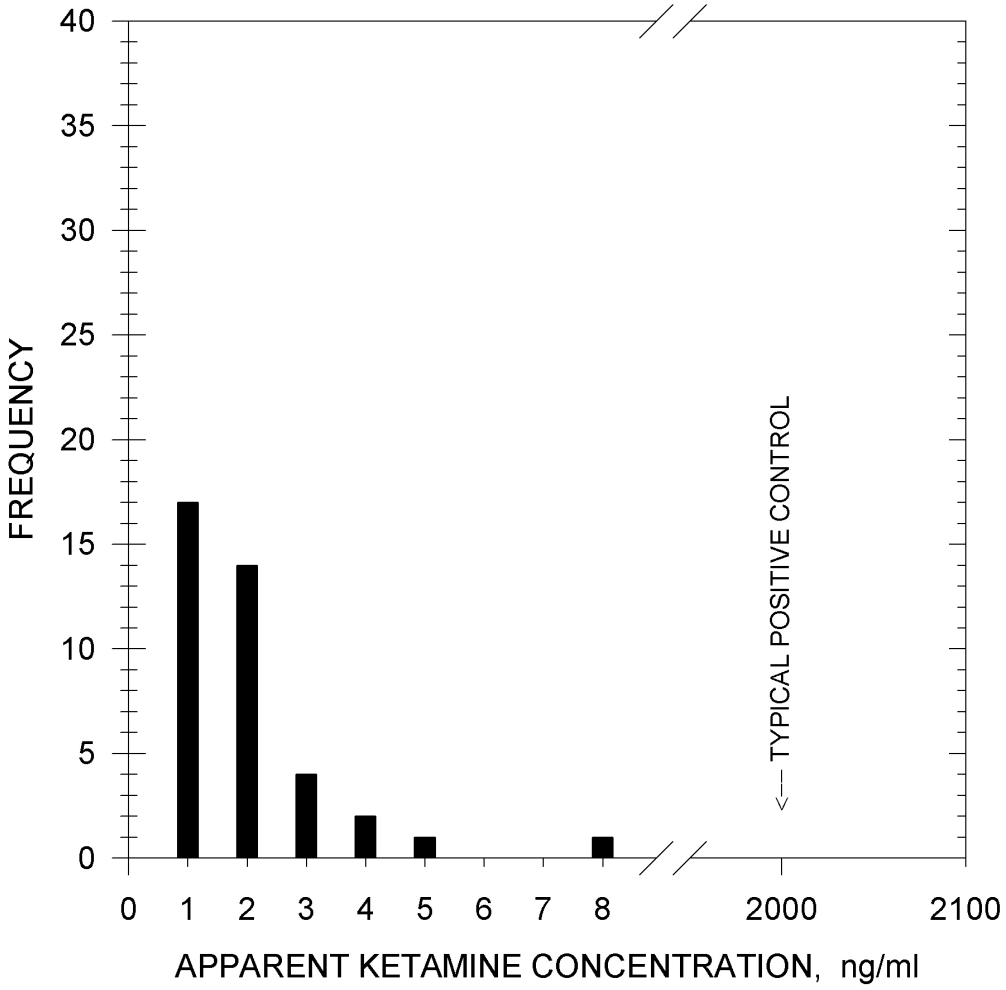


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples, diluted 1:1, has shown no background levels above 7.7 ng/ml.

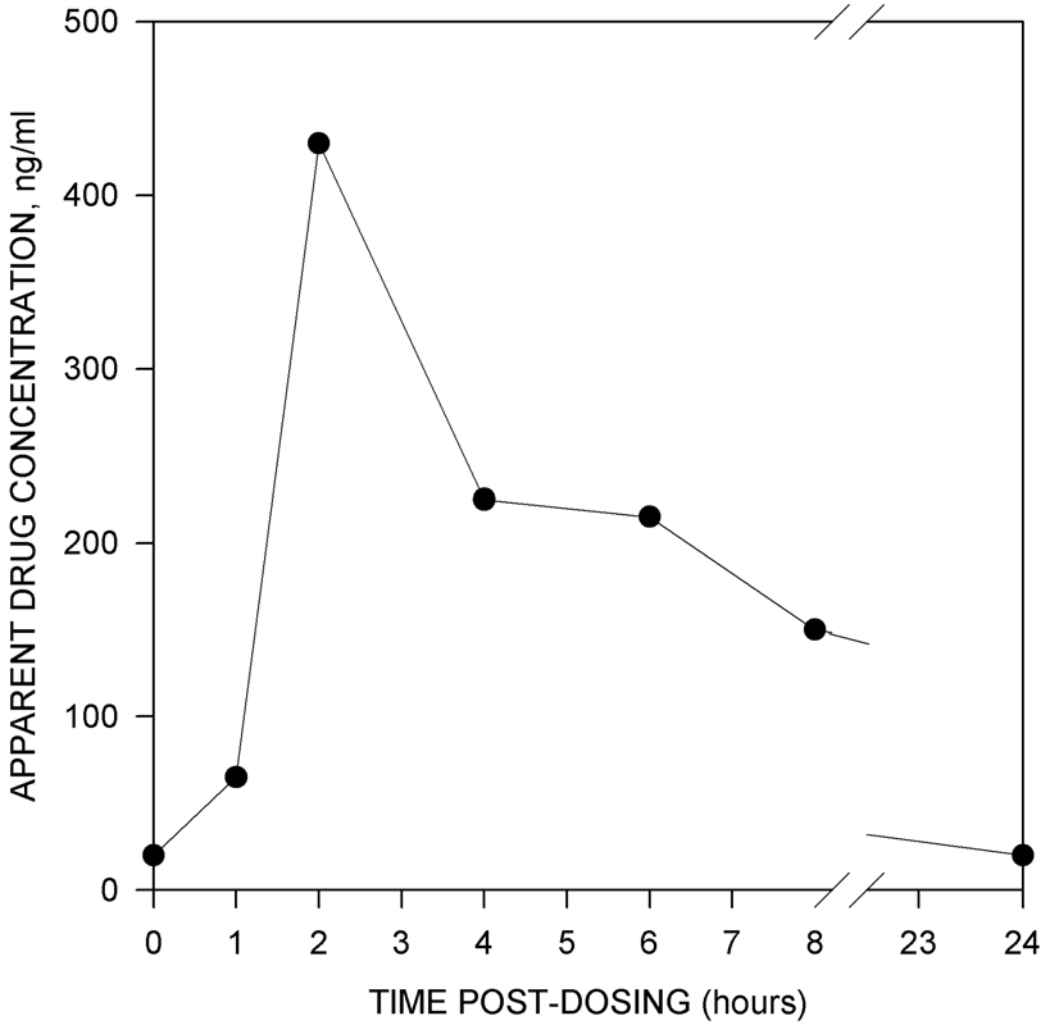
Sample Treatment: A small dilution (1:1) may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 100 mg of ketamine by intramuscular injection to one horse, the presence of this drug was detected at 2 hours and for at least 8 hours in equine urine. Samples were diluted 1:4 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Ketamine	100%
Norketamine	4.6%

Acepromazine	<0.01%	Lidocaine	<0.01%
Acetaminophen	<0.01%	Meperidine	<0.01%
Acetylsalicylic Acid	<0.01%	Metaproterenol	<0.01%
E-amino-n-caproic Acid	<0.01%	Methadone	<0.01%
Amitriptyline	<0.01%	*d*-Methamphetamine	<0.01%
d-Amphetamine	<0.01%	Methaqualone	<0.01%
Ascorbic Acid	<0.01%	Methocarbamol	<0.01%
Benzoic Acid	<0.01%	Methylene Blue	<0.01%
Caffeine	<0.01%	Methylprednisolone	<0.01%
Chlordiazepoxide	<0.01%	Nalorphine	<0.01%
Chlorpromazine	<0.01%	Naproxen	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Codeine	<0.01%	Nicotine	<0.01%
Cortisol	<0.01%	Nortriptyline	<0.01%
Cotinine	<0.01%	Orphenadrine	<0.01%
Dexamethasone	<0.01%	Oxycodone	<0.01%
Dextromethorphan	<0.01%	Oxyphenbutazone	<0.01%
Diclofenac	<0.01%	PCP	<0.01%
Dimethyl Sulfoxide	<0.01%	Penicillin G-Potassium	<0.01%
Dipyrone	<0.01%	Penicillin G-Procaine	<0.01%
Doxepin	<0.01%	Pentoxifylline	<0.01%
Ephedrine	<0.01%	Phenothiazine	<0.01%
Erythromycin	<0.01%	Phenylbutazone	<0.01%
Ethyl p-amino-benzoate	<0.01%	Polyethylene Glycol	<0.01%
Fenoprofen	<0.01%	Prednisolone	<0.01%
Flunixin	<0.01%	Primadone	<0.01%
Folic Acid	<0.01%	Procainamide	<0.01%
Folinic Acid	<0.01%	Procaine	<0.01%
Furosemide	<0.01%	Promazine	<0.01%
Gemfibrozil	<0.01%	Pseudoephedrine	<0.01%
Gentisic Acid	<0.01%	Pyrantel	<0.01%
Glipizide	<0.01%	Pyrilamine	<0.01%
L-Glutamic Acid	<0.01%	Pyrimethamine	<0.01%
Gluthethimide	<0.01%	Quinidine	<0.01%
Glycopyrrolate	<0.01%	Quinine	<0.01%
Heparin	<0.01%	Salbutamol	<0.01%
Hippuric Acid	<0.01%	Salicylamide	<0.01%
Hordenine	<0.01%	Salicylic Acid	<0.01%
Hydrocortisone	<0.01%	Theophylline	<0.01%
Hydromorphone	<0.01%	Thiamine	<0.01%
Ibuprofen	<0.01%	Trimethoprim	<0.01%
Imipramine	<0.01%	Trimpramine	<0.01%
Isoxsuprine	<0.01%	Uric Acid	<0.01%

ENHANCED KIT

KETOPROFEN

Product #108210 & 108215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Ketoprofen 24.8 ng/ml

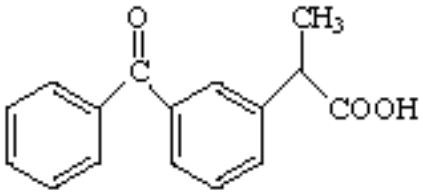
I-50 in Equine Urine (Diluted 1:9)		I-50 in Canine Urine (Diluted 1:9)	
Ketoprofen	208.7 ng/ml	Ketoprofen	203.1 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Ketoprofen	723.5 ng/ml	Ketoprofen	45.6 ng/ml

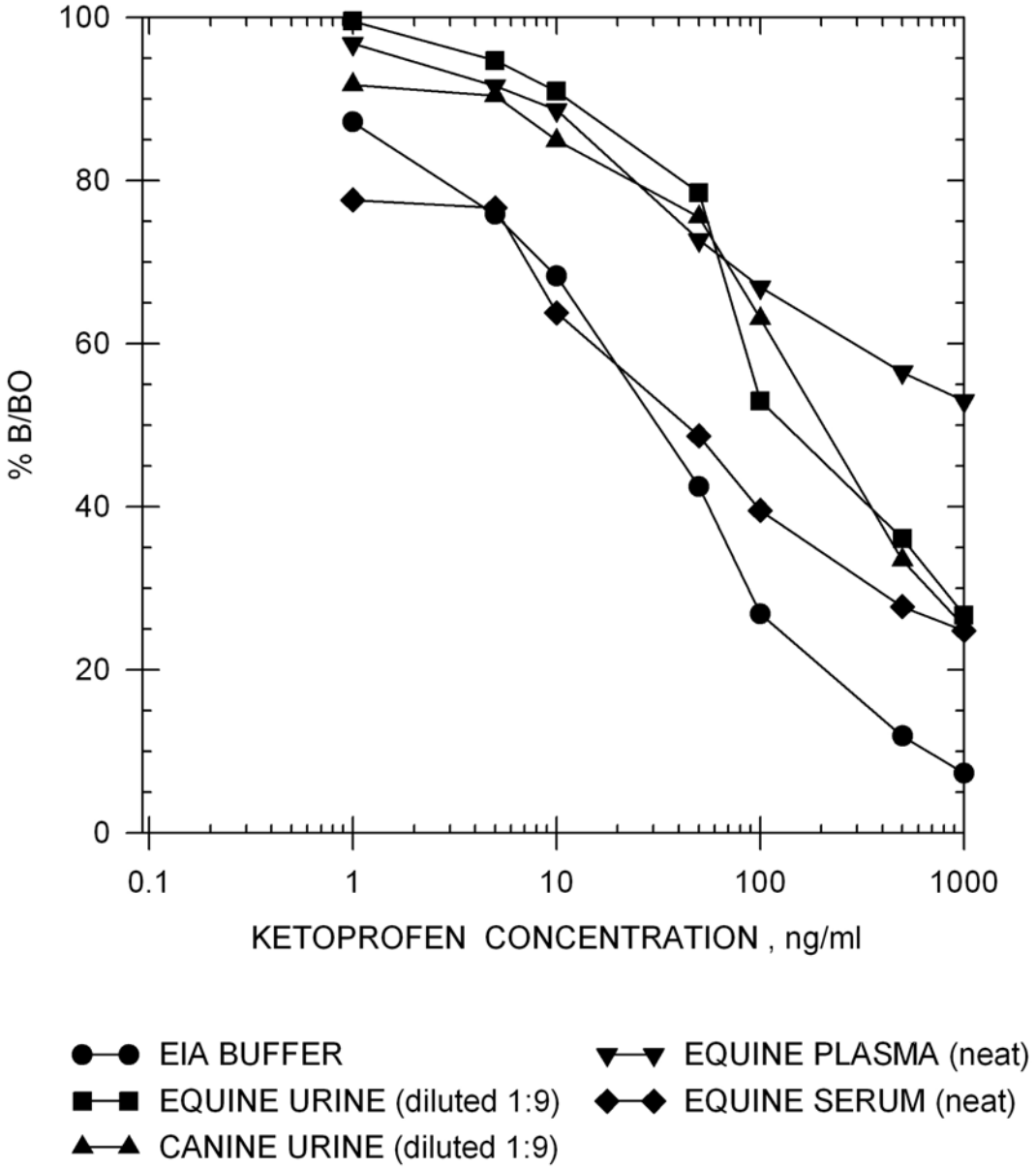
Precision:	Intra-assay	2.76 %
	Inter-assay	4.83 %

Note: Measuring wavelength was 650 nm**.**

KETOPROFEN STANDARD CURVES

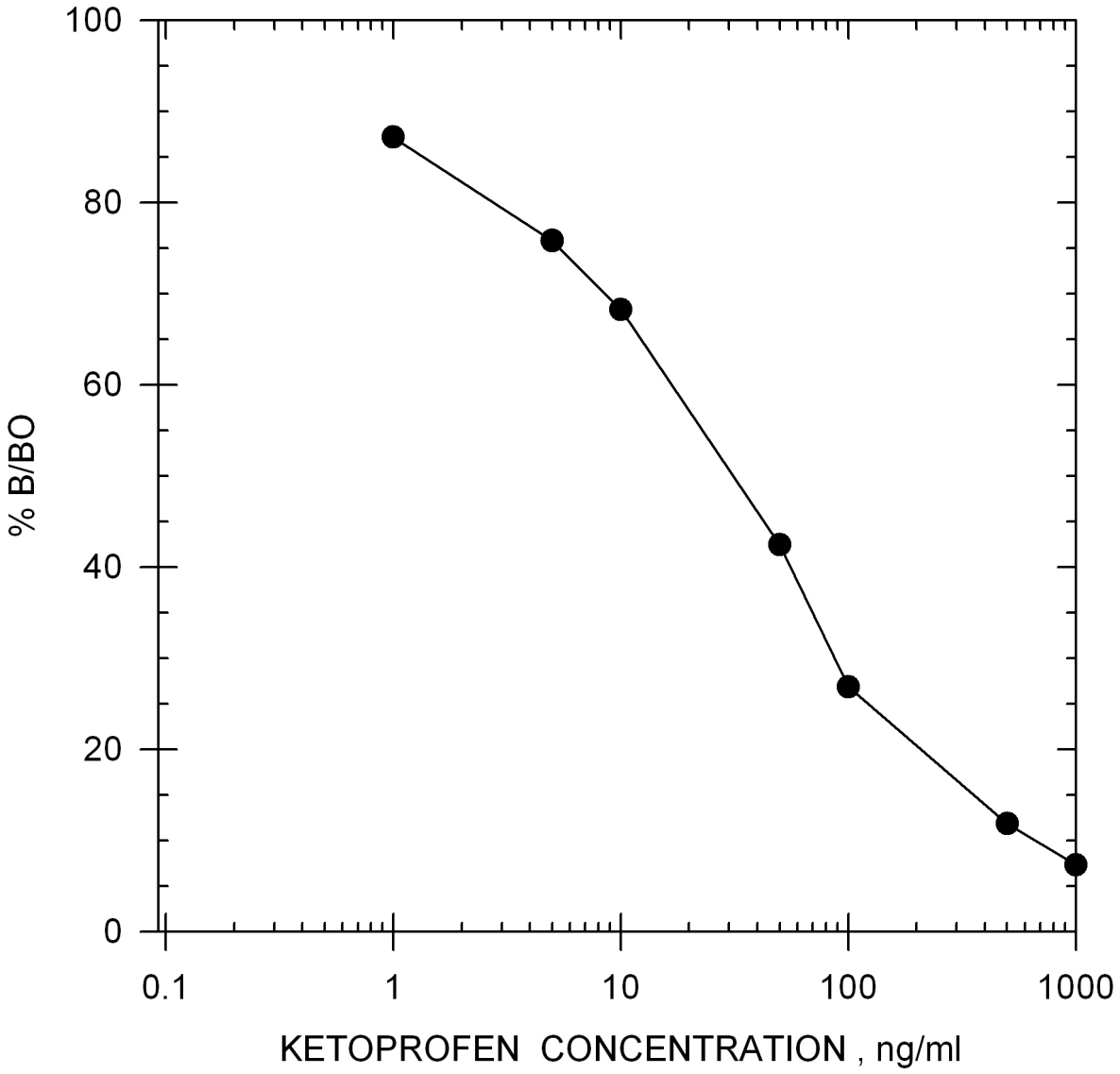
Ketoprofen





KETOPROFEN STANDARD CURVES

Drug Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

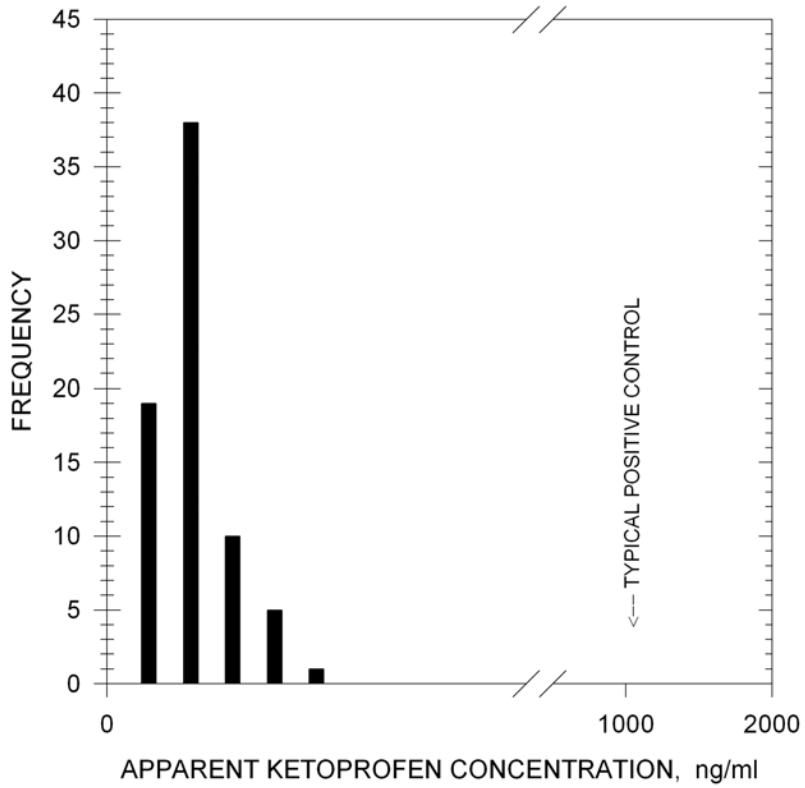
Backgrounds: Analysis of 83 post-race equine urine samples, diluted 1:9, has shown no background levels above 4.5 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.

TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:9, has shown no background levels above 8 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

Equine Serum : No dilution is necessary.

Equine Plasma : An extraction is necessary.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Ketoprofen	100%
Suprofen	3.4%
Fenoprofen	1.2%
Indoprofen	0.3%
Indomethacin	0.2%
Methylene Blue	0.1%
Flurbiprofen	0.04%

Meperidine	<0.01%	Acepromazine	<0.01%
Metaproterenol	<0.01%	Acetaminophen	<0.01%
Methadone	<0.01%	Acetylsalicylic Acid	<0.01%
Methaqualone	<0.01%	E-Amino-n-Caproic Acid	<0.01%
Methocarbamol	<0.01%	Amitriptyline	<0.01%
6α-Methylprednisolone	<0.01%	Ascorbic Acid	<0.01%
Nalorphine	<0.01%	Benzoic Acid	<0.01%
Naproxen	<0.01%	Caffeine	<0.01%
Niacinamide	<0.01%	Chlordiazepoxide	<0.01%
Nicotine	<0.01%	Chlorpromazine	<0.01%
Nortriptyline	<0.01%	Clenbuterol	<0.01%
Orphenadrine	<0.01%	Codeine	<0.01%
Oxyphenbutazone	<0.01%	Cotinine	<0.01%
Penicillin G-Potassium	<0.01%	Dexamethasone	<0.01%
Penicillin G-Procaine	<0.01%	Dextromethorphan	<0.01%
Pentoxifylline	<0.01%	Diclofenac	<0.01%
Phencyclidine (PCP)	<0.01%	Dimethyl Sulfoxide	<0.01%
Phenothiazine	<0.01%	Dipyrone	<0.01%
Phenylbutazone	<0.01%	Doxepin	<0.01%
Polyethylene Glycol	<0.01%	Ephedrine	<0.01%
Prednisolone	<0.01%	Erthromycin	<0.01%
Primidone	<0.01%	Fenoprofen	<0.01%
Procainamide	<0.01%	Flunixin	<0.01%
Procaine	<0.01%	Folic Acid	<0.01%
Promazine	<0.01%	Furosemide	<0.01%
Pseudoephedrine	<0.01%	Gemfibrozil	<0.01%
Pyrantel	<0.01%	Gentisic Acid	<0.01%
Pyrimethamine	<0.01%	Glipizide	<0.01%
Quinidine	<0.01%	L-Glutamic Acid	<0.01%
Quinine	<0.01%	Glutethimide	<0.01%
Salbutamol	<0.01%	Glycopyrrolate	<0.01%
Salicylamide	<0.01%	Heparin	<0.01%
Salicylic Acid	<0.01%	Hippuric Acid	<0.01%
Theophylline	<0.01%	Hordenine	<0.01%
Thiamine	<0.01%	Hydrocortisone	<0.01%
Trimethoprim	<0.01%	Ibuprofen	<0.01%
Trimipramine	<0.01%	Imipramine	<0.01%
Uric Acid	<0.01%	Isoxsuprine	<0.01%
		Lidocaine	<0.01%

ENHANCED KIT

KETOROLAC

Product #105610 & 105615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Ketorolac	1.83 ng/ml
Tolmetin	3.21 ng/ml
Zomepirac	13.26 ng/ml

I-50 in Equine Urine (Diluted 1:4)

Ketorolac	9.72 ng/ml
Tolmetin	13.22 ng/ml
Zomepirac	10.31 ng/ml

I-50 in Canine Urine (Diluted 1:4)

Ketorolac	6.7 ng/ml
Tolmetin	19.81 ng/ml
Zomepirac	16.34 ng/ml

I-50 in Equine Plasma

Ketorolac	1.55 ng/ml
Tolmetin	2.57 ng/ml
Zomepirac	9.52 ng/ml

I-50 in Equine Serum

Ketorolac	3.14 ng/ml
Tolmetin	2.44 ng/ml
Zomepirac	6.51 ng/ml

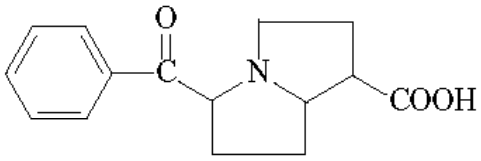
Precision:

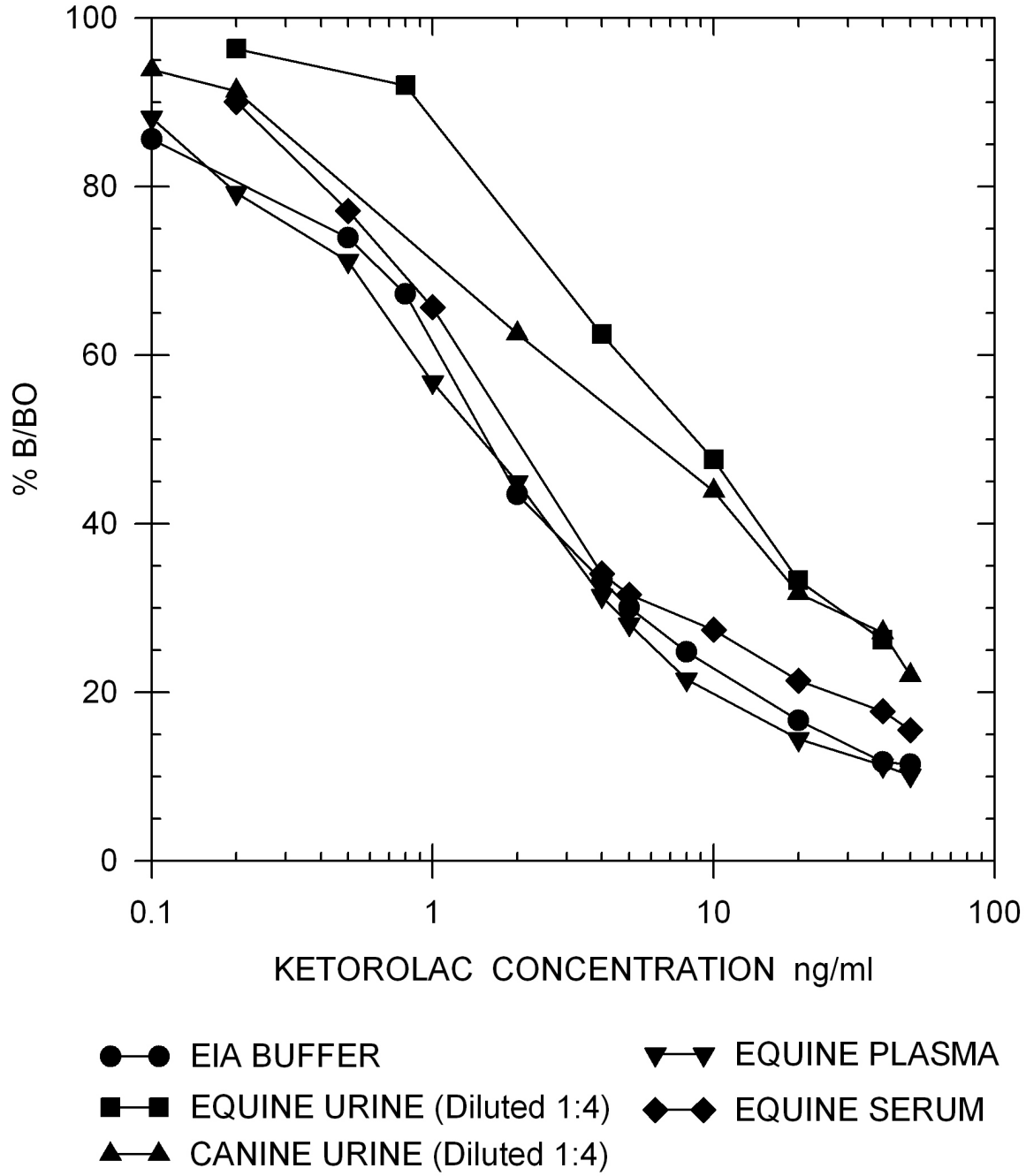
Intra-assay	4.36 %
Inter-assay	5.17 %

Note: Measuring wavelength was 650 nm**.**

KETOROLAC STANDARD CURVES

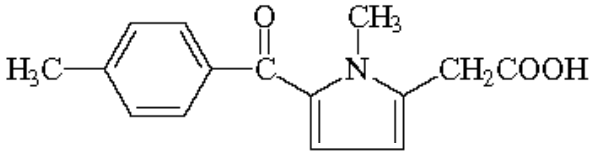
Ketorolac

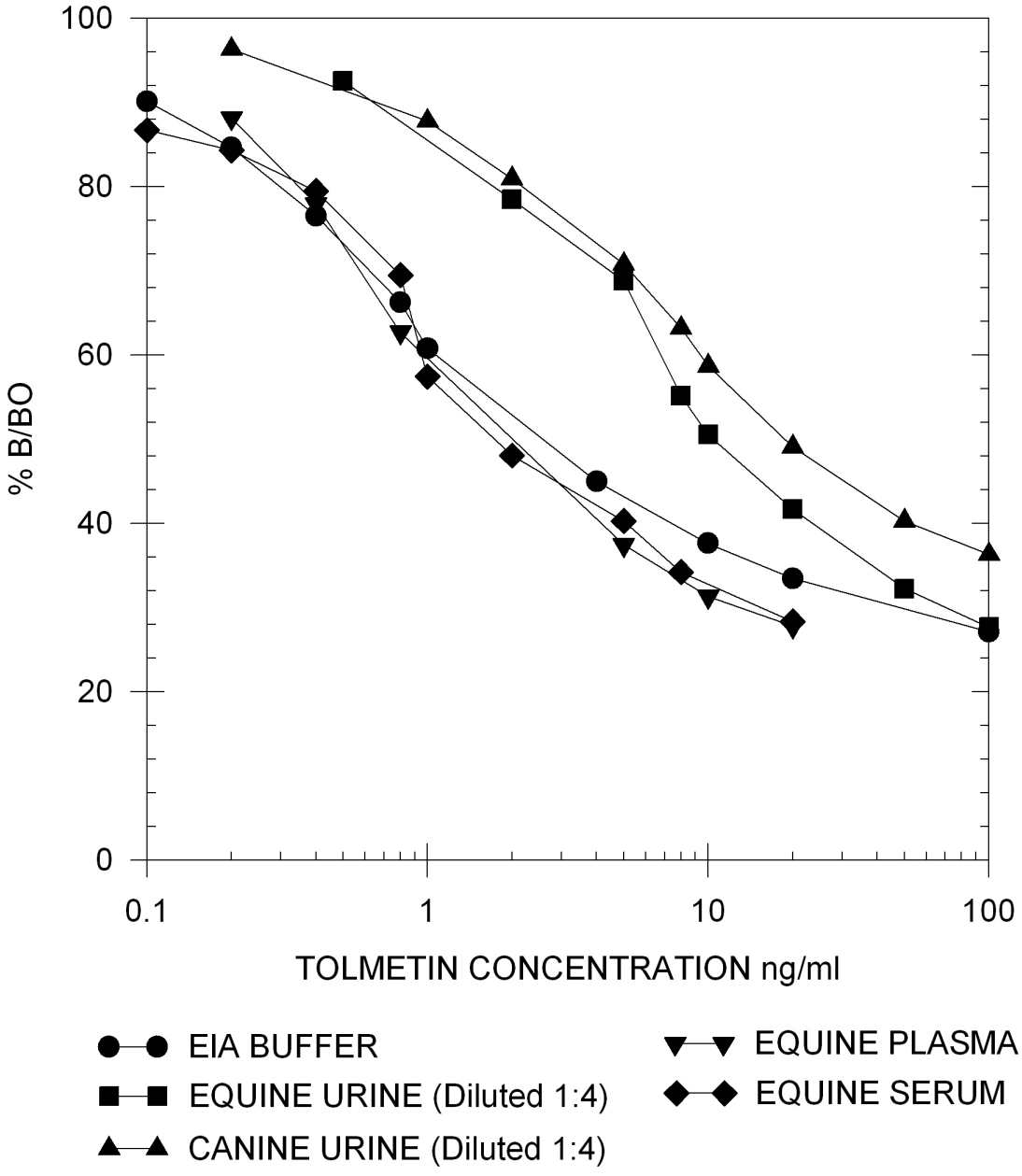




KETOROLAC STANDARD CURVES

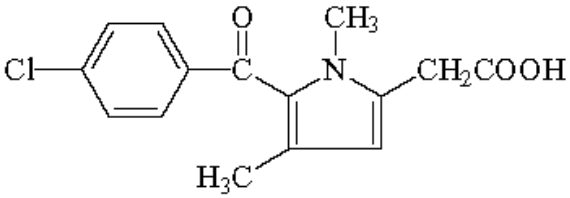
Tolmetin

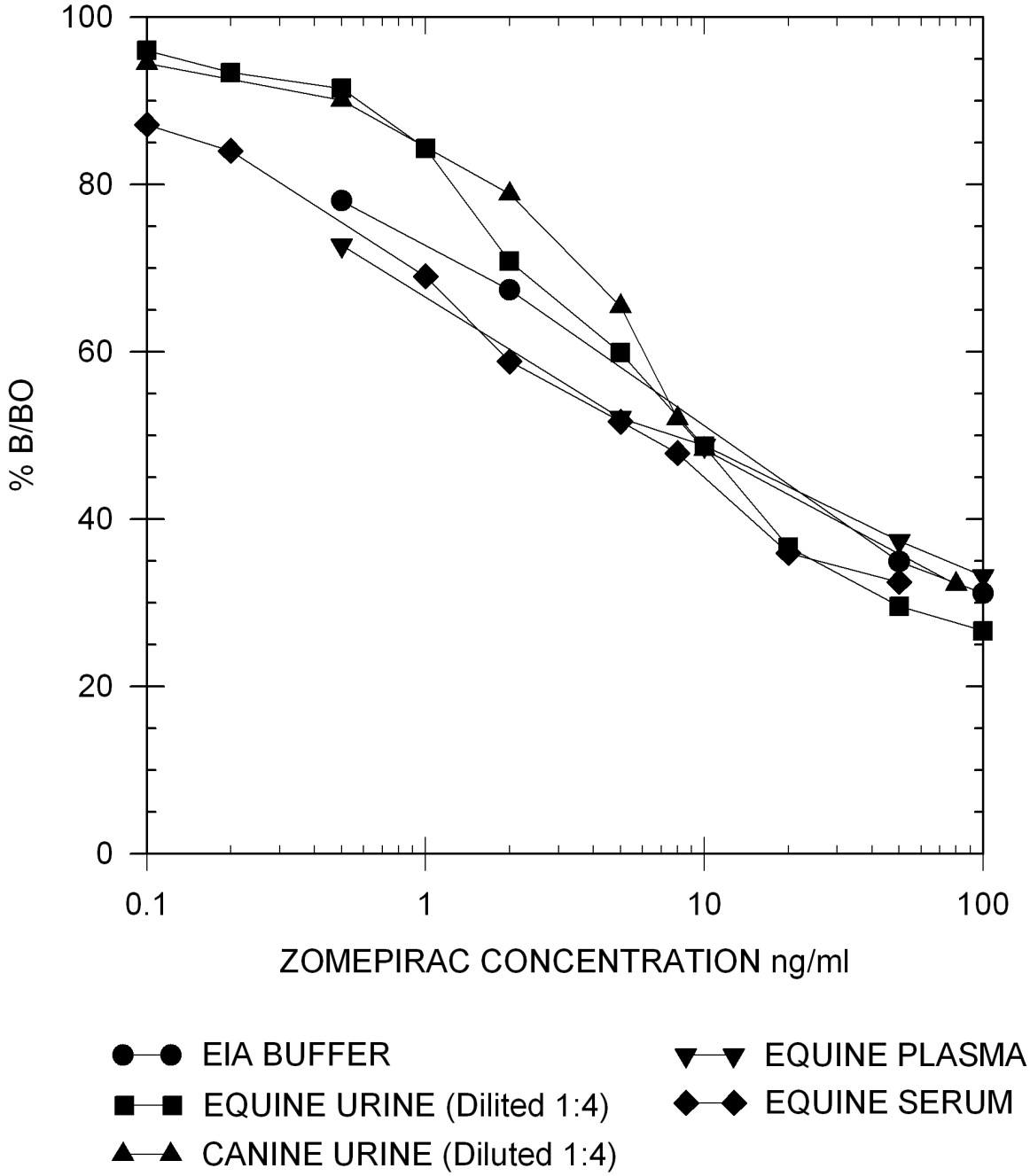




KETOROLAC STANDARD CURVES

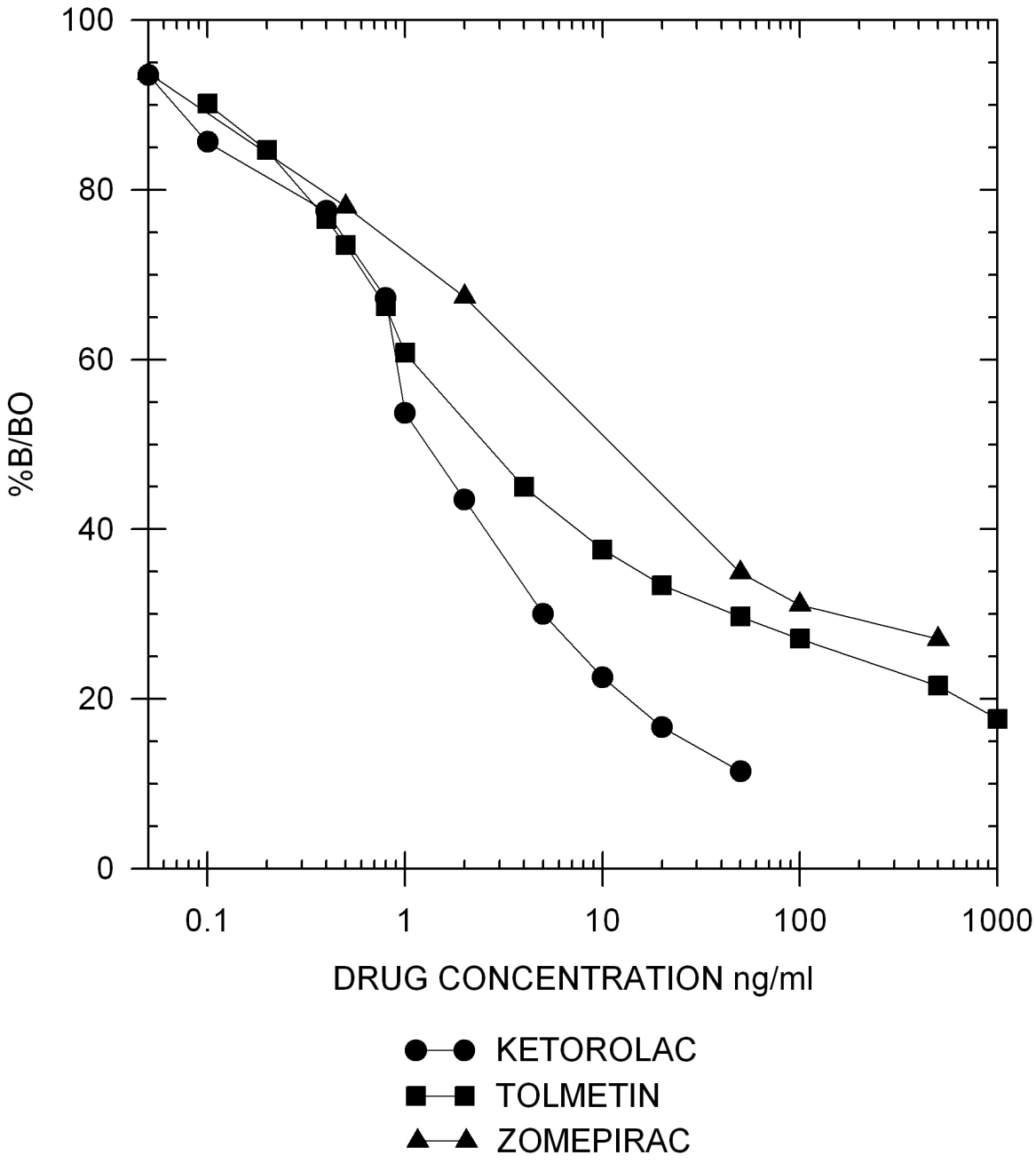
Zomepirac





KETOROLAC STANDARD CURVES

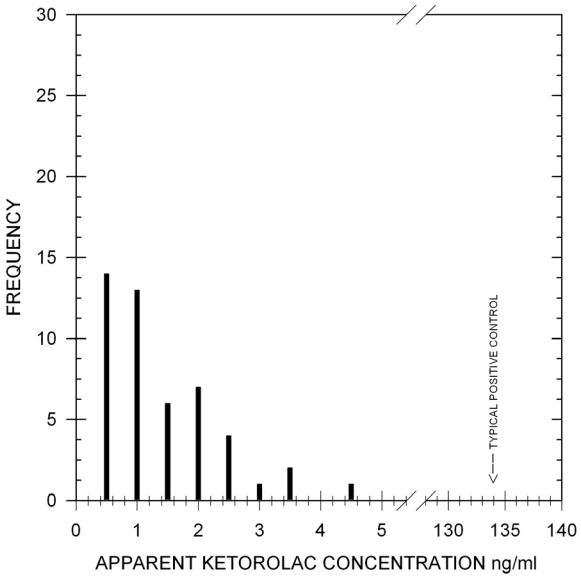
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 48 post-race equine urine samples, diluted 1:9, has shown no background levels above 4.5 ng/ml.

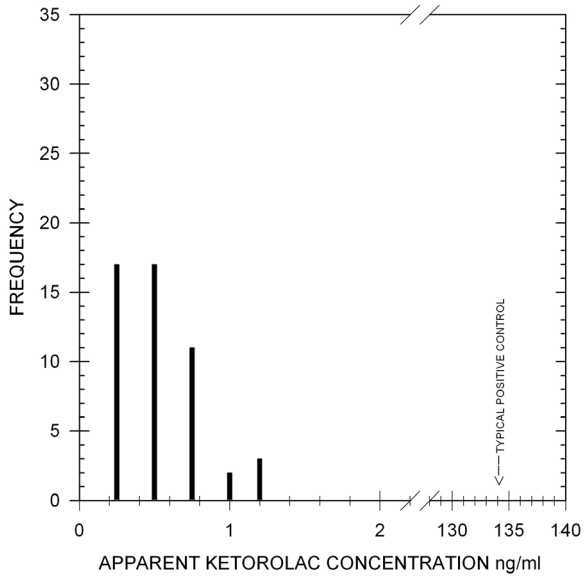
Sample Treatment: A dilution of 1:4 to 1:9 is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples, diluted 1:4, has shown no background levels above 1.2 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.

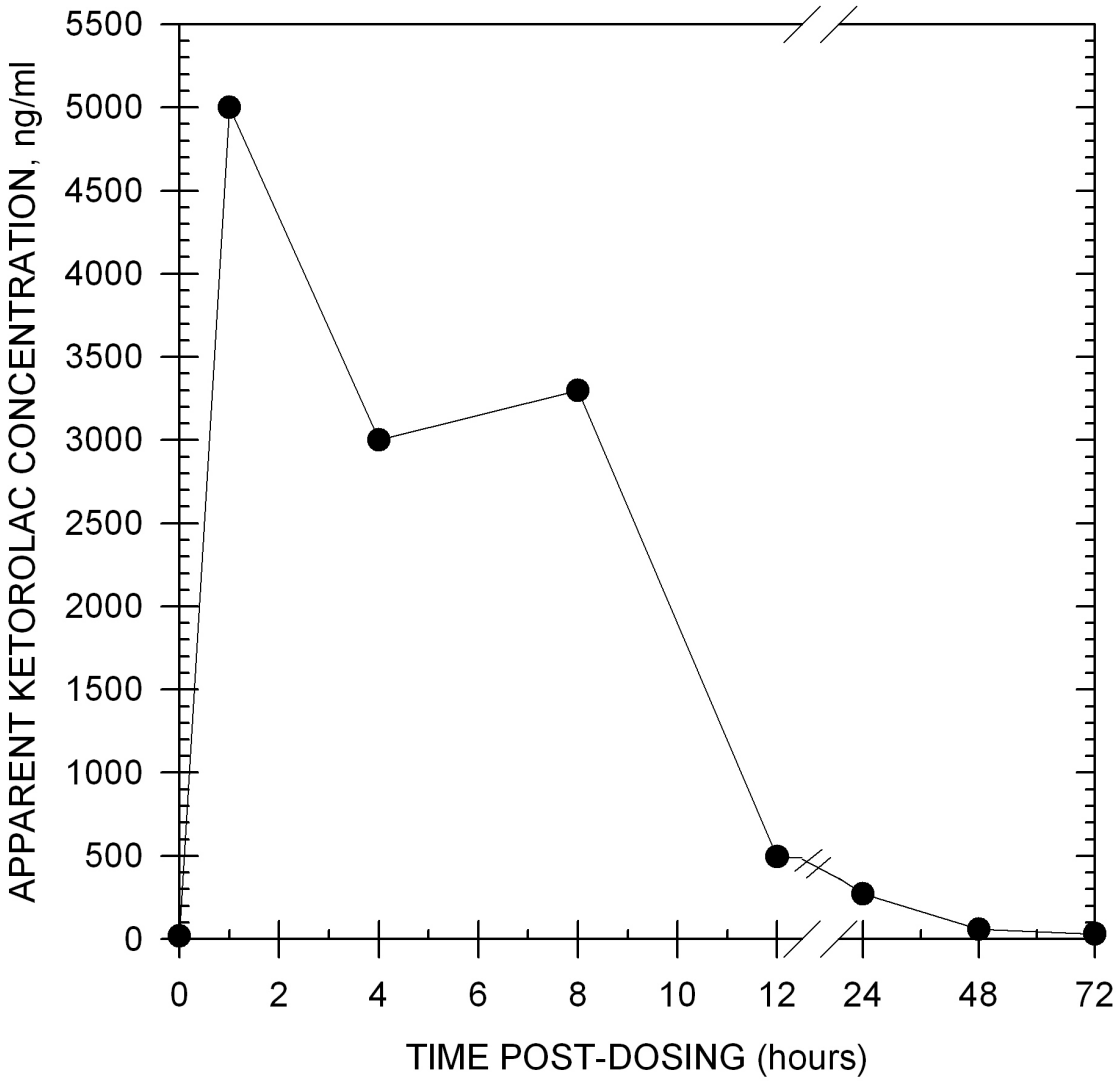


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 40 mg/horse of ketorolac by intramuscular injection to one horse, the presence of this drug was detected for 24 hours in equine urine. All samples were diluted 1:9 with EIA buffer before testing.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Ketorolac	100%
Tolmetin	57%
Zomiperac	13.8%
Tiaprofenic Acid	0.22%
Ketoprofen	0.18%
Ethyl-p-Amino Benzoate	0.04%
Suprofen	0.03%
Dipyrone	0.01%

Methotrimeprazine	<0.01%	Acetylsalicylic Acid	<0.01%
Methylene Blue	<0.01%	E-Amino-n-Caproic Acid	<0.01%
6α-Methylprednisolone	<0.01%	Aminopyrene	<0.01%
Nabumetone	<0.01%	Ascorbic Acid	<0.01%
Naproxen	<0.01%	1-Benzylpiperazine	<0.01%
Niacinamide	<0.01%	Carprofen	<0.01%
Niflumic Acid	<0.01%	Clenbuterol	<0.01%
Orphenadrine	<0.01%	Diclofenac	<0.01%
Oxyphenbutazone	<0.01%	Diflunisal	<0.01%
PCP	<0.01%	Dimethyl sulfoxide	<0.01%
Pentoxifylline	<0.01%	Etodolac	<0.01%
Phenothiazine	<0.01%	Fenoprofen Calcium Hydrate	<0.01%
Phenylbutazone	<0.01%	Flunixin	<0.01%
Piroxicam	<0.01%	Flufenamic Acid	<0.01%
Polyethylene Glycol	<0.01%	Flurbiprofen	<0.01%
Prednisolone	<0.01%	Furosemide	<0.01%
Procaine	<0.01%	Glycopyrrolate	<0.01%
Pyrantel	<0.01%	Hordenine	<0.01%
Quinidine	<0.01%	Hydrocortisone	<0.01%
Salbutamol	<0.01%	Ibuprofen	<0.01%
Salicylamide	<0.01%	Indomethacin	<0.01%
Salicylic Acid	<0.01%	Isoxicam	<0.01%
Sulindac	<0.01%	Meclofenamic Acid	<0.01%
Thiamine	<0.01%	Mefanamic Acid	<0.01%
Thiosalicylic Acid	<0.01%	Meperidine	<0.01%
Tramadol	<0.01%	Metaproterenol	<0.01%
Xylazine	<0.01%	Methocarbamol	<0.01%

ENHANCED KIT

LEVALLORPHAN

Product #102310 &
102315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Levallorphan	0.2 ng/ml
Levorphanol	9 ng/ml
Nalorphine	58 ng/ml
Butorphanol	173 ng/ml
Naloxone	297 ng/ml
Nalmefene	542 ng/ml

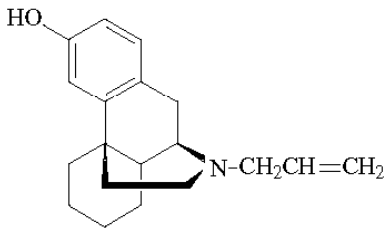
I-50 in Equine Urine (Diluted 1:1)		**I-50 in Canine Urine (Diluted 1:1)**	
Levallorphan	0.8 ng/ml	Levallorphan	0.3 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Levallorphan	0.5 ng/ml	Levallorphan	0.4 ng/ml

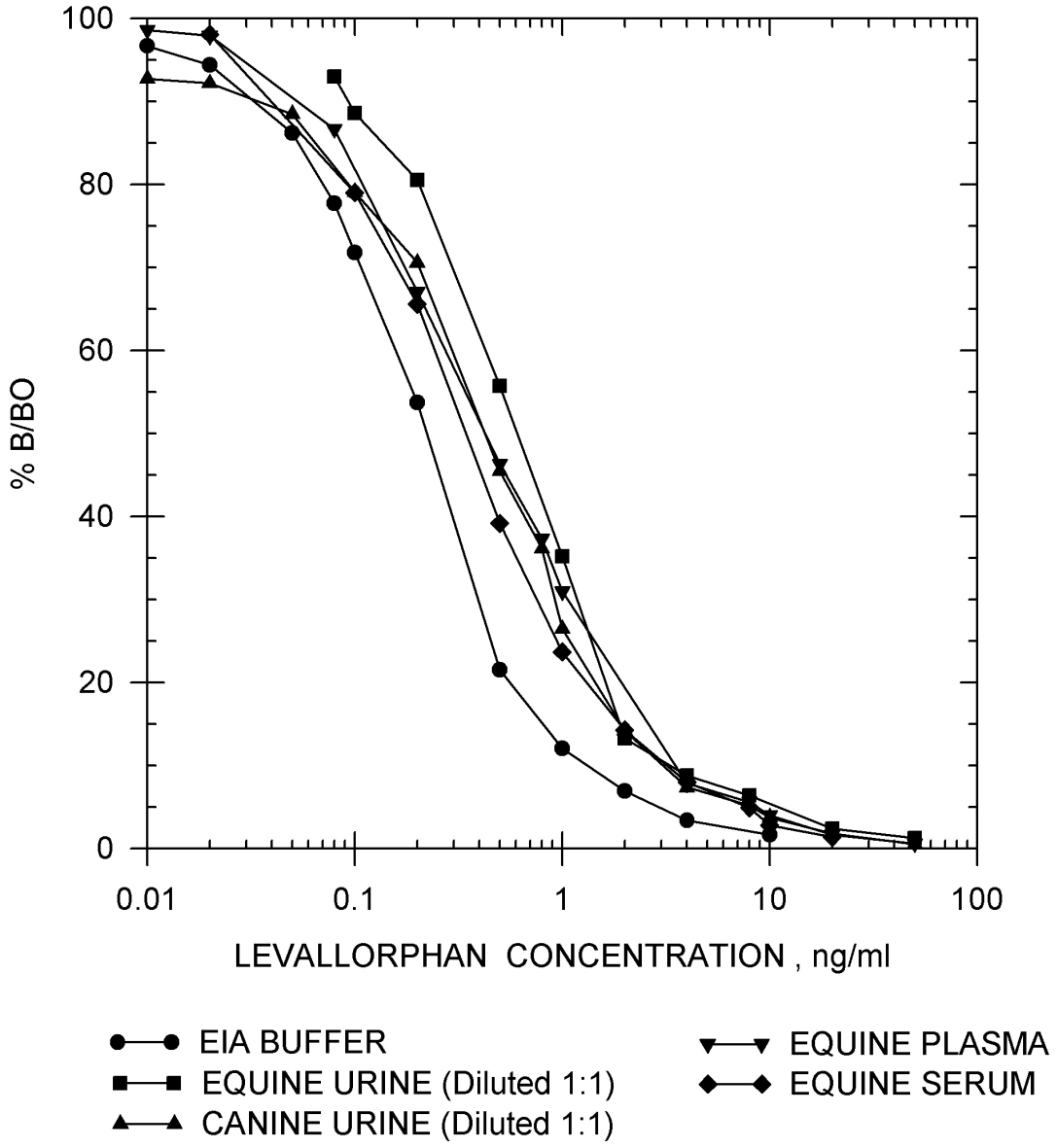
Precision:	Intra-assay	4.78 %
	Inter-assay	5.26 %

Note: Measuring wavelength was 650 nm**.**

LEVALLORPHAN STANDARD CURVES

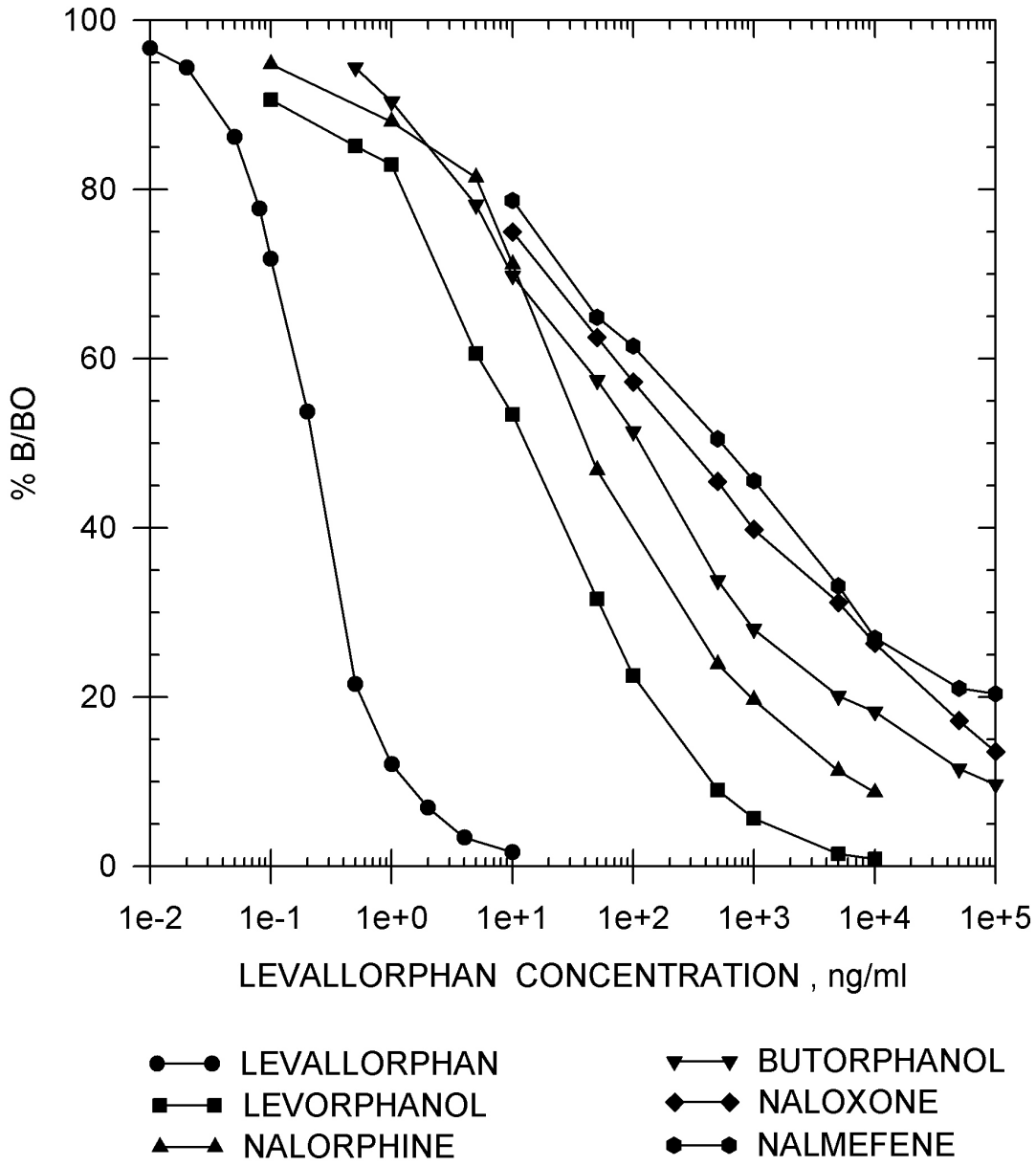
Levallorphan





LEVALLORPHAN STANDARD CURVES

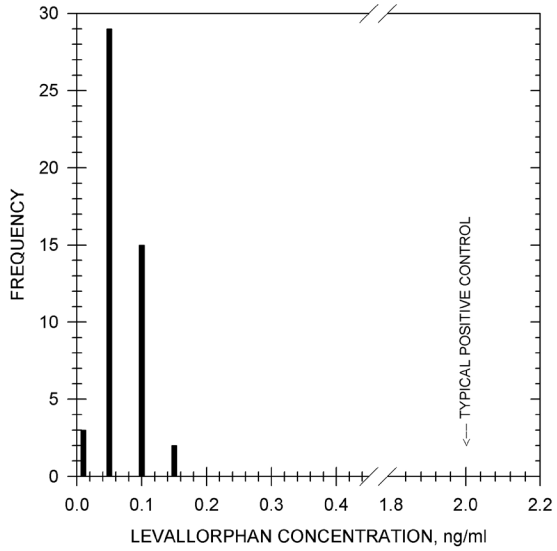
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.11 ng/ml.

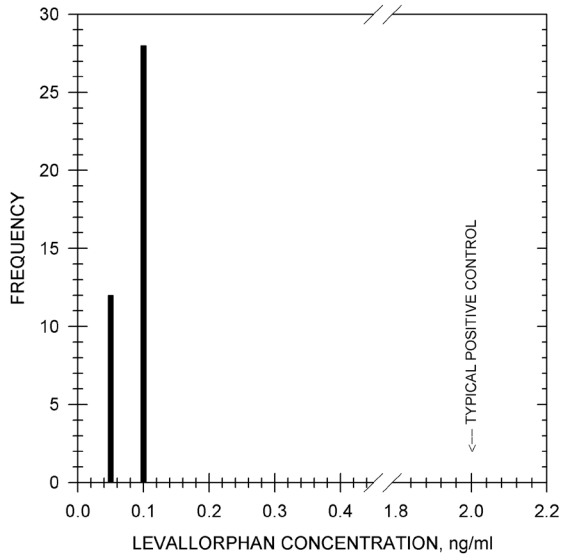
Sample Treatment: No sample treatment, or a 1:1 dilution (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:1, has shown background levels above 0.07 ng/ml.

Sample Treatment: No sample treatment, or a 1:1 dilution (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.

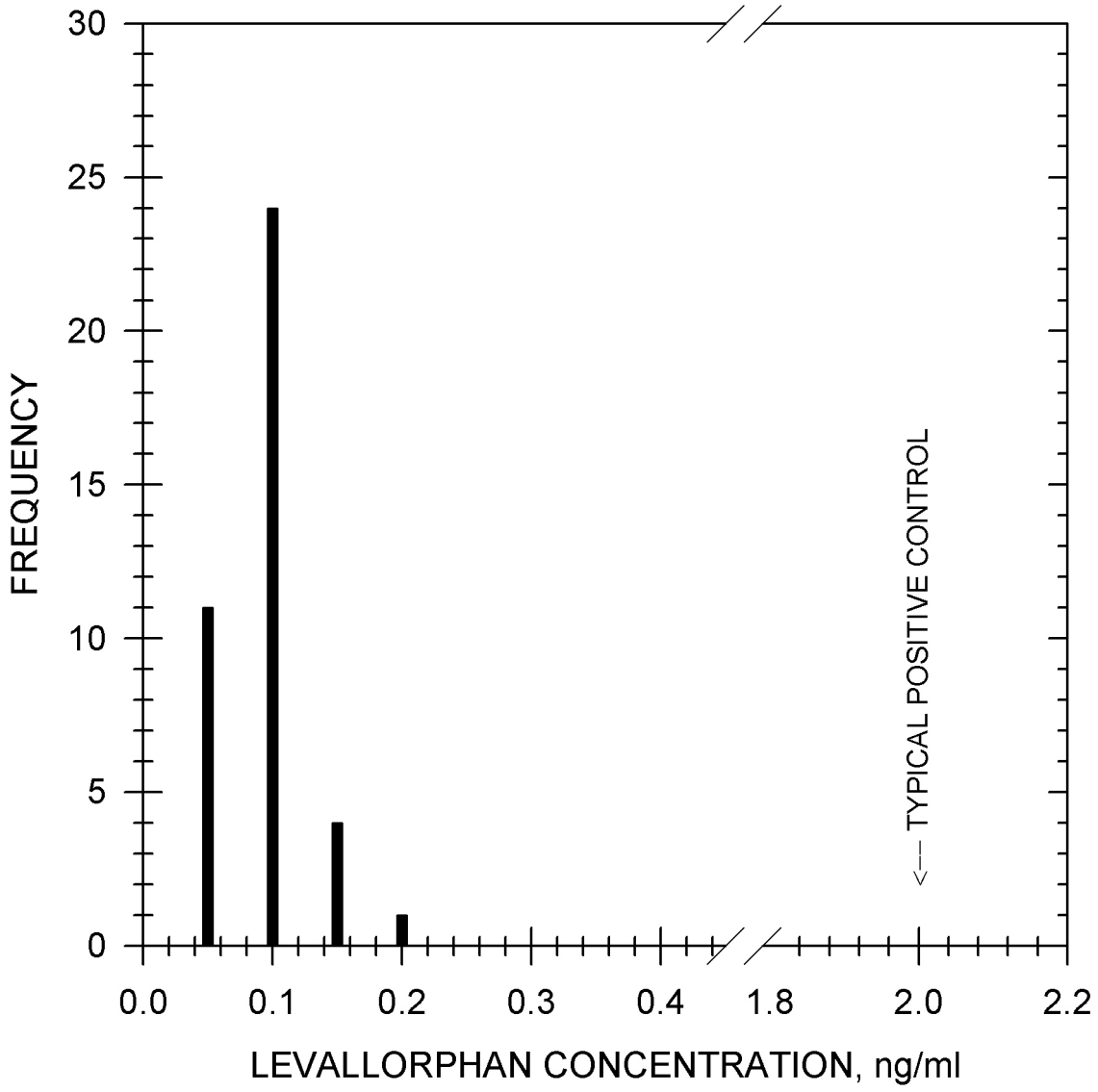


TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 0.11 ng/ml.

Sample Treatment: No sample treatment necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth or plasma samples.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Levallorphan	100%
Levorphanol	2.3%
Nalorphine	0.4%
Butorphanol	0.1%
Naloxone	0.05%
Nalmefene	0.04%

Acepromazine	<0.01%	Meperidine	<0.01%
Acetaminophen	<0.01%	Metaproterenol	<0.01%
Acetylsalicylic Acid	<0.01%	Methadone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Methaqualone	<0.01%
Amitriptyline	<0.01%	Methocarbamol	<0.01%
Ascorbic Acid	<0.01%	Methylene Blue	<0.01%
Benzoic Acid	<0.01%	6-α Methylprednisolone	<0.01%
Caffeine	<0.01%	Morphine	<0.01%
Chlordiazepoxide	<0.01%	Nalbuphine	<0.01%
Chlorpromazine	<0.01%	Naltrexone	<0.01%
Clenbuterol	<0.01%	Naproxen	<0.01%
Codeine	<0.01%	Niacinamide	<0.01%
Cotinine	<0.01%	Nicotine	<0.01%
Dexamethasone	<0.01%	Nortriptyline	<0.01%
Dextromethorphan	<0.01%	Orphenadrine	<0.01%
Diclofenac	<0.01%	Oxyphenbutazone	<0.01%
Dimethyl Sulfoxide	<0.01%	PCP	<0.01%
Dipyrone	<0.01%	Penicillin G-Potassium	<0.01%
Doxepin	<0.01%	Penicillin G-Procaine	<0.01%
Ephedrine	<0.01%	Pentoxifylline	<0.01%
Erythromycin	<0.01%	Phenothiazine	<0.01%
Ethyl p-Amino-Benzoate	<0.01%	Phenylbutazone	<0.01%
Fenoprofen	<0.01%	Polyethylene Glycol	<0.01%
Flunixin	<0.01%	Prednisolone	<0.01%
Folic Acid	<0.01%	Primadone	<0.01%
Folinic Acid	<0.01%	Procaine	<0.01%
Furosemide	<0.01%	Procainamide	<0.01%
Gemfibrozil	<0.01%	Promazine	<0.01%
Gentisic Acid	<0.01%	Pseudoephedrine	<0.01%
Glipizide	<0.01%	Pyrantel	<0.01%
L-Glutamic Acid	<0.01%	Pyrilamine	<0.01%
Glutethimide	<0.01%	Pyrimethamine	<0.01%
Glycopyrrolate	<0.01%	Quinidine	<0.01%
Heparin	<0.01%	Quinine	<0.01%
Hippuric Acid	<0.01%	Salbutamol	<0.01%
Hordenine	<0.01%	Salicylic Acid	<0.01%
Hydrocortisone	<0.01%	Theophylline	<0.01%
Ibuprofen	<0.01%	Thiamine	<0.01%
Imipramine	<0.01%	Trimethoprim	<0.01%
Isoxsuprine	<0.01%	Trimipramine	<0.01%
Lidocaine	<0.01%	Uric Acid	<0.01%

ENHANCED KIT

LIDOCAINE

Product #106710-1 & 106715-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

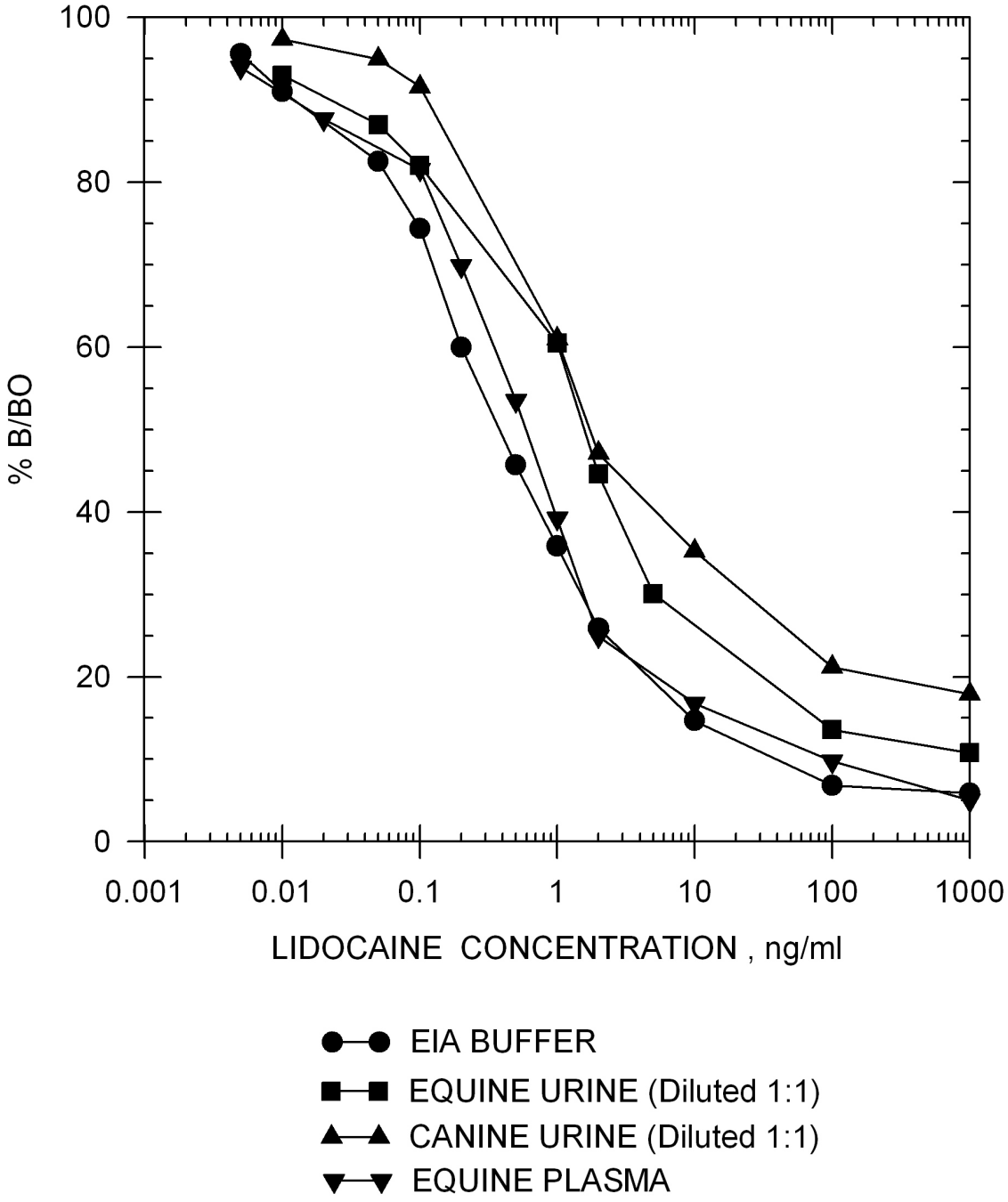
Lidocaine	0.4 ng/ml
3-Hydroxylidocaine	0.4 ng/ml
4-Hydroxylidocaine	0.4 ng/ml

I-50 in Equine Urine (Diluted 1:1)		**I-50 in Canine Urine (Diluted 1:1)**	
Lidocaine	1.5 ng/ml	Lidocaine	2.7 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Lidocaine	0.6 ng/ml	Lidocaine	2.7 ng/ml

Note: Measuring wavelength was 650 nm**.**

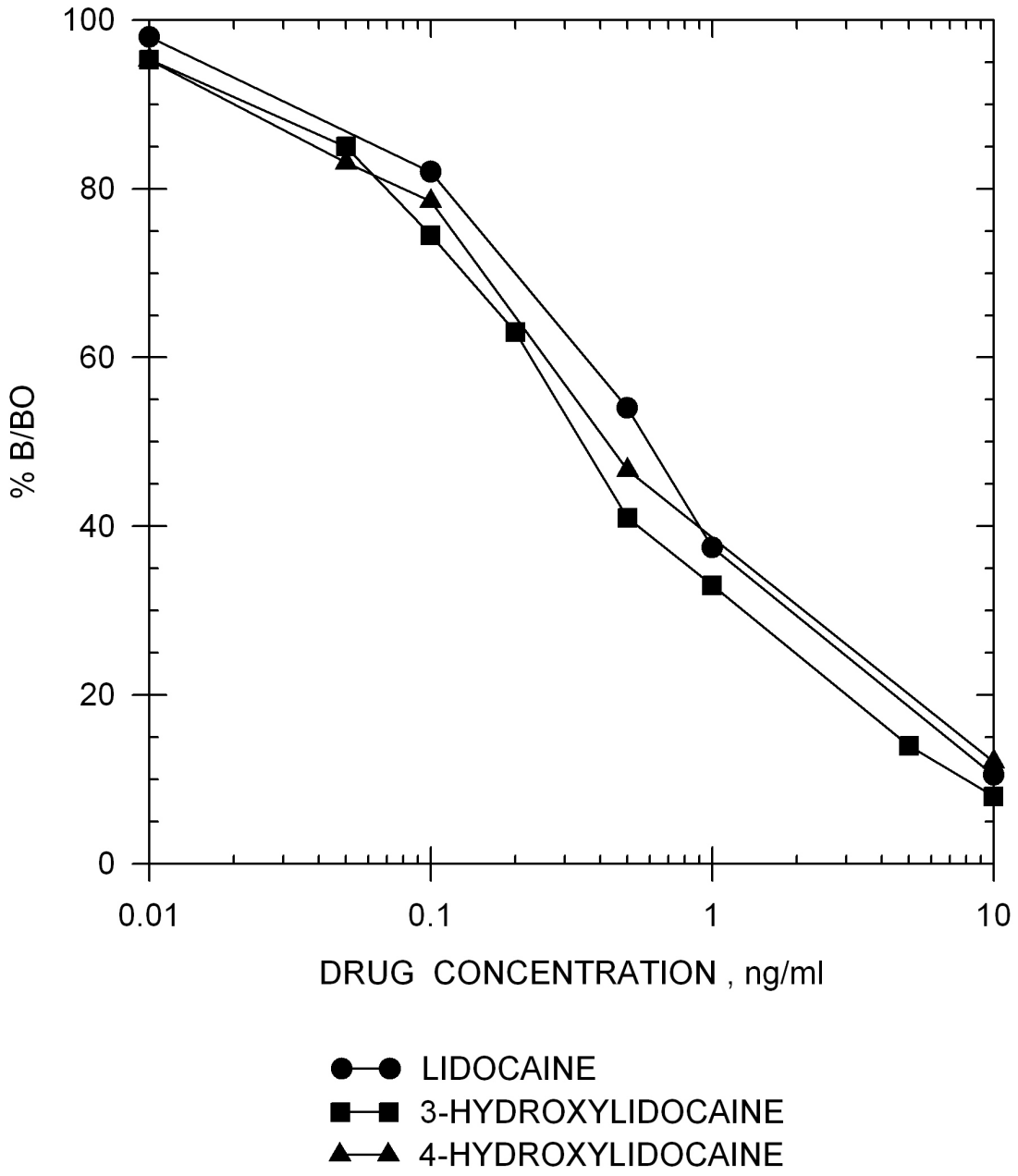
Precision:	Intra-assay	6.52%
	Inter-assay	4.81%

LIDOCAINE STANDARD CURVES



LIDOCAINE STANDARD CURVES

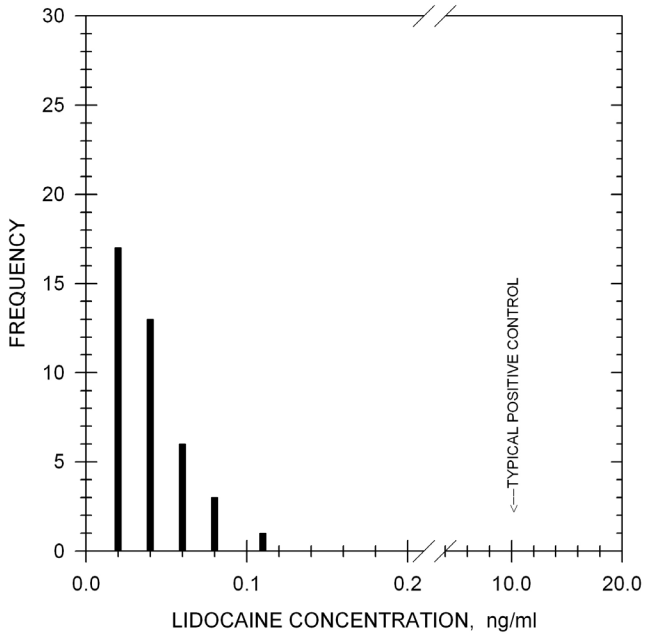
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.11 ng/ml.

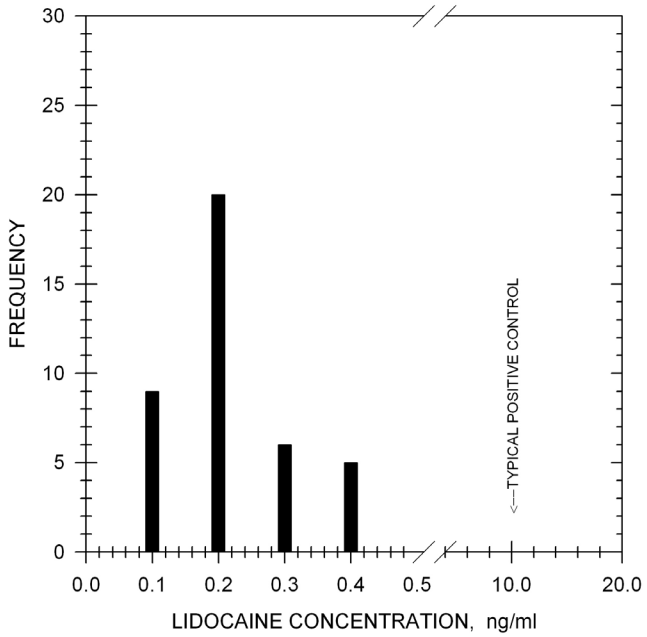
Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.4 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

Equine Serum: Extraction is recommended.

Equine Plasma: A small dilution (1:1) may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: Data not currently available.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Lidocaine	100%
4-Hydroxylidocaine	100%
3-Hydroxylidocaine	100%
Etidocaine	0.9%
Mepivacaine	0.8%
Prilocaine	0.02%
Bupivacaine	0.01%
Dibucaine	0.01%
Prilocaine	0.01%

Acepromazine	<0.01%	Metaproterenol	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Methocarbamol	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Methylene Blue	<0.01%
Benzoylecgonine	<0.01%	6α-Methylprednisolone	<0.01%
Butacaine	<0.01%	Naproxen	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Cocaine	<0.01%	Orphenadrine	<0.01%
Dexamethasone	<0.01%	Oxyphenbutazone	<0.01%
Diclofenac	<0.01%	Pentoxifylline	<0.01%
Dimethyl Sulfoxide	<0.01%	Phencyclidine	<0.01%
Dipyrone	<0.01%	Phenothiazine	<0.01%
Ecgonine	<0.01%	Phenylbutazone	<0.01%
Ecgonine Methyl Ester	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-Amino-Benzoate		Prednisolone	<0.01%
(Benzocaine)	<0.01%	Procaine	<0.01%
Flunixin	<0.01%	Promazine	<0.01%
Furosemide	<0.01%	Pyrantel	<0.01%
Glycopyrrolate	<0.01%	Pyrilamine	<0.01%
Hordenine	<0.01%	Salbutamol	<0.01%
Hydrocortisone	<0.01%	Salicylamide	<0.01%
Ibuprofen	<0.01%	Salicylic Acid	<0.01%
Isoxsuprine	<0.01%	Tetracaine	<0.01%
Ketamine	<0.01%	Thiamine	<0.01%
Meprylcaine	<0.01%	Xylazine	<0.01%

ENHANCED KIT

MAZINDOL/ MAZINDOL METABOLITE

Product #102510 & 102515 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Mazindol Metabolite	1.7 ng/ml
Mazindol	3.1 ng/ml

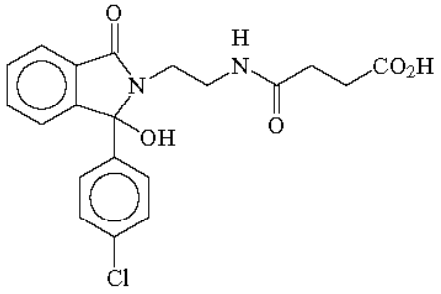
I-50 in Equine Urine (Diluted 1:2)		**I-50 in Canine Urine (Diluted 1:2)**	
Mazindol Metabolite	5.3 ng/ml	Mazindol Metabolite	3.3 ng/ml
Mazindol	4.5 ng/ml	Mazindol	3.6 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Mazindol Metabolite	3.7 ng/ml	Mazindol Metabolite	4.5 ng/ml
Mazindol	5.6 ng/ml	Mazindol	11.6 ng/ml

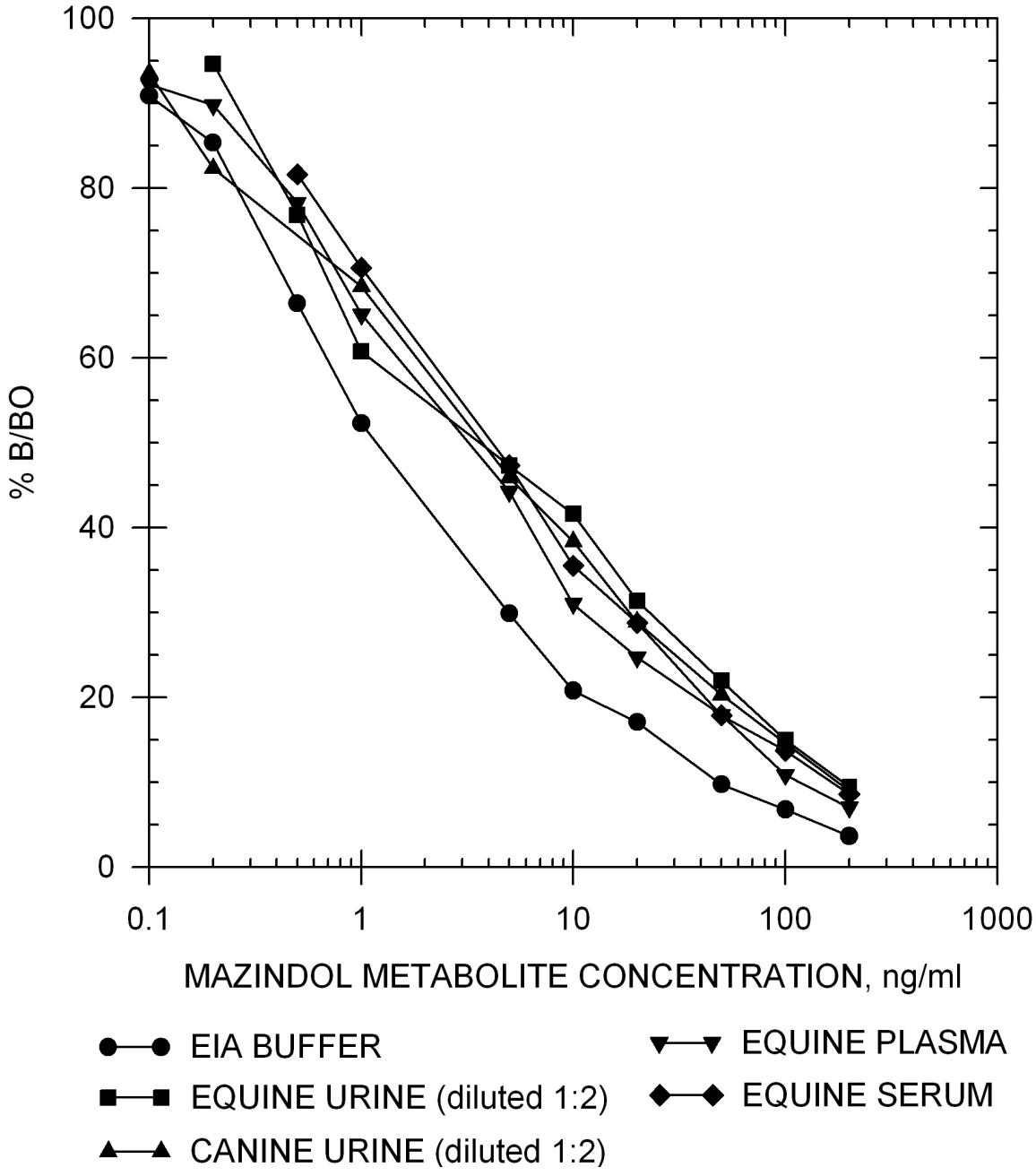
Precision:	Intra-assay	5.72%
	Inter-assay	4.96%

Note: Measuring wavelength was 650 nm**.**

MAZINDOL/MAZINDOL METABOLITE STANDARD CURVES

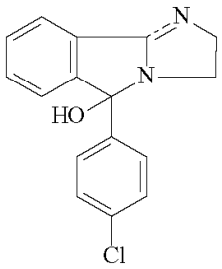
Mazindol Metabolite

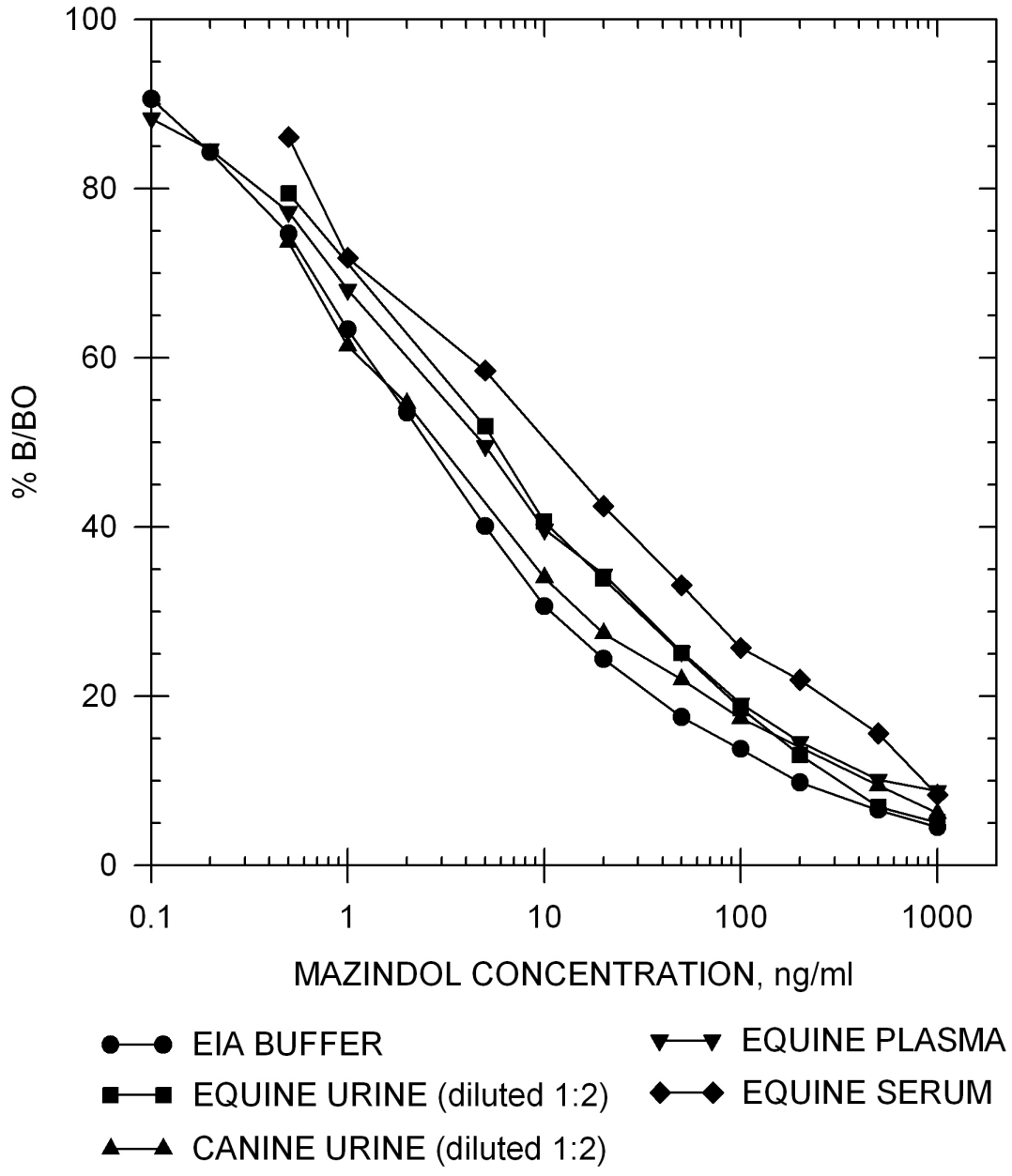




MAZINDOL/MAZINDOL METABOLITE STANDARD CURVES

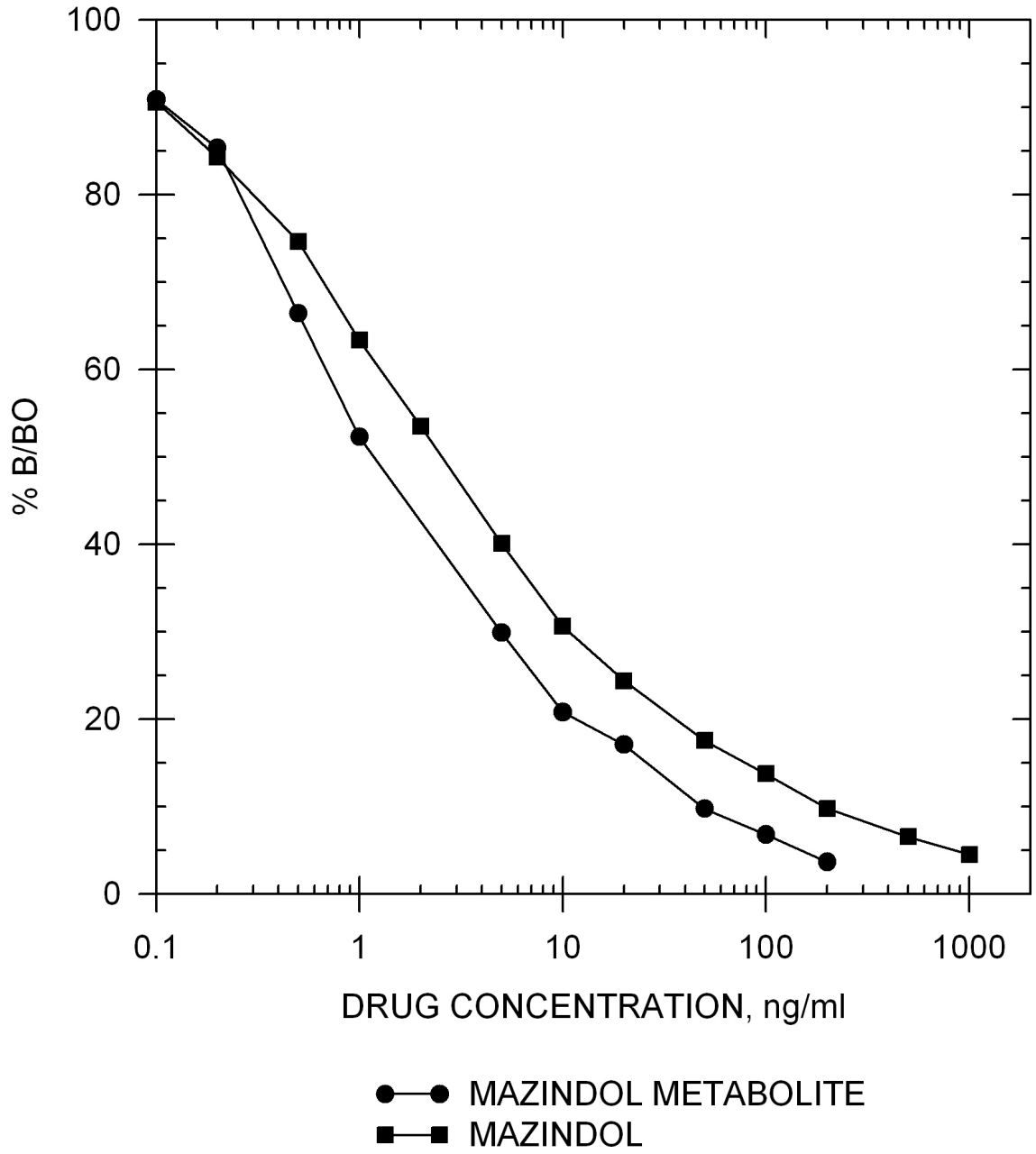
Mazindol





MAZINDOL/MAZINDOL METABOLITE STANDARD CURVES

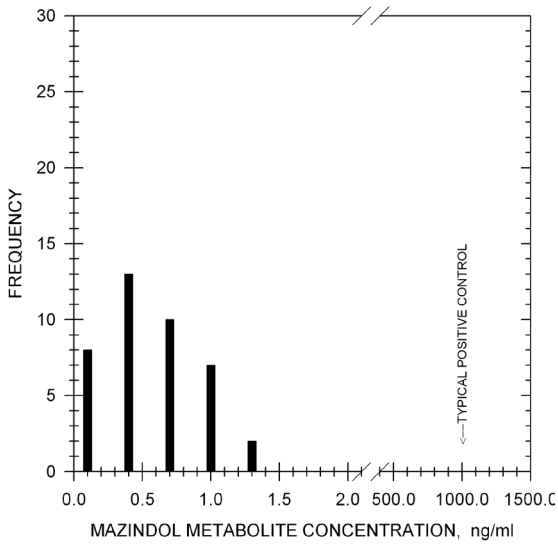
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:2, has shown no background levels above 1.3 ng/ml.

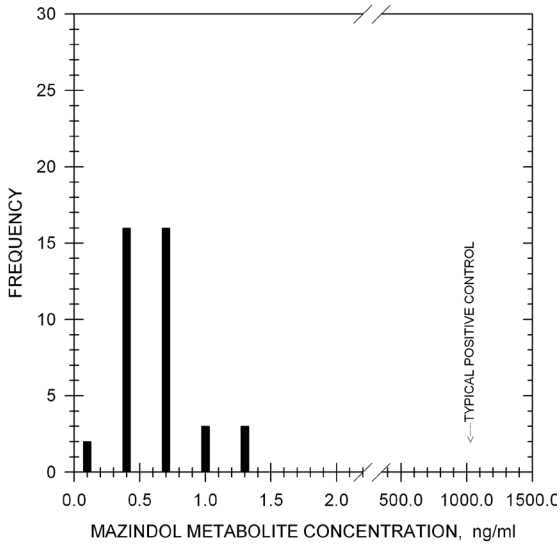
Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:2, has shown no background levels above 1.3 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recommended to reduce natural backgrounds.

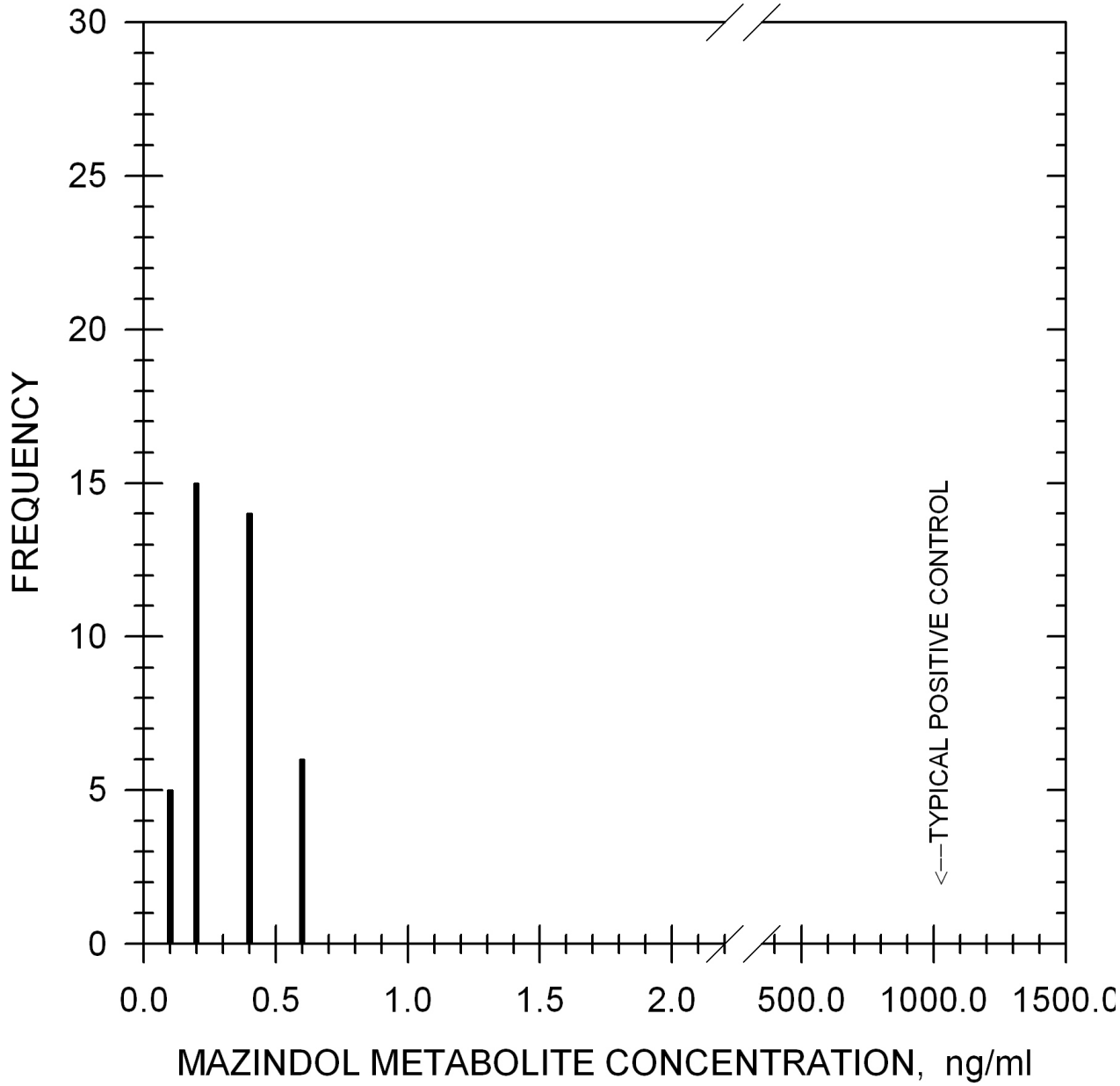


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 0.6 ng/ml.

Sample Treatment: No sample dilution is necessary. In some cases a small dilution (1:1) or sample extraction may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.

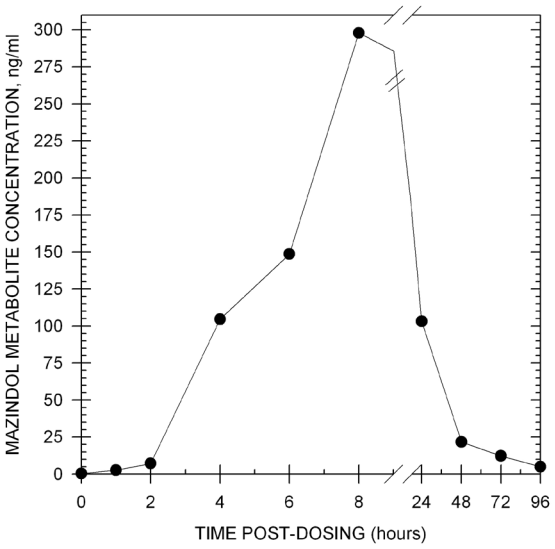


TYPICAL DURATION OF DETECTION

Duration of Detection:

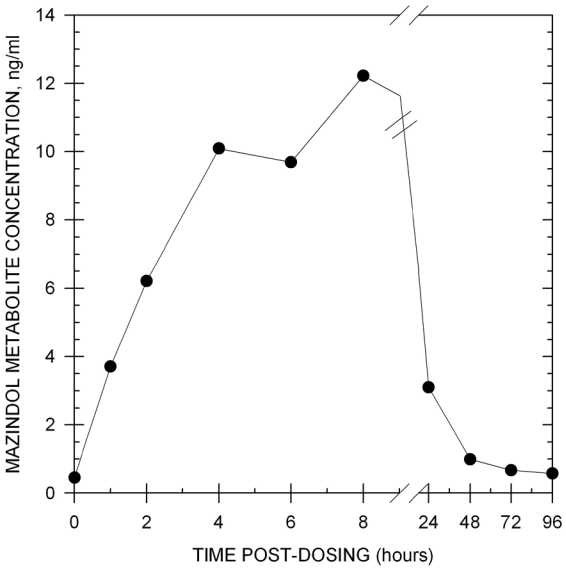
After administration of 50 mg of mazindol, orally, to one horse, the presence of this drug was detected for at least 96 hours in equine urine. Time points were diluted 1:2 according to the recommended sample treatment.

Because post dose time points 4 to 48 hours exceeded the range of the assay, samples were diluted 1:50 with EIA buffer and back calculated to the recommended 1:2 dilution.



Duration of Detection:

After administration of 50 mg of mazindol, orally, to one horse, the presence of this drug was detected for at least 8 hours in equine plasma.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Mazindol Metabolite	100%
Mazindol	56%
Hydroxyzine	0.1%
Pyrilamine	0.02%

Acepromazine	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Amphetamine	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%
Benzoylecgonine	<0.01%
Benzphetamine	<0.01%
Brucine	<0.01%
Bumetanide	<0.01%
Buprenorphine	<0.01%
Butorphanol	<0.01%
Caffeine	<0.01%
Carfentanil	<0.01%
Clenbuterol	<0.01%
Dexamethasone	<0.01%
Dextromethorphan	<0.01%
Diclofenac	<0.01%
Diethylpropion	<0.01%
Dihydrocodeine	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Ephedrine	<0.01%
Ethamivan	<0.01%
Ethyl-p-Amino-Benzoate (Benzocaine)	<0.01%
Fencamfamine	<0.01%
Fenfluramine	<0.01%
Fentanyl	<0.01%
Flunixin	<0.01%
Flurothyl	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Heparin	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Hydromorphone	<0.01%
Ibuprofen	<0.01%
Isoxsuprine	<0.01%
Ketoprofen	<0.01%
Lidocaine	<0.01%
MDMA (3,4-Methylenedioxymethamphetamine)	<0.01%
Mefexamide	<0.01%
Metaproterenol	<0.01%
Methamphetamine	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
Methylphenidate	<0.01%
6α-Methylprednisolone	<0.01%
Morphine-3-β-d-Glucuronide	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Nikethamide	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
Pemoline	<0.01%
Pentoxifylline	<0.01%
Pentylenetetrazol	<0.01%
Phendimetrazine	<0.01%
Phenmetrazine	<0.01%
Phenothiazine	<0.01%
Phentermine	<0.01%
Phenylbutazone	<0.01%
Phenylpropanolamine	<0.01%
Picrotoxin	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Procaine	<0.01%
Promazine	<0.01%
Pseudoephedrine	<0.01%
Pyrantel	<0.01%
Reserpine	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Secobarbital	<0.01%
Tetrahydrozoline	<0.01%
Thiamine	<0.01%

ENHANCED KIT
MEPERIDINE

Product #102610 &
102615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Meperidine	0.47 ng/ml
Normeperidine	4.65 ng/ml

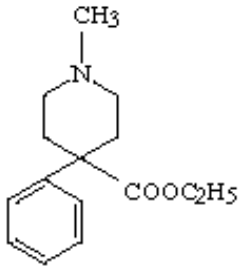
I-50 in Equine Urine (Diluted 1:1)		**I-50 in Canine Urine**	
Meperidine	1.02 ng/ml	Meperidine	0.2 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Meperidine	0.75 ng/ml	Meperidine	1.5 ng/ml

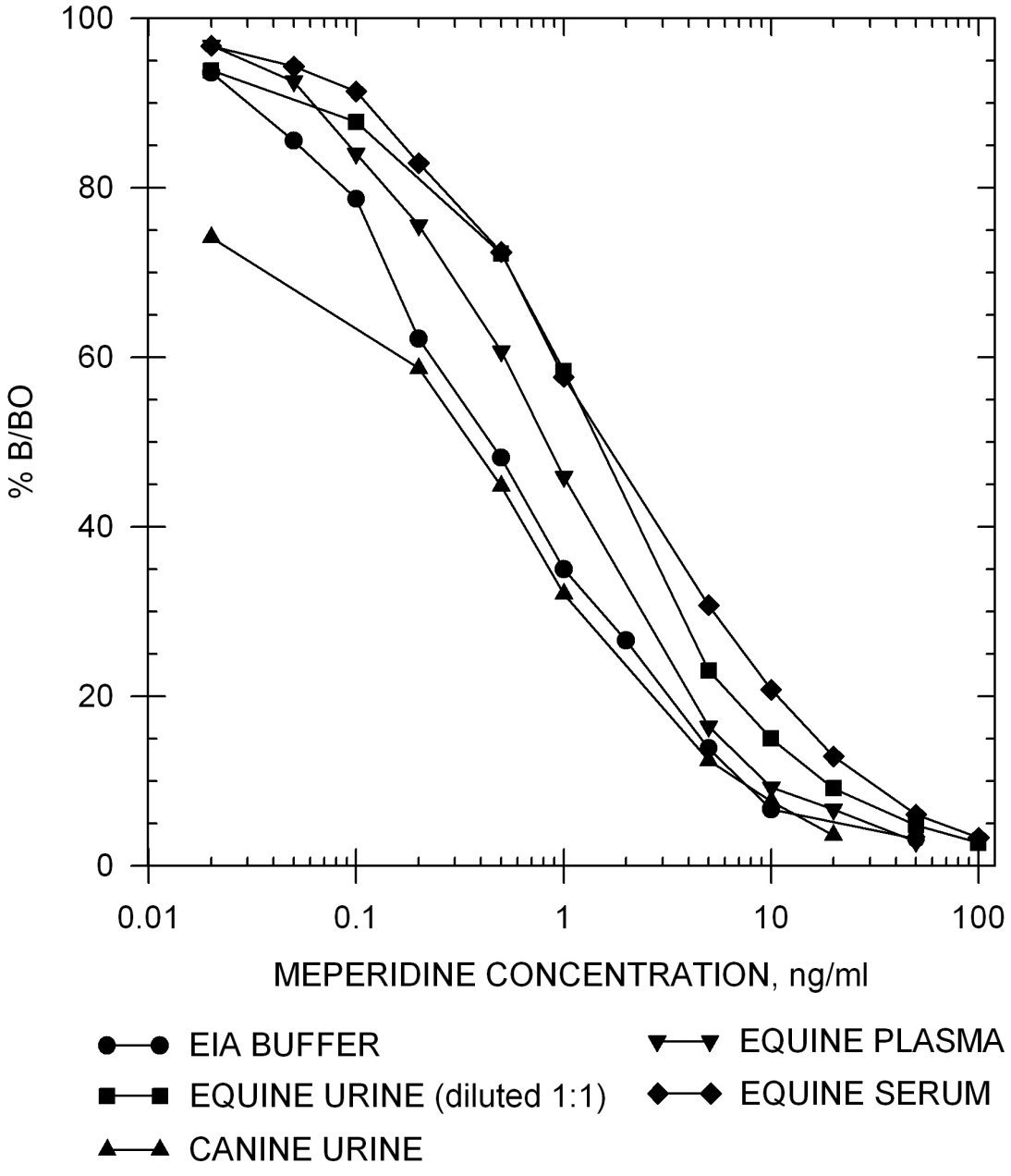
Precision:	Intra-assay	2.96 %
	Inter-assay	3.63 %

Note: Measuring wavelength was 650 nm**.**

MEPERIDINE STANDARD CURVE

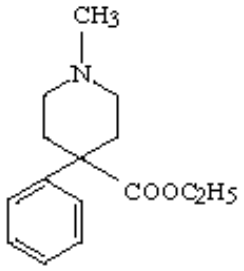
Meperidine



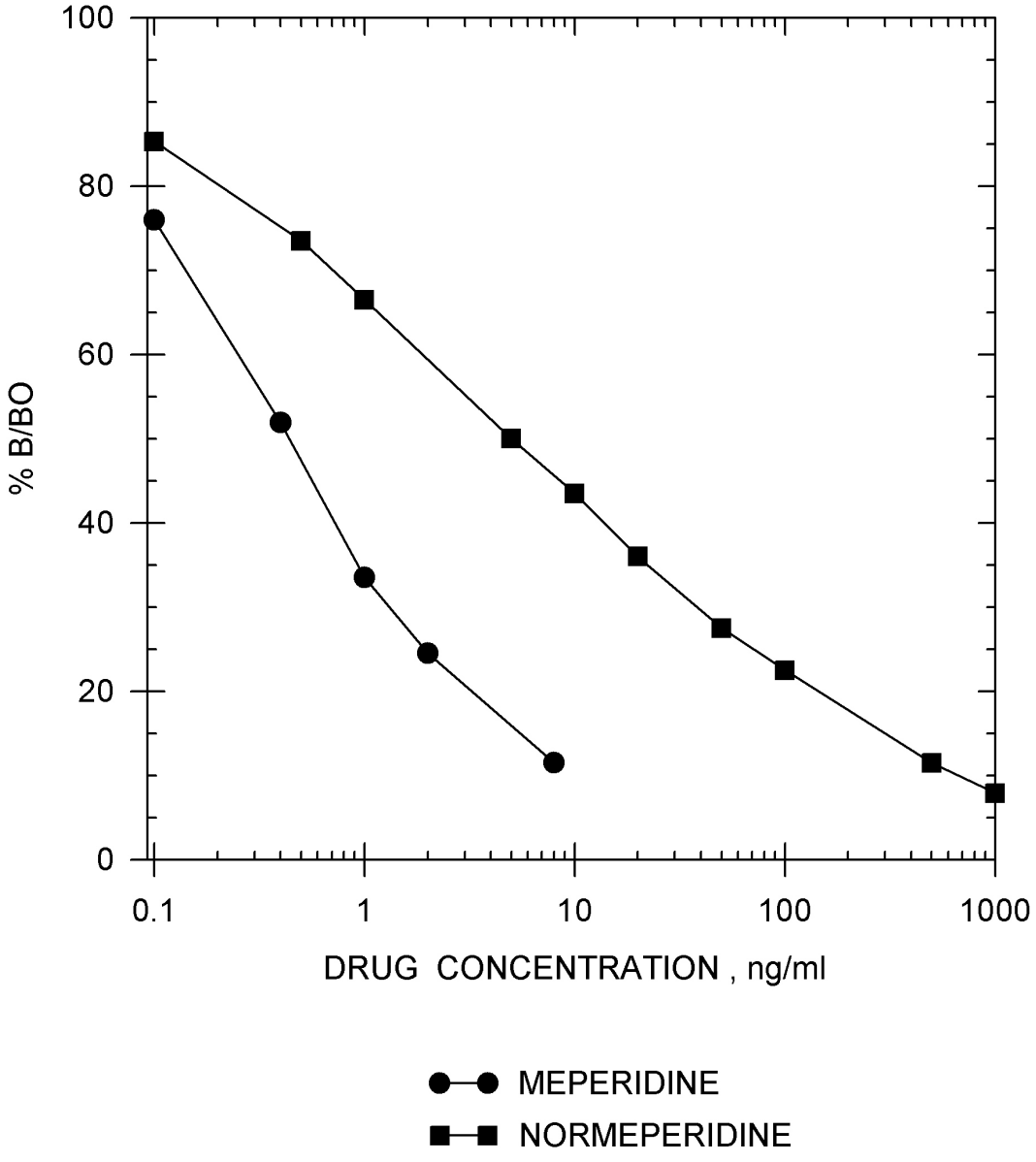


MEPERIDINE STANDARD CURVE

Meperidine



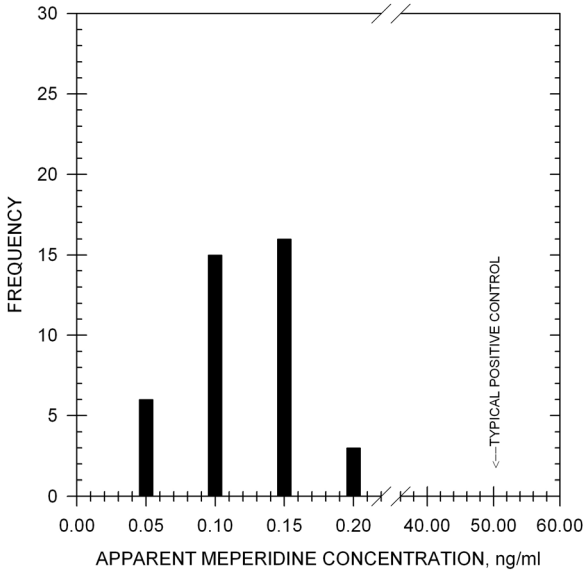
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.2 ng/ml.

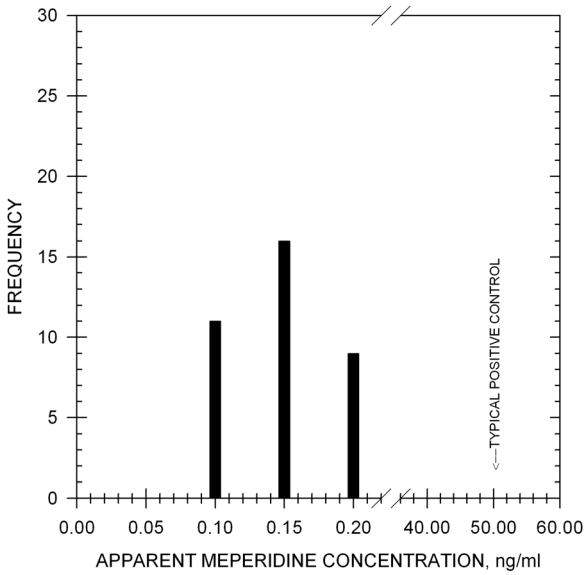
Sample Treatment: A dilution of 1:1 (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.24 ng/ml.

Sample Treatment: No sample dilution is necessary.

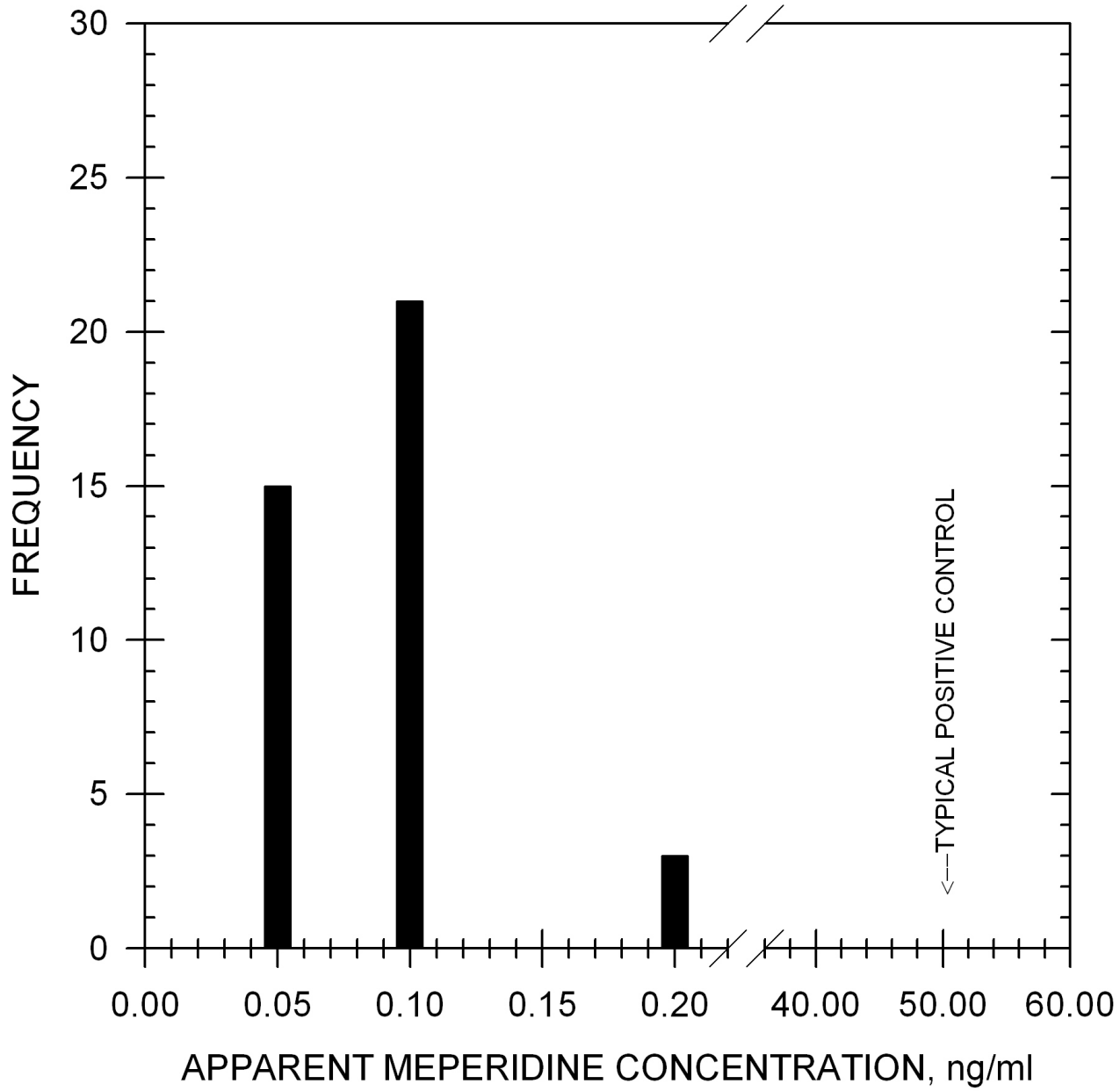


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race equine plasma samples has shown no background levels above 0.2 ng/ml.

Sample Treatment: No sample dilution is necessary. In some cases a small dilution (1:1) or sample extraction may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.

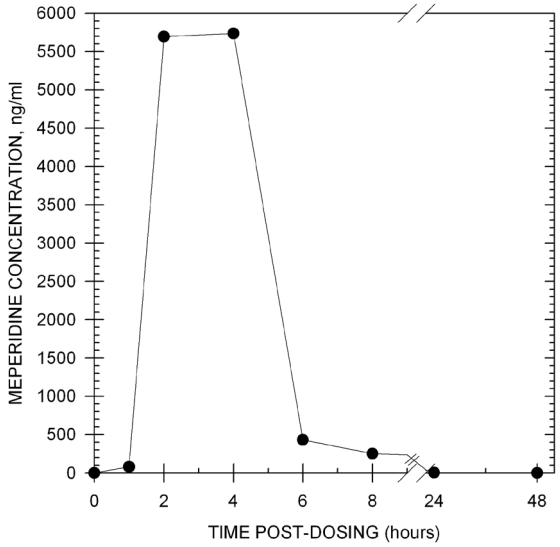


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 100 mg of demoral by intravenous injection to one horse, the presence of this drug was detected for at least 24 hours in equine urine. Time points were diluted 1:1 according to the recommended sample treatment.

Because the post-dose time points 1 through 8 hours exceeded the range of the assay, samples were diluted 1:100 to 1:1600 with EIA buffer and backcalculated to the recommended 1:1 dilution.

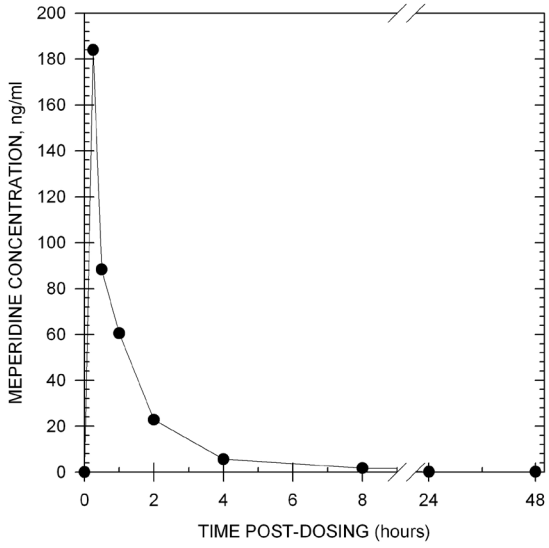


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 100 mg of demoral by intravenous injection to one horse, the presence of this drug was detected for at least 8 hours in equine plasma.

Because the post-dose samples 0.25 through 2 hours exceeded the range of the assay, samples were diluted 1:50 with EIA buffer and backcalculated.



CROSS REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/ml.

Meperidine	100%
Normeperidine	9.5%
Anileridine	1.6%
Diphenoxylate	0.2%
Amitriptyline	0.01%

11-Nor-Δ9-THC-9-Carboxylic Acid	<0.01%	Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Niacinamide	<0.01%
Acepromazine	<0.01%	Ethylmorphine	<0.01%	Nortriptyline	<0.01%
Acetaminophen	<0.01%	Etorphine	<0.01%	Orphenadrine	<0.01%
Alfentanil	<0.01%	Fenoprofen	<0.01%	Oxycodone	<0.01%
Alphaprodine	<0.01%	Fentanyl	<0.01%	Oxymorphone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Flunixin	<0.01%	Oxyphenbutazone	<0.01%
Amphetamine	<0.01%	Furosemide	<0.01%	Penicillin G-Potassium	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Gemfibrozil	<0.01%	Penicillin G-Procaine	<0.01%
Aspirin	<0.01%	Gentisic Acid	<0.01%	Pentazocine	<0.01%
Azaperone	<0.01%	Glipizide	<0.01%	Pentobarbital	<0.01%
Benzoylecgonine	<0.01%	Glutethimide	<0.01%	Pentoxifylline	<0.01%
Bumetanide	<0.01%	Glycopyrrolate	<0.01%	Perphenazine	<0.01%
Buprenorphine	<0.01%	Heparin	<0.01%	Phencyclidine	<0.01%
Butacaine	<0.01%	Hordenine	<0.01%	Phenothiazine	<0.01%
Butalbital	<0.01%	Hydrocodone	<0.01%	Phenylbutazone	<0.01%
Butorphanol	<0.01%	Hydrocortisone	<0.01%	Polyethylene Glycol	<0.01%
Carfentanil	<0.01%	Hydromorphone	<0.01%	Prednisolone	<0.01%
Chloral Hydrate	<0.01%	Ibuprofen	<0.01%	Prilocaine	<0.01%
Chlordiazepoxide	<0.01%	Imipramine	<0.01%	Primadone	<0.01%
Chlorpromazine	<0.01%	Isoxsuprine	<0.01%	Procainamide	<0.01%
Clenbuterol	<0.01%	Ketamine	<0.01%	Procaine	<0.01%
Cocaine	<0.01%	Levorphanol	<0.01%	Promazine	<0.01%
Codeine	<0.01%	Lidocaine	<0.01%	Propiomazine	<0.01%
Cotinine	<0.01%	Lobeline	<0.01%	Propionylpromazine	<0.01%
Detomidine	<0.01%	Lofentanil	<0.01%	Pyrantel	<0.01%
Dexamethasone	<0.01%	Loperamide	<0.01%	Pyrilamine	<0.01%
Dextromethorphan	<0.01%	Mazindol	<0.01%	Quinidine	<0.01%
Dextromoramide	<0.01%	Medetomidine	<0.01%	Quinine	<0.01%
Dezocine	<0.01%	Mepivacaine	<0.01%	Reserpine	<0.01%
Diazepam	<0.01%	Metaproterenol	<0.01%	Salbutamol	<0.01%
Dibucaine	<0.01%	Methadone	<0.01%	Salicylamide	<0.01%
Diclofenac	<0.01%	Methamphetamine	<0.01%	Salicylic Acid	<0.01%
Dihydrocodeine	<0.01%	Methaqualone	<0.01%	Sufentanil	<0.01%
Dimethyl Sulfoxide	<0.01%	Methocarbamol	<0.01%	Temazapam	<0.01%
Dipyrone	<0.01%	Methylene Blue	<0.01%	Tetracaine	<0.01%
Doxepin	<0.01%	Methylphenidate	<0.01%	Thiamine	<0.01%
Ecgonine Methyl Ester	<0.01%	6α-Methylprednisolone	<0.01%	Theophylline	<0.01%
Erythromycin	<0.01%	Morphine-3-β-d-Glucuronide	<0.01%	Tramadol	<0.01%
Ethacrynic Acid	<0.01%	Nalbuphine	<0.01%	Triazolam	<0.01%
		Nalorphine	<0.01%	Trimipramine	<0.01%
		Naproxen	<0.01%	Xylazine	<0.01%

ENHANCED KIT

MEPHENTERMINE

Product #107210 & 107215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

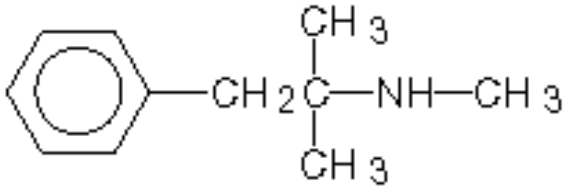
Mephentermine 2.0 ng/ml

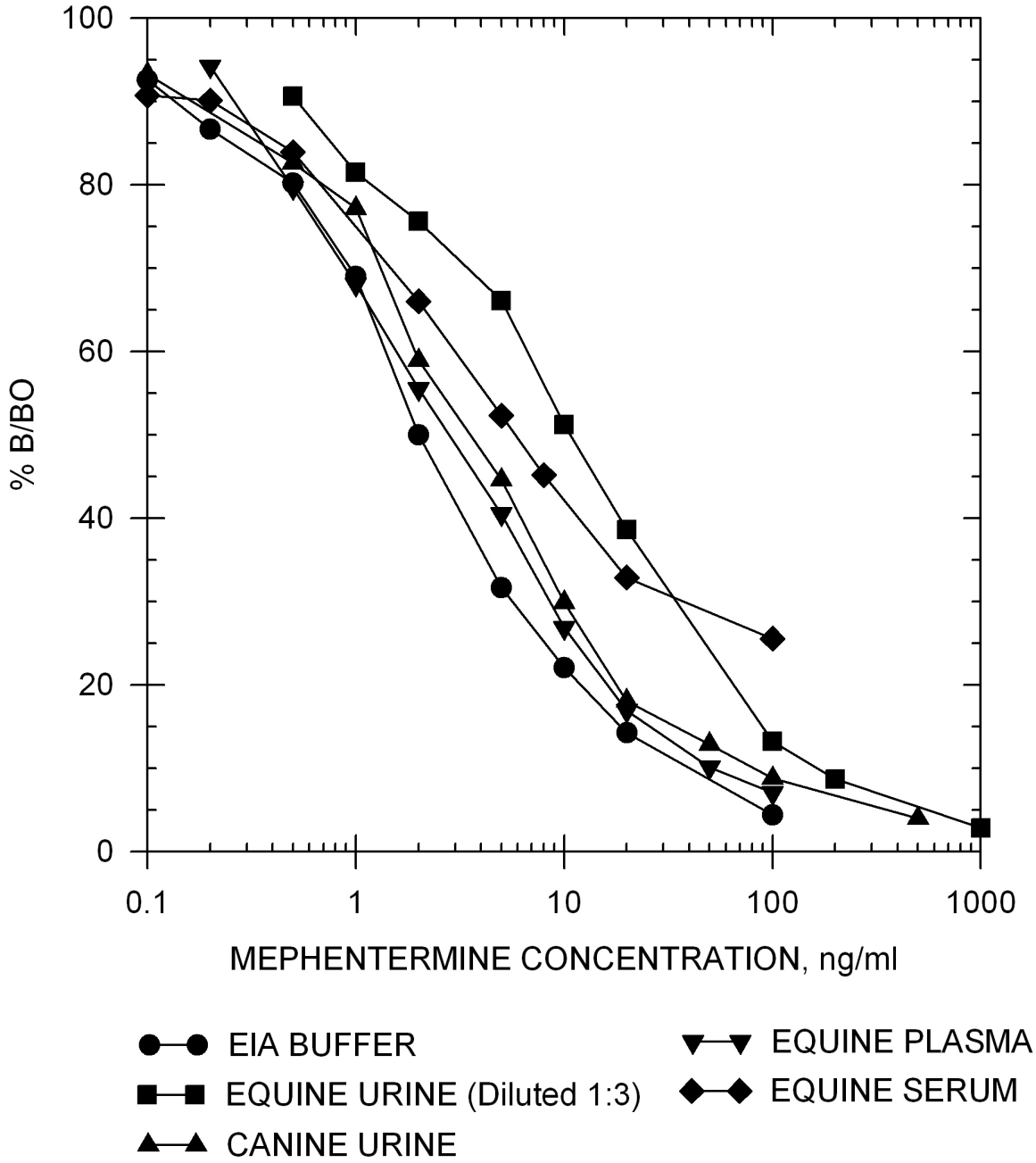
I-50 in Equine Urine (Diluted 1:3)		**I-50 in Canine Urine**	
Mephentermine	10.0 ng/ml	Mephentermine	3.5 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Mephentermine	2.5 ng/ml	Mephentermine	6.0 ng/ml

Note: Measuring wavelength was 650 nm**.**

Precision:	Intra-assay	6.22%
	Inter-assay	2.84%

MEPHENTERMINE STANDARD CURVES

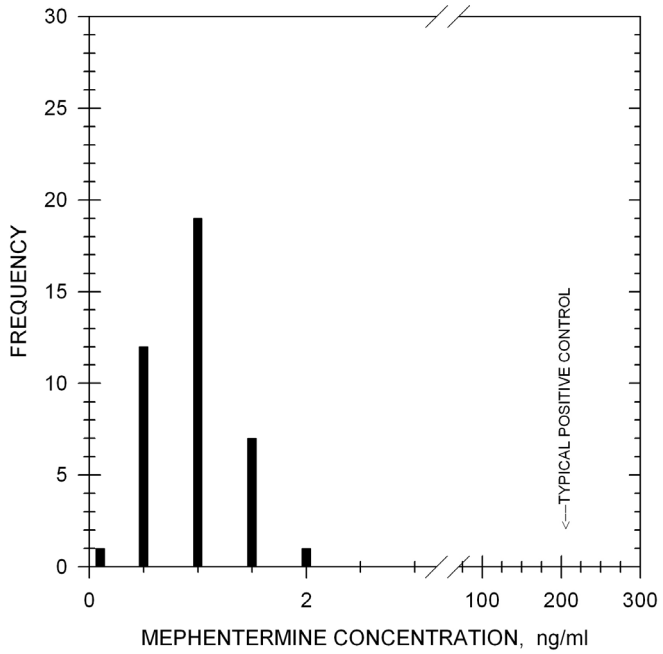




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:3, has shown no background levels above 2.0 ng/mL.

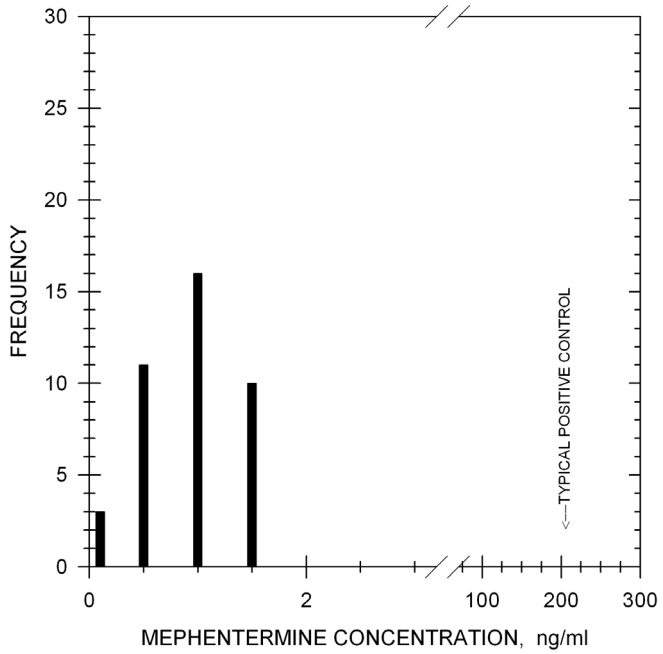
Sample Treatment: A dilution of 1:3 (i.e. 1 part urine to 3 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 1.5 ng/mL.

Sample Treatment: No sample dilution is necessary.



ADDITIONAL BACKGROUND

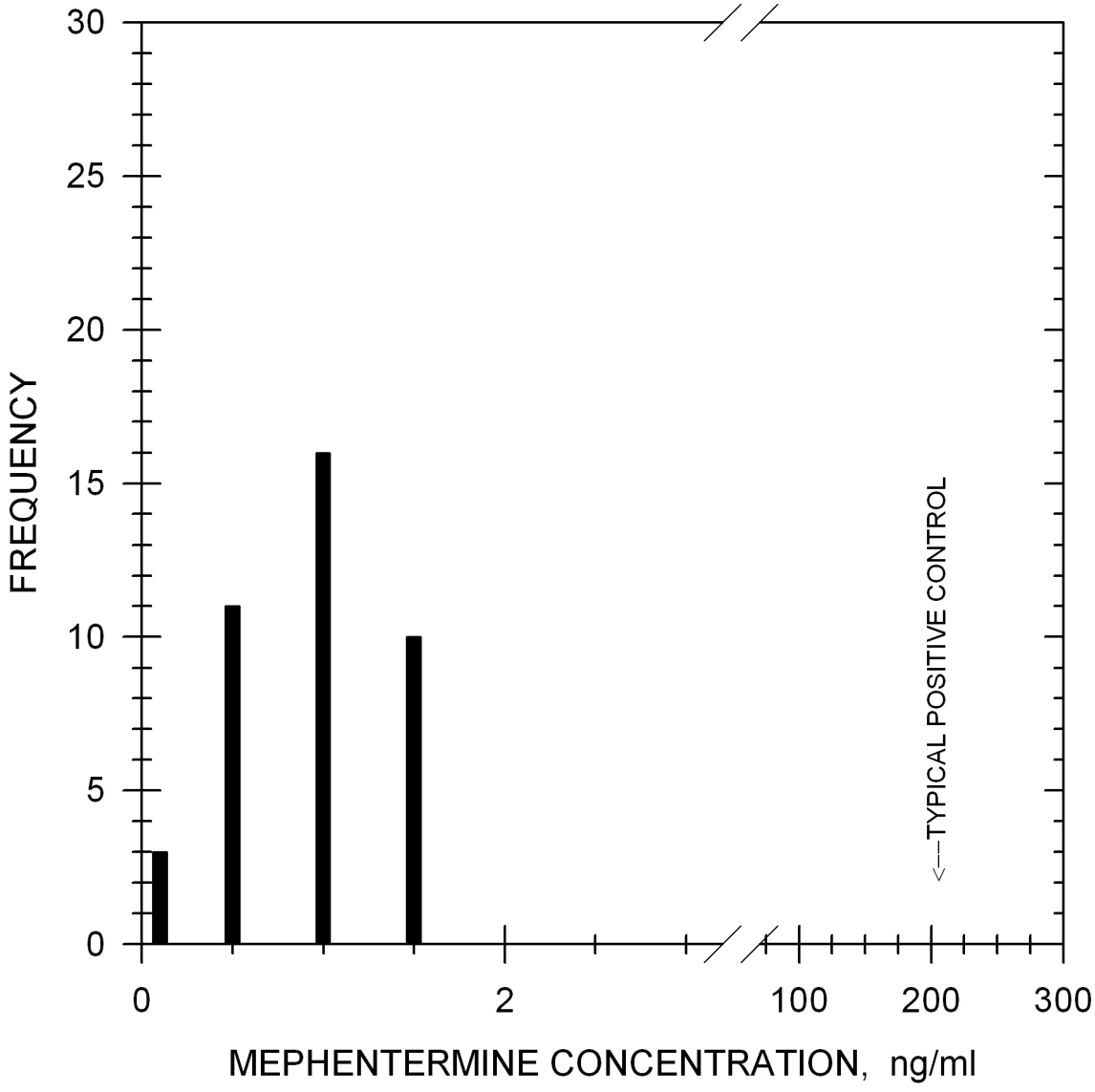
Equine Plasma

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 1.5 ng/ml.

Sample Treatment: No sample dilution is necessary. In some cases a small dilution (1:1) or sample extraction may be necessary.

Equine Serum

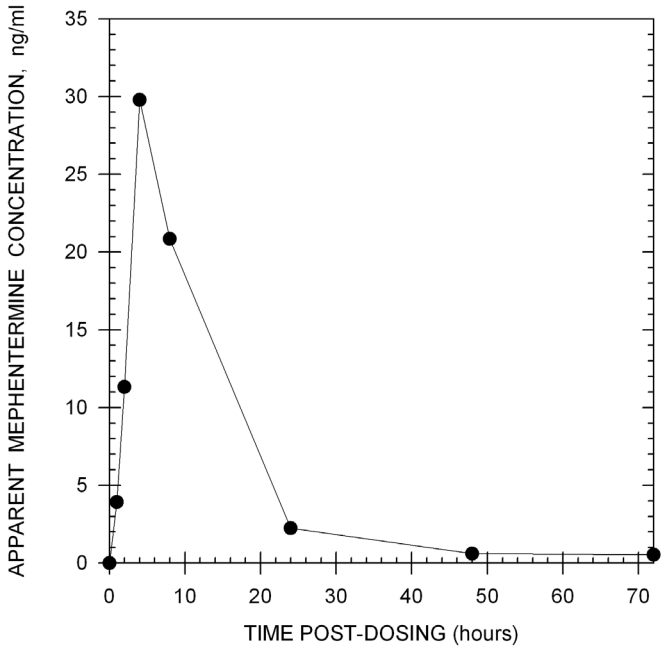
Sample Treatment: Serum samples have not been fully evaluated. Standard curves in serum have indicated that a small dilution (1:1) or sample extraction may be necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection:

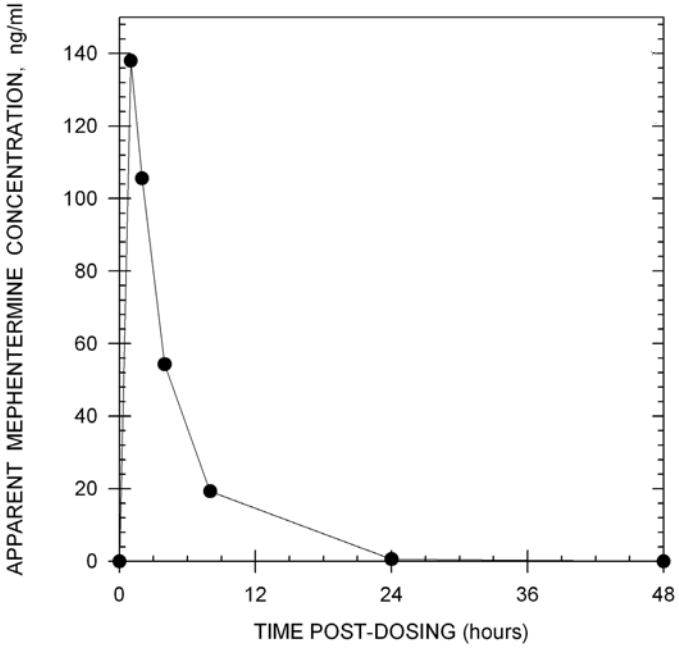
After administration of 90 mg of mephentermine by intramuscular injection to one horse (~1000 lb), the presence of this drug was detected for at least 8 hours in equine urine. All samples were diluted 1:3 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 90 mg of mephentermine by intramuscular injection to one horse (~1000 lb), the presence of this drug was detected for 8 hours in equine plasma.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/mL.

Mephentermine	100%
Phentermine	0.10%
Amphetamine	0.04%
Dopamine	0.03%
Methylene Blue	0.03%
Propranolol	0.03%
Ephedrine	0.02%
Metaraminol	0.02%
Clenbuterol	0.02%
Salbutamol	0.02%

Acepromazine	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Ascorbic Acid	<0.01%
Dexamethasone	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Ethyl p-Amino-Benzoate	<0.01%
Flunixin	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Isoxsuprine	<0.01%
Lidocaine	<0.01%
Metaproteranol	<0.01%
Methocarbamol	<0.01%

6α-Methylprednisolone	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phenyethylamine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Procaine	<0.01%
Pyrantel	<0.01%
Pyrilamine	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Thiamine	<0.01%
Tyramine	<0.01%

MEPIVACAINE

Product #102710 & 102715 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

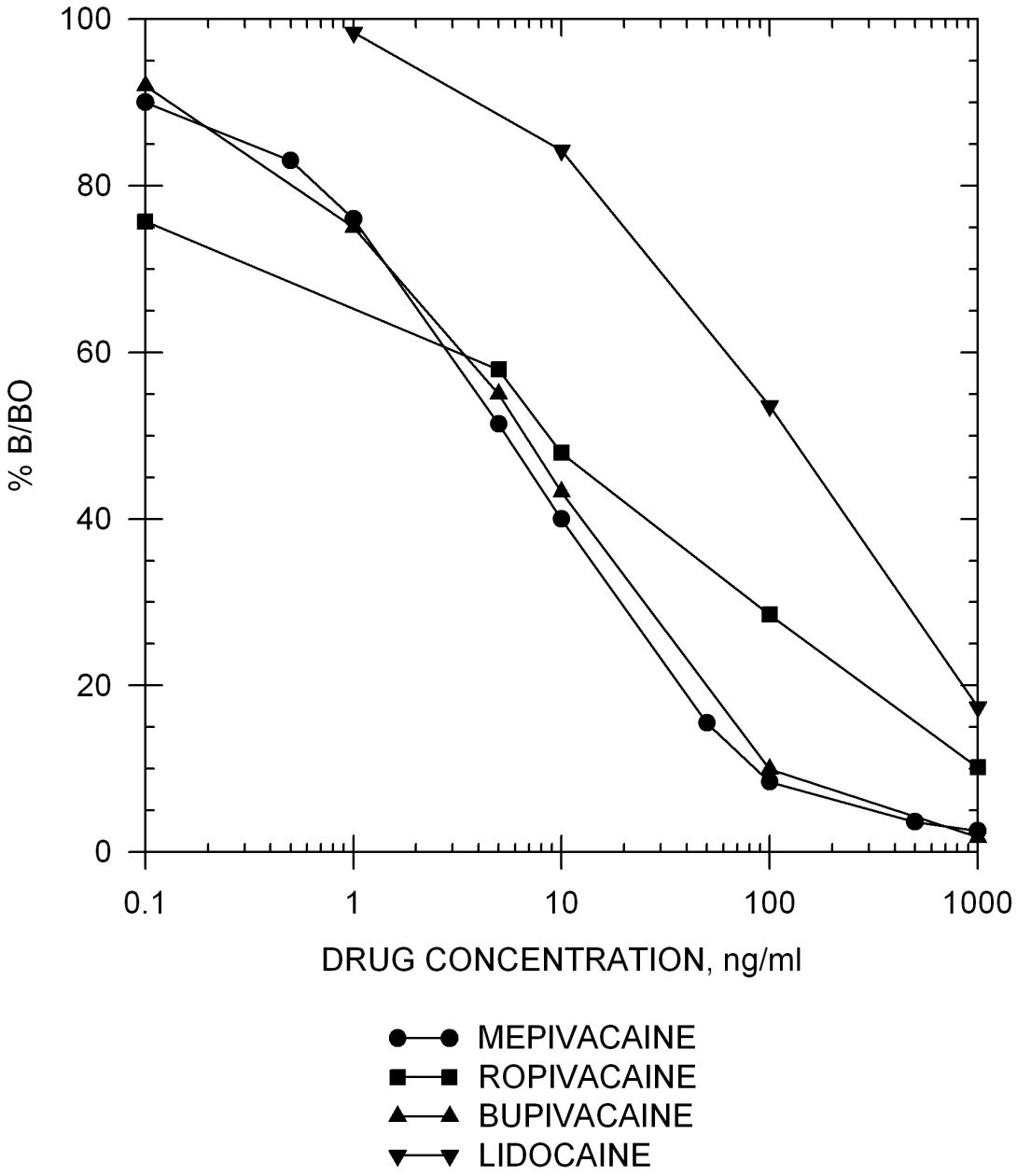
Mepivacaine	5 ng/ml
Ropivacaine	5 ng/ml
Bupivacaine	5 ng/ml
Lidocaine	120 ng/ml
3-Hydroxymepivacaine	173 ng/ml

Precision:	Intra-assay	2.50 %
	Inter-assay	3.52 %

Note: Measuring wavelength was 650 nm**.**

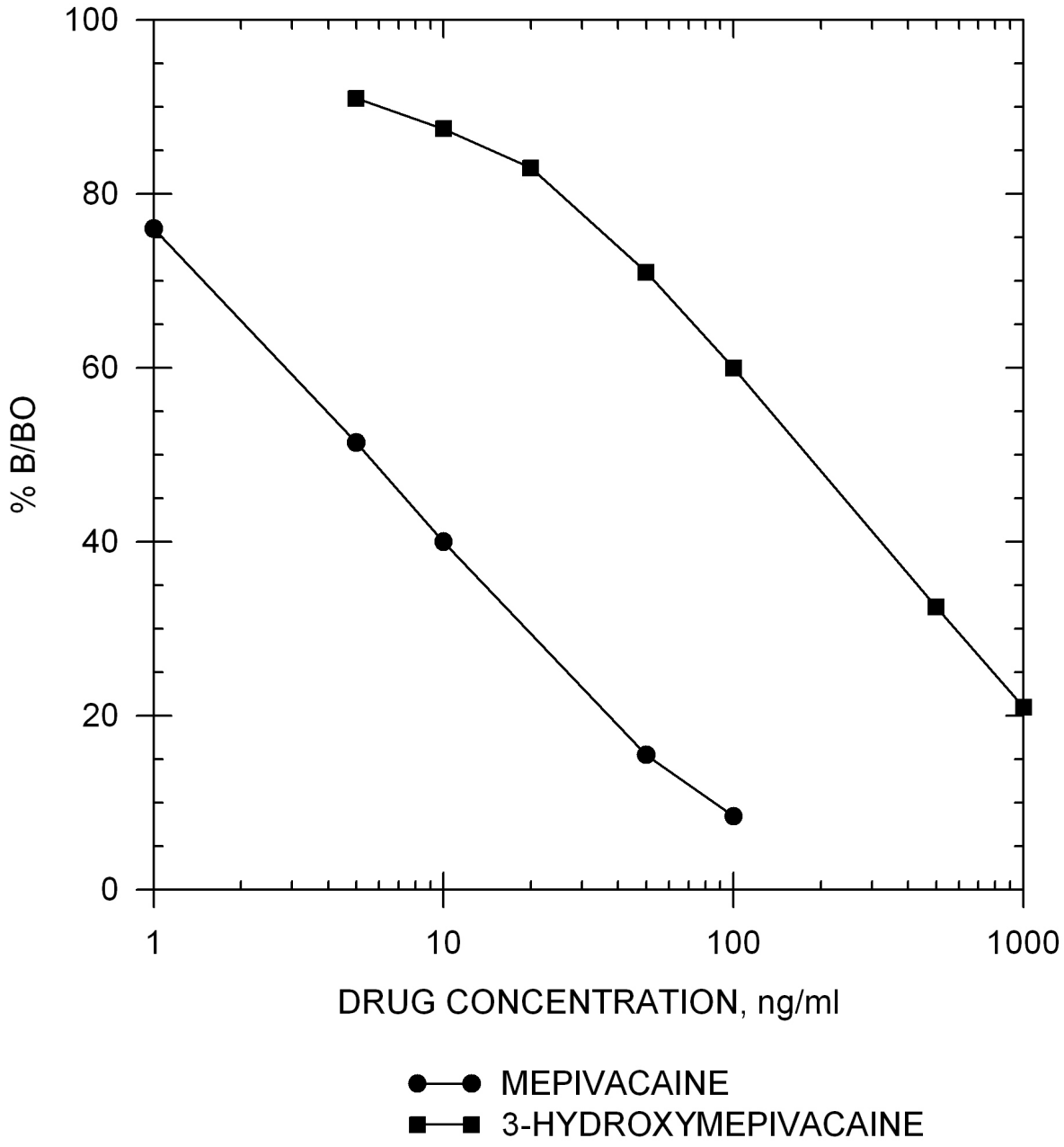
MEPIVACAINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



MEPIVACAINE STANDARD CURVES

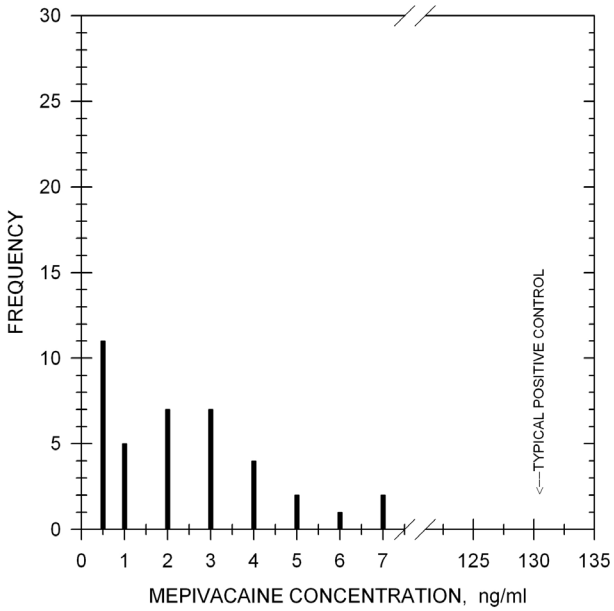
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

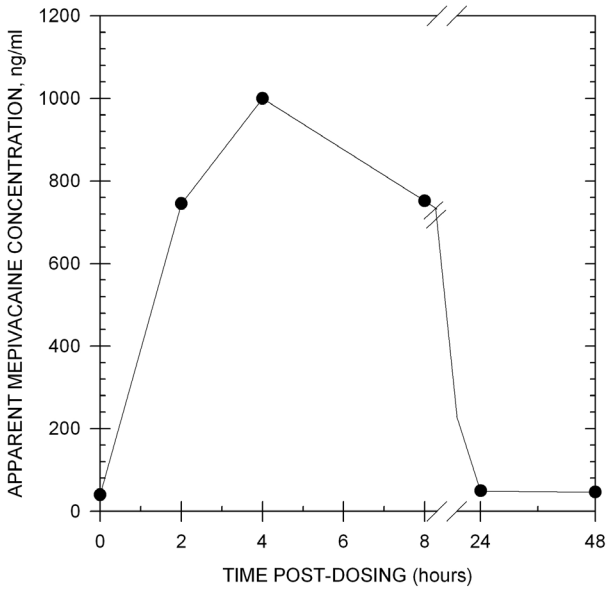
Backgrounds: Analysis of 39 post-race equine urine samples, diluted 1:9, has shown no background levels above 7 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 200 mg of mepivacaine by subcutaneous injection to one horse, the presence of this drug was detected for 12 hours in equine urine. All samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Mepivacaine	100%
Ropivacaine	95%
Bupivacaine	94%
Lidocaine	13%
Etidocaine	5%
Prilocaine	5%
3-Hydroxylidocaine	3%
4-Hydroxylidocaine	1%
Phenothiazine	0.05%
Oxyphenbutazone	0.02%
Methaqualone	0.01%

Acepromazine	< 0.01%	Flunixin	< 0.01%	Orphenadrine	< 0.01%
Acetaminophen	< 0.01%	Folic Acid	< 0.01%	PCP	< 0.01%
Acetylsalicylic Acid	< 0.01%	Folinic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Furosemide	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	Gemfibrozil	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Gentisic Acid	< 0.01%	Phenol	< 0.01%
Benoxinate	< 0.01%	Glipizide	< 0.01%	Phenylbutazone	< 0.01%
Benzoic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Polyethylene Glycol	< 0.01%
Benzoylecgonine	< 0.01%	Glutethimide	< 0.01%	Prednisolone	< 0.01%
Butacaine	< 0.01%	Glycopyrrolate	< 0.01%	Primadone	< 0.01%
Butamben	< 0.01%	Heparin	< 0.01%	Procainamide	< 0.01%
Chlordiazepoxide	< 0.01%	Hippuric Acid	< 0.01%	Procaine	< 0.01%
Chlorpromazine	< 0.01%	Hordenine	< 0.01%	Promazine	< 0.01%
Chloroprocaine	< 0.01%	Hydrocortisone	< 0.01%	Propoxycaine	< 0.01%
Clenbuterol	< 0.01%	Ibuprofen	< 0.01%	Pseudoephedrine	< 0.01%
Codeine	< 0.01%	Imipramine	< 0.01%	Pyrantel	< 0.01%
Cotinine	< 0.01%	Isoxsuprine	< 0.01%	Pyrilamine	< 0.01%
Dexamethasone	< 0.01%	Ketamine	< 0.01%	Pyrimethamine	< 0.01%
Dextromethorphan	< 0.01%	Lidocaine	< 0.01%	Quinidine	< 0.01%
Diclofenac	< 0.01%	Meperidine	< 0.01%	Quinine	< 0.01%
Dibucaine	< 0.01%	Metaproterenol	< 0.01%	Salbutamol	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methadone	< 0.01%	Salicylamide	< 0.01%
Diperidone	< 0.01%	Methaqualone	< 0.01%	Salicylic Acid	< 0.01%
Dipyrone	< 0.01%	Methocarbamol	< 0.01%	Tetracaine	< 0.01%
Doxepin	< 0.01%	Methylene Blue	< 0.01%	Theophylline	< 0.01%
Ecgonine	< 0.01%	Methylprednisolone	< 0.01%	Thiamine	< 0.01%
Ecgonine Methylester	< 0.01%	Nalorphine	< 0.01%	Trimethoprim	< 0.01%
Ephedrine	< 0.01%	Naproxen	< 0.01%	Trimipramine	< 0.01%
Erythromycin	< 0.01%	Niacinamide	< 0.01%	Uric Acid	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Nicotine	< 0.01%		
Fenoprofen	< 0.01%	Nortriptyline	< 0.01%		

MEPROBAMATE (RTU) FORENSIC KIT

Product #133419 & 133415

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer	
Meprobamate	4.7 ng/ml

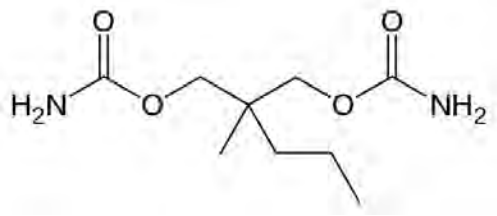
I-50 in Equine Urine (Diluted 1:19)		I-50 in Canine Urine (Diluted 1:19)	
Meprobamate	57.9 ng/ml	Meprobamate	65.4 ng/ml

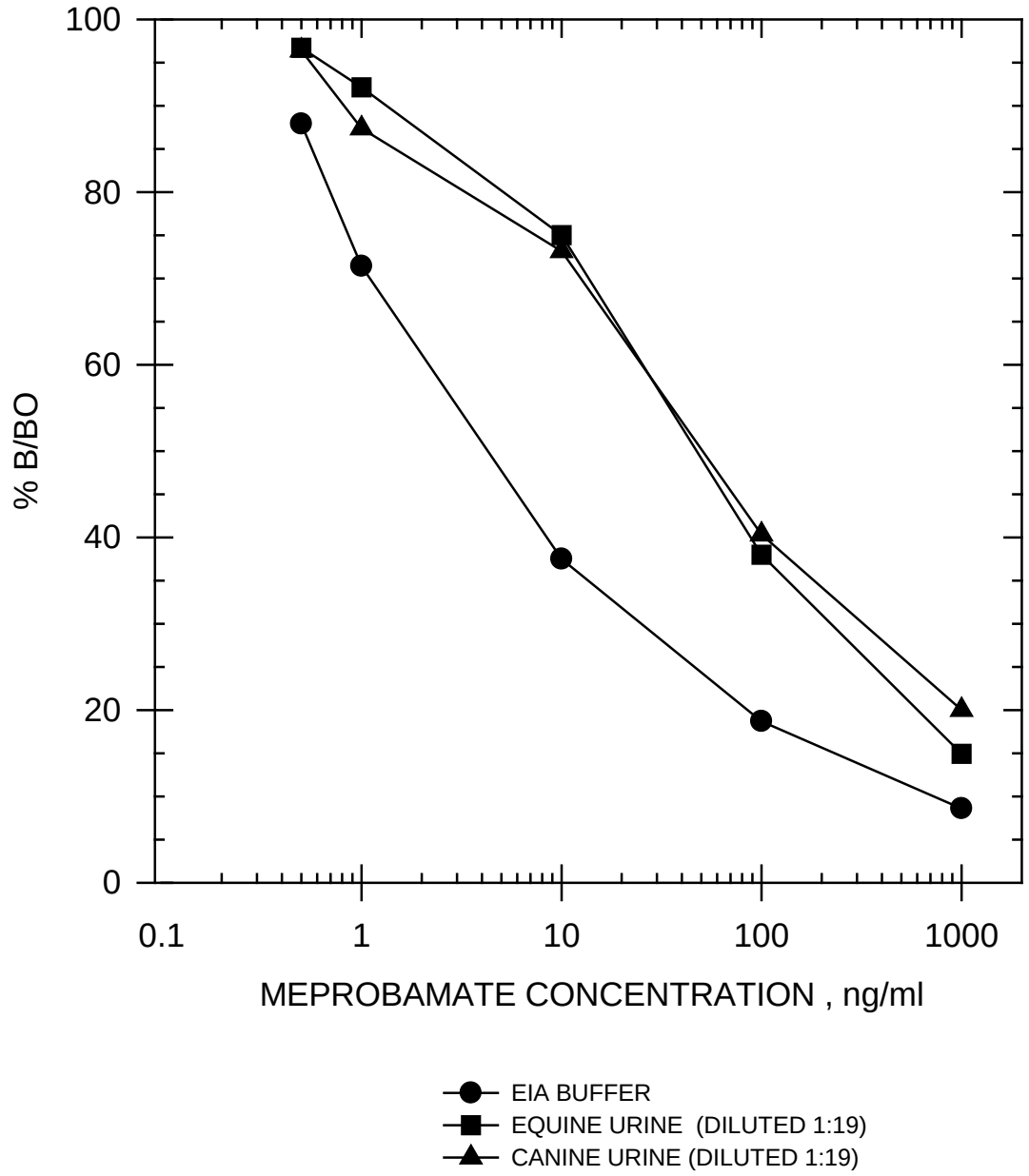
Precision:	Intra-assay	4.34%
	Inter-assay	5.06%

Note: Measuring wavelength was 650 nm**.**

MEPROBAMATE STANDARD CURVES

Meprobamate

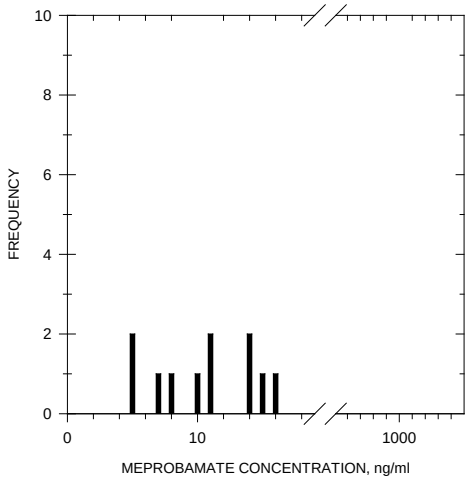




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:19, has shown no background levels above 16.6 ng/ml.

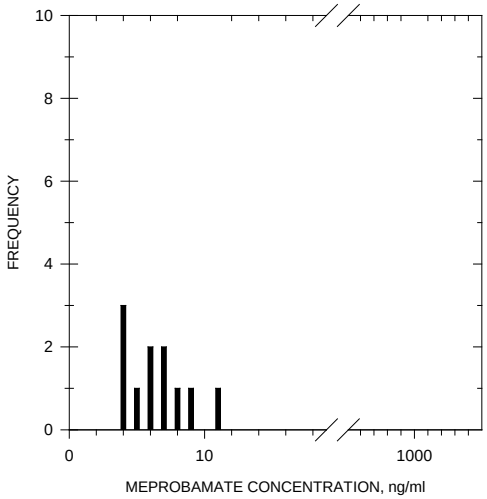
Sample Treatment: A dilution of 1:19 (i.e. 1 part to 19 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples, diluted 1:19, has shown no background levels above 11.9 ng/ml.

Sample Treatment: A dilution of 1:19 (i.e. 1 part to 19 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT METARAMINOL

Product #107910 & 107915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Phenylpropanolamine	1.6 ng/mL
Metaraminol	1.7 ng/mL
p-Methoxyamphetamine	35 ng/mL
4-Hydroxyamphetamine	46 ng/mL
MDA	64 ng/mL
d-Amphetamine	114 ng/mL
Phentermine	174 ng/mL
l-Amphetamine	1801 ng/mL
2-Aminoheptane	2453 ng/mL
Norepinephrine	3218 ng/mL
Ethyltryptamine	4637 ng/mL
Phenethylamine	10120 ng/mL
Methylene Blue	11433 ng/mL
S-Cathinone	12571 ng/mL

I-50 in Equine Urine (Diluted 1:4)

Phenylpropanolamine	8.8 ng/ml
Metaraminol	7.0 ng/ml
p-Methoxyamphetamine	256 ng/ml

I-50 in Canine Urine (Diluted 1:4)

Phenylpropanolamine	13 ng/ml
Metaraminol	6.8 ng/ml
p-Methoxyamphetamine	387 ng/ml

I-50 in Equine Plasma (Diluted 1:4)

Phenylpropanolamine	36 ng/ml
Metaraminol	24 ng/ml
p-Methoxyamphetamine	665 ng/ml

I-50 in Equine Serum (Diluted 1:4)

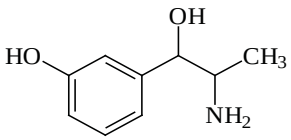
Phenylpropanolamine	31 ng/ml
Metaraminol	36 ng/ml
p-Methoxyamphetamine	1261 ng/ml

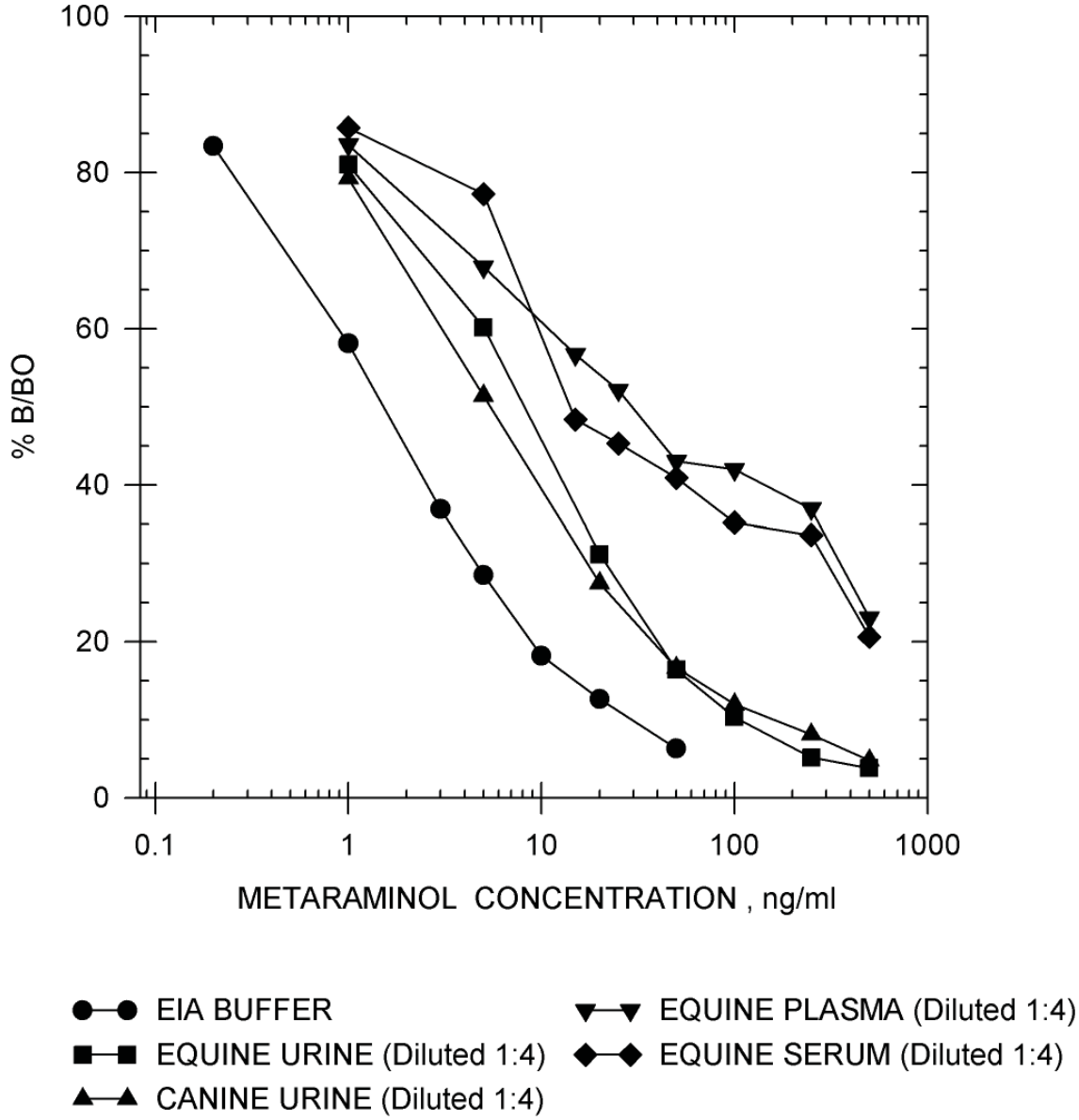
Precision: Intra-Assay 1.84%
Inter-Assay 2.42%

Note: Measuring wavelength was 650 nm.

METARAMINOL STANDARD CURVES

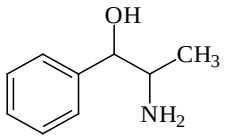
Metaraminol

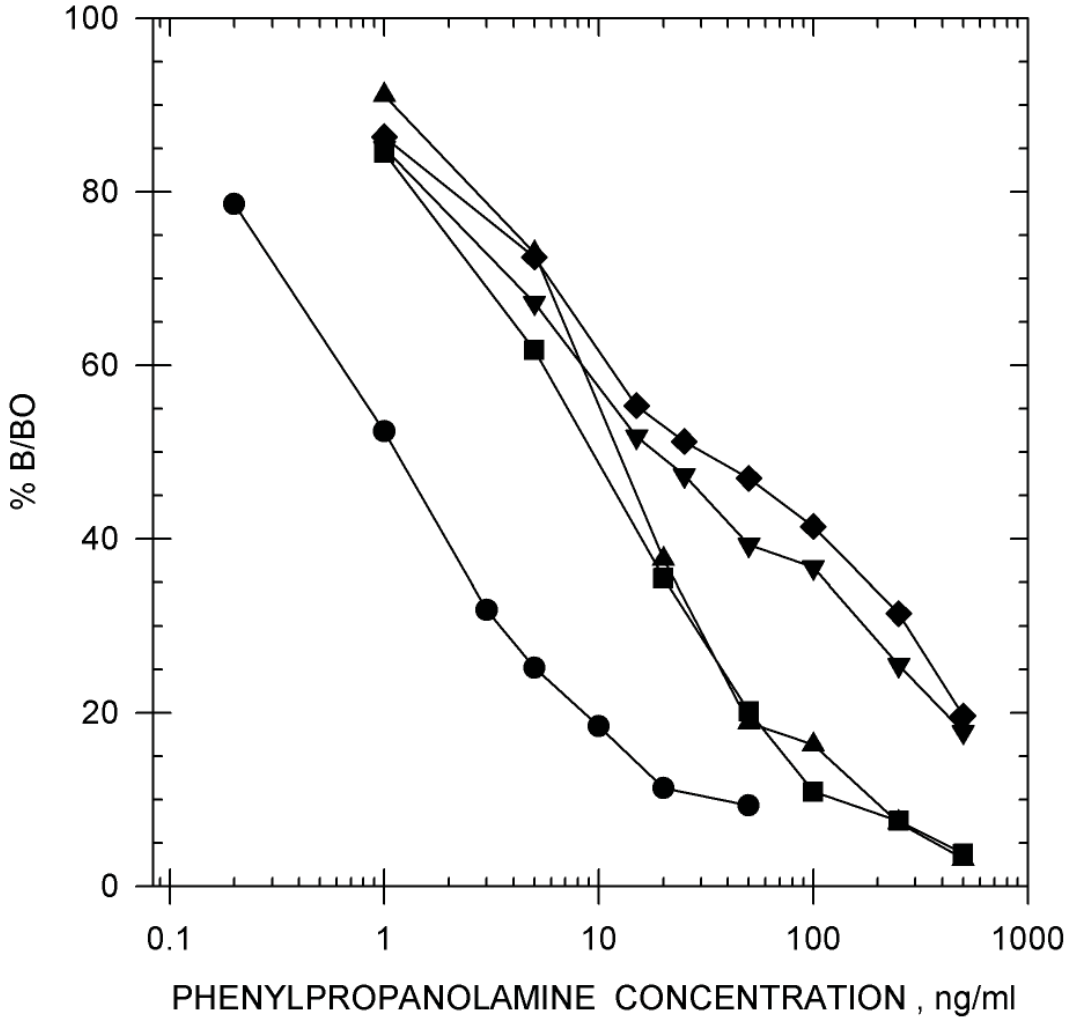




METARAMINOL STANDARD CURVES

Phenylpropanolamine



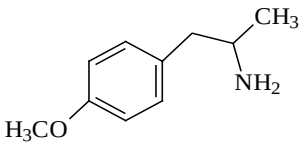


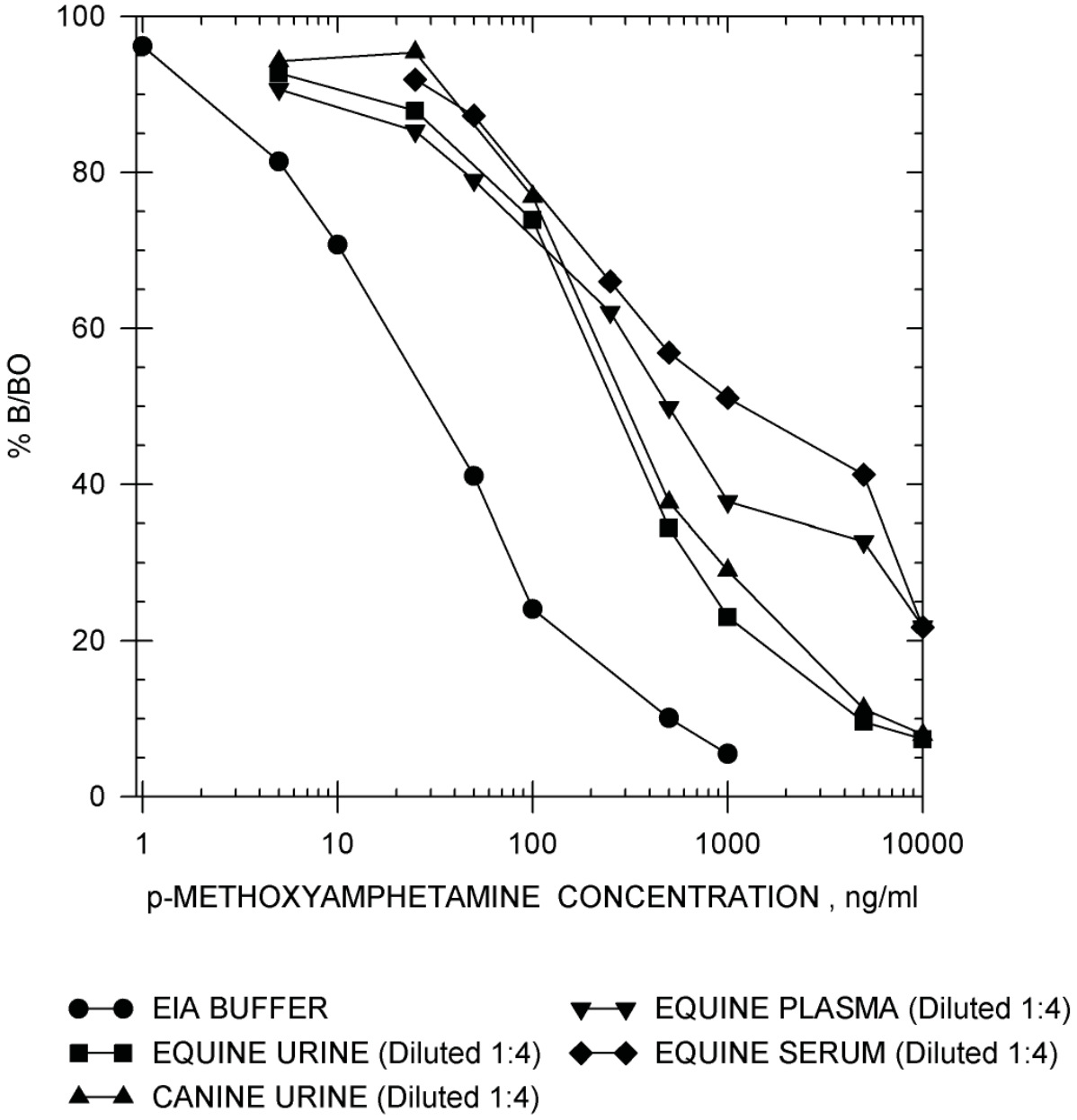
EIA BUFFER
EQUINE URINE (Diluted 1:4)
CANINE URINE (Diluted 1:4)
EQUINE PLASMA (Diluted 1:4)
EQUINE SERUM (Diluted 1:4)

Rev 12/2009

METARAMINOL STANDARD CURVES

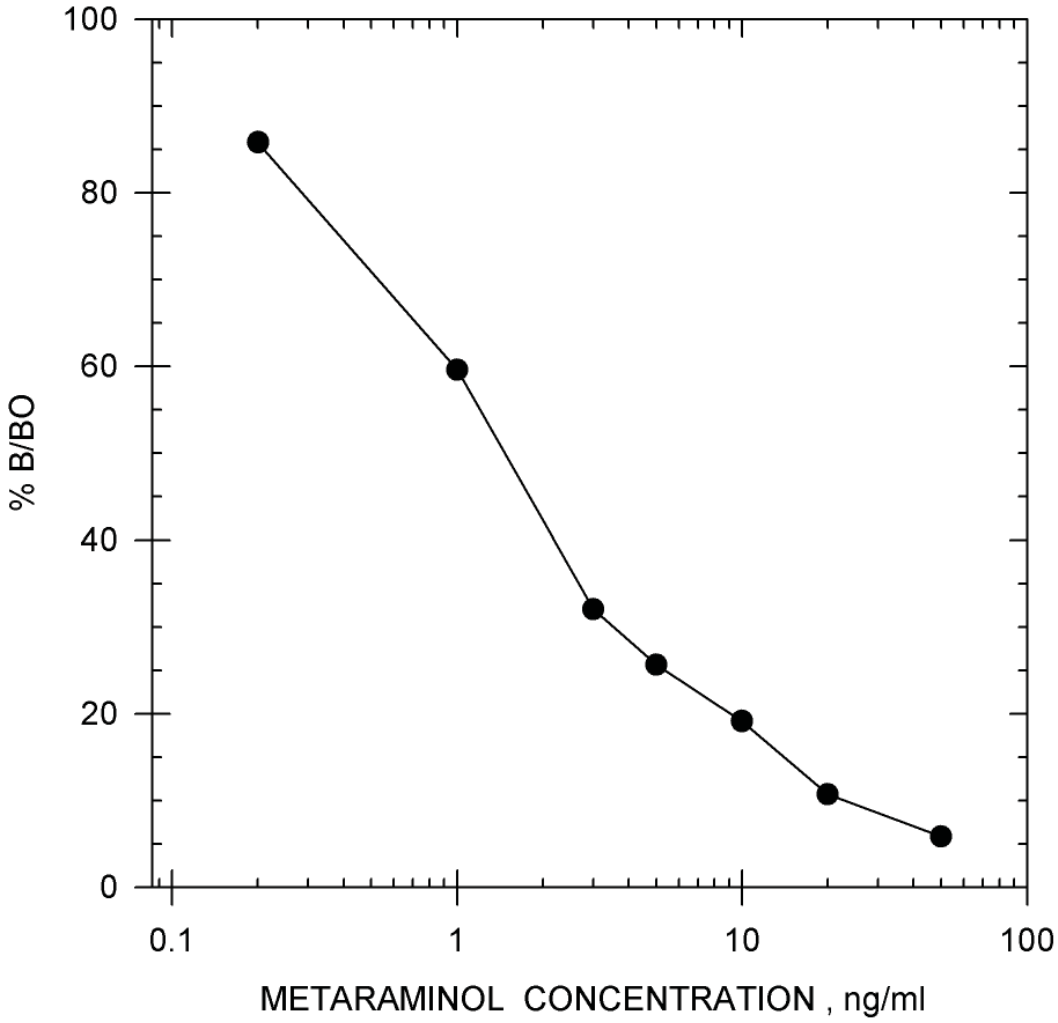
p-Methoxyamphetamine





METARAMINOL STANDARD CURVES

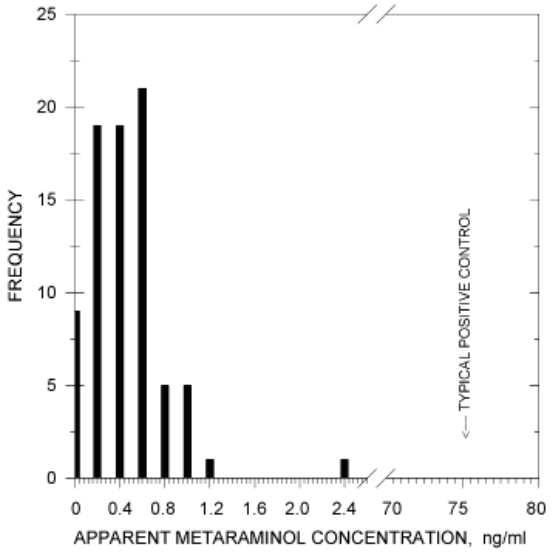
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:4, has shown no background levels above 2.44 ng/ml.

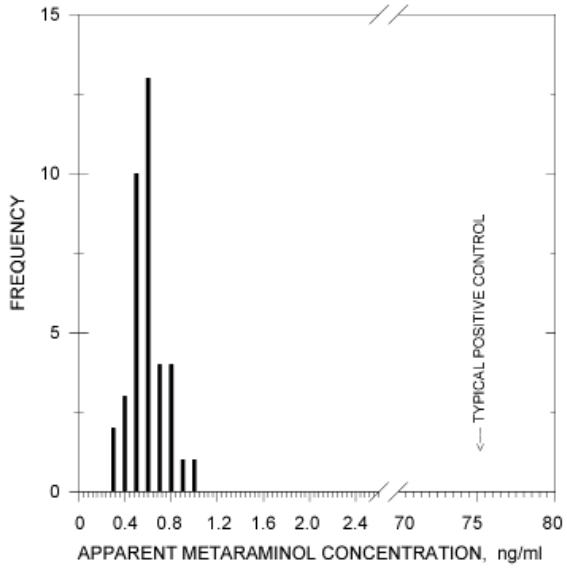
Sample Treatment: A dilution of 1:4 (i.e. 1 part urine to 4 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:4, has shown no background levels above 0.51 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e. 1 part urine to 4 parts EIA buffer) will reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A 1:4 dilution is necessary to reduce natural background.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Phenylpropanolamine	111%
Metaraminol	100%
p-Methoxyamphetamine	5.0%
4-Hydroxyamphetamine	3.8%
MDA	2.7%
d-Amphetamine	1.5%
Phentermine	1.0%
l-Amphetamine	0.1%
2-Aminoheptane	0.07%
Norepinephrine	0.05%
Ethyltryptamine	0.04%
Methylene Blue	0.02%
Phenethylamine	0.02%
S-Cathinone	0.01%

Acepromazine	<0.01%
Acetaminophen	<0.01%
Acetylsalicylic Acid	<0.01%
Aminorex	<0.01%
Amitriptyline	<0.01%
Ascorbic Acid	<0.01%
Benzoic Acid	<0.01%
Benzphetamine	<0.01%
Caffeine	<0.01%
E-amino-n-Caproic Acid	<0.01%
Chlordiazepoxide	<0.01%
Chlorpromazine	<0.01%
Clenbuterol	<0.01%
Codeine	<0.01%
Cotinine	<0.01%
N-desmethylselegiline	<0.01%
Dexamethasone	<0.01%
Dextromethorphan	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Doxepin	<0.01%
Ephedrine	<0.01%
Erythromycin	<0.01%
Ethyl p-amino-benzoate	<0.01%
Fencamfamine	<0.01%
Fenfluramine	<0.01%
Fenoprofen	<0.01%
Flunixin	<0.01%
Folic Acid	<0.01%
Folinic Acid	<0.01%
Furosemide	<0.01%
Gemfibrozil	<0.01%
Gentisic Acid	<0.01%
Glipizide	<0.01%
L-Glutamic Acid	<0.01%
Glutethimide	<0.01%
Glycopyrrolate	<0.01%
Heparin	<0.01%
Hippuric Acid	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Imipramine	<0.01%
Isoxsuprine	<0.01%
Lidocaine	<0.01%
MDMA	<0.01%
Meperidine	<0.01%
Mephentermine	<0.01%
Metaproterenol	<0.01%
Methadone	<0.01%
d-Methamphetamine	<0.01%
Methaqualone	<0.01%
R-Methcathinone	<0.01%
S-Methcathinone	<0.01%
Methocarbamol	<0.01%
p-Methoxymethamphetamine	<0.01%
Methylprednisolone	<0.01%
Nalorphine	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Nicotine	<0.01%
Nortriptyline	<0.01%
Nylidrin	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
PCP	<0.01%
Penicillin G-Potassium	<0.01%
Penicillin G-Procaine	<0.01%
Pentoxifylline	<0.01%
Phendimetrazine	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Primadone	<0.01%
Procainamide	<0.01%
Procaine	<0.01%
Promazine	<0.01%
Pseudoephedrine	<0.01%
Pyrante	l<0.01%
Pyrilamine	<0.01%
Pyrimethamine	<0.01%
Quinidine	<0.01%
Quinine	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salycylic Acid	<0.01%
Selegiline	<0.01%
Theophylline	<0.01%
Thiamide	<0.01%
Trimethoprim	<0.01%
Trimipramine	<0.01%
Uric Acid	<0.01%

METHADONE (RTU) FORENSIC KIT

Product #131619 & 131615

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer	
Methadone	0.48 ng/mL

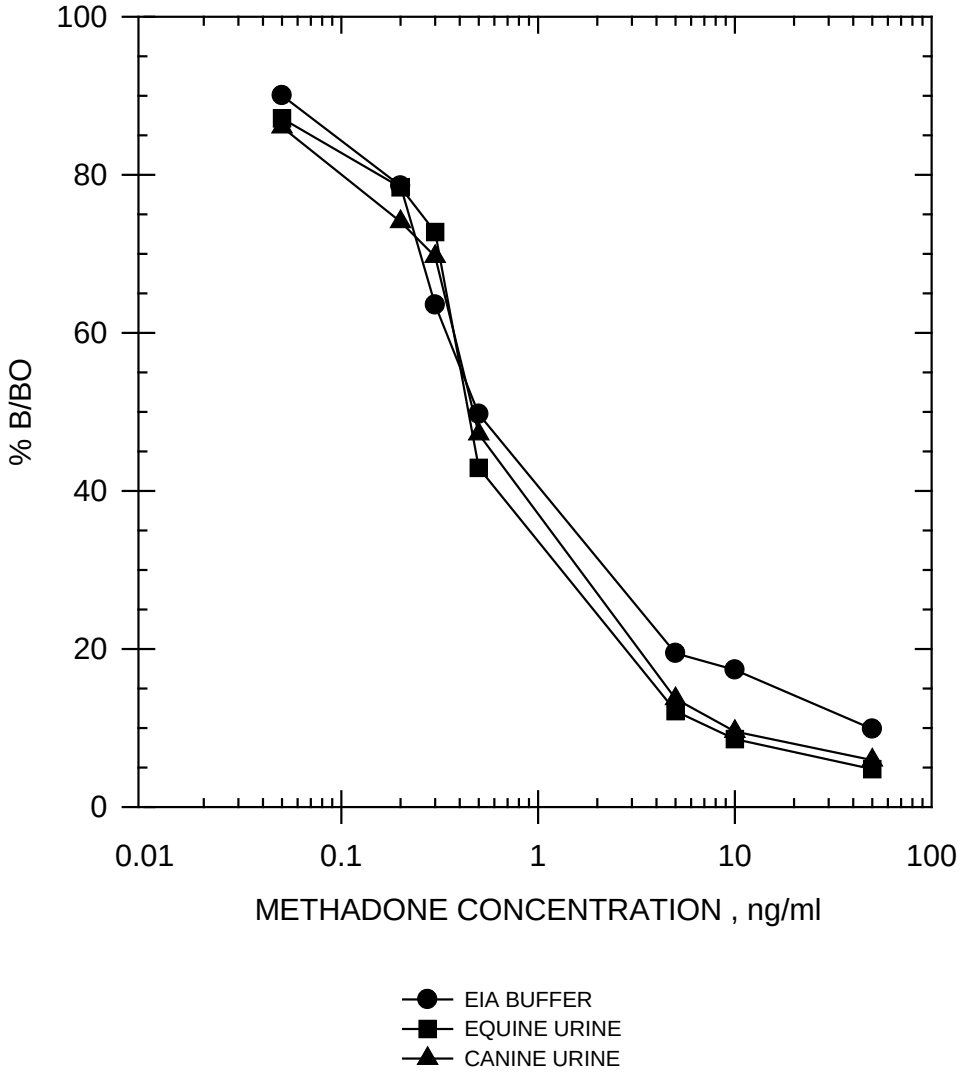
I-50 in Equine Urine		I-50 in Canine Urine	
Methadone	0.64 ng/mL	Methadone	0.63 ng/mL

Precision:	Intra-assay	5.68%
	Inter-assay	6.83%

Note: Measuring wavelength was 650 nm**.**

METHADONE STANDARD CURVES

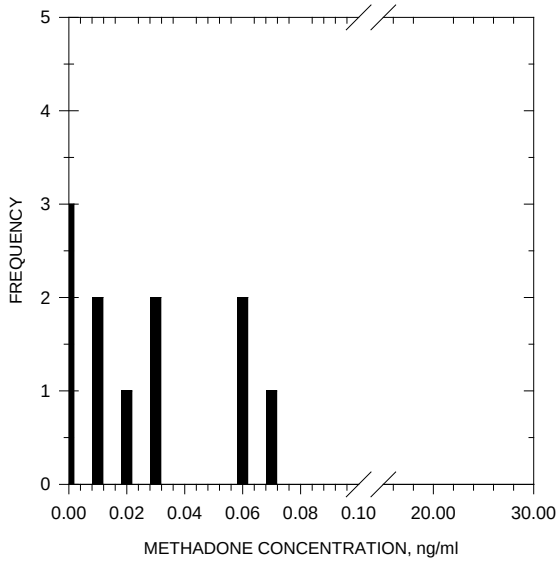
Drug Standard Curves



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples has shown no background levels above 0.07 ng/mL.

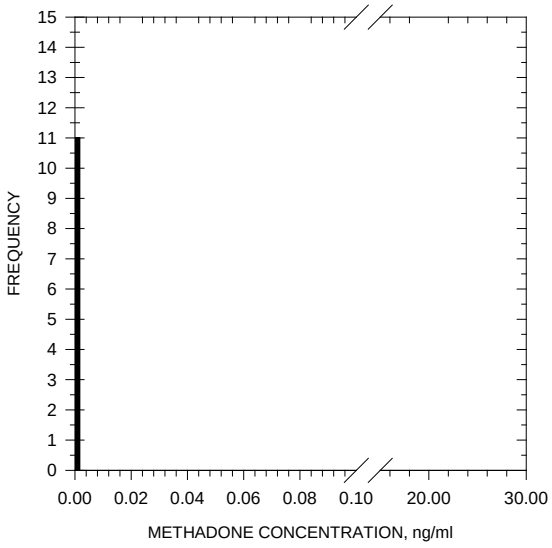
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples has shown no background levels above 0.00 ng/mL.

Sample Treatment: No sample dilution is necessary.



CROSS-REACTIVITY DATA

Please reference the product insert for cross reactivity data. Product insert is included with the kit or available upon request.

METHADONE/LAAM (RTU) FORENSIC KIT

Product #132919 & 132915

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer	
Methadone	11.09 ng/mL

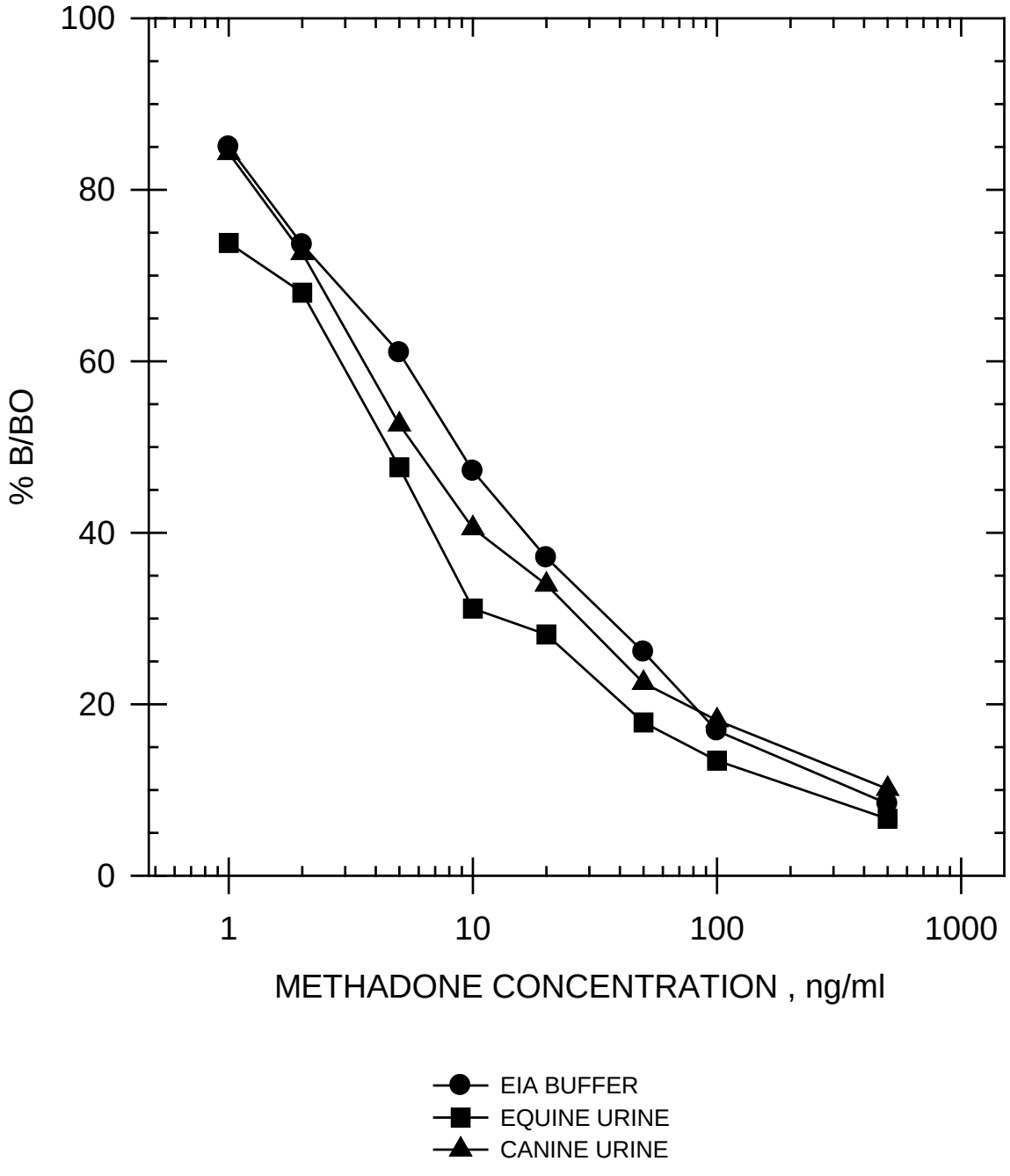
I-50 in Equine Urine		I-50 in Canine Urine	
Methadone	4.67 ng/mL	Methadone	8.43 ng/mL

Precision:	Intra-assay	3.10%
	Inter-assay	1.95%

Note: Measuring wavelength was 650 nm**.**

METHADONE STANDARD CURVES

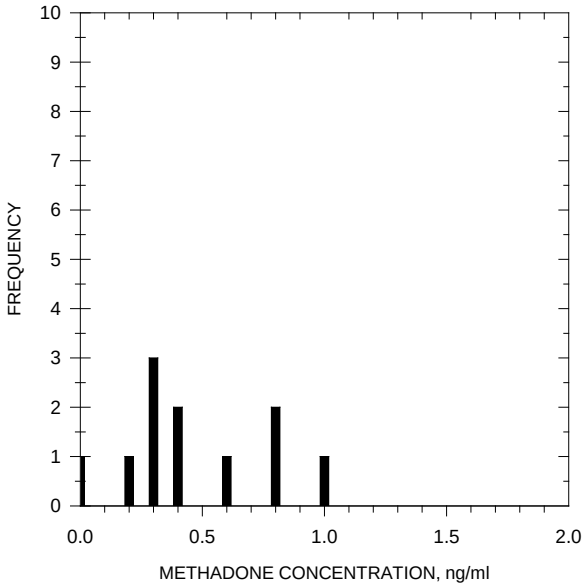
Methadone/LAAM Drug Standard Curves



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples has shown no background levels above 1.01 ng/mL.

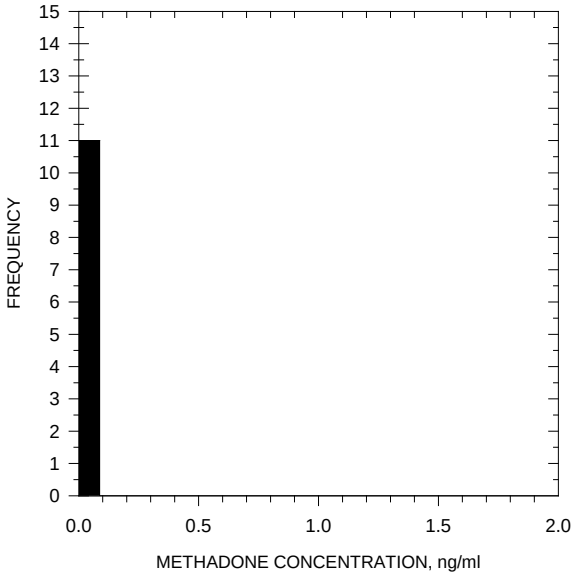
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples has shown no background levels above 0.00 ng/mL.

Sample Treatment: No sample dilution is necessary.



CROSS-REACTIVITY DATA

Please reference the product insert for cross reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT

METHOCARBAMOL

Product #108010 & 108015 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Methocarbamol	5 ng/ml
Guaifenesin	40 ng/ml

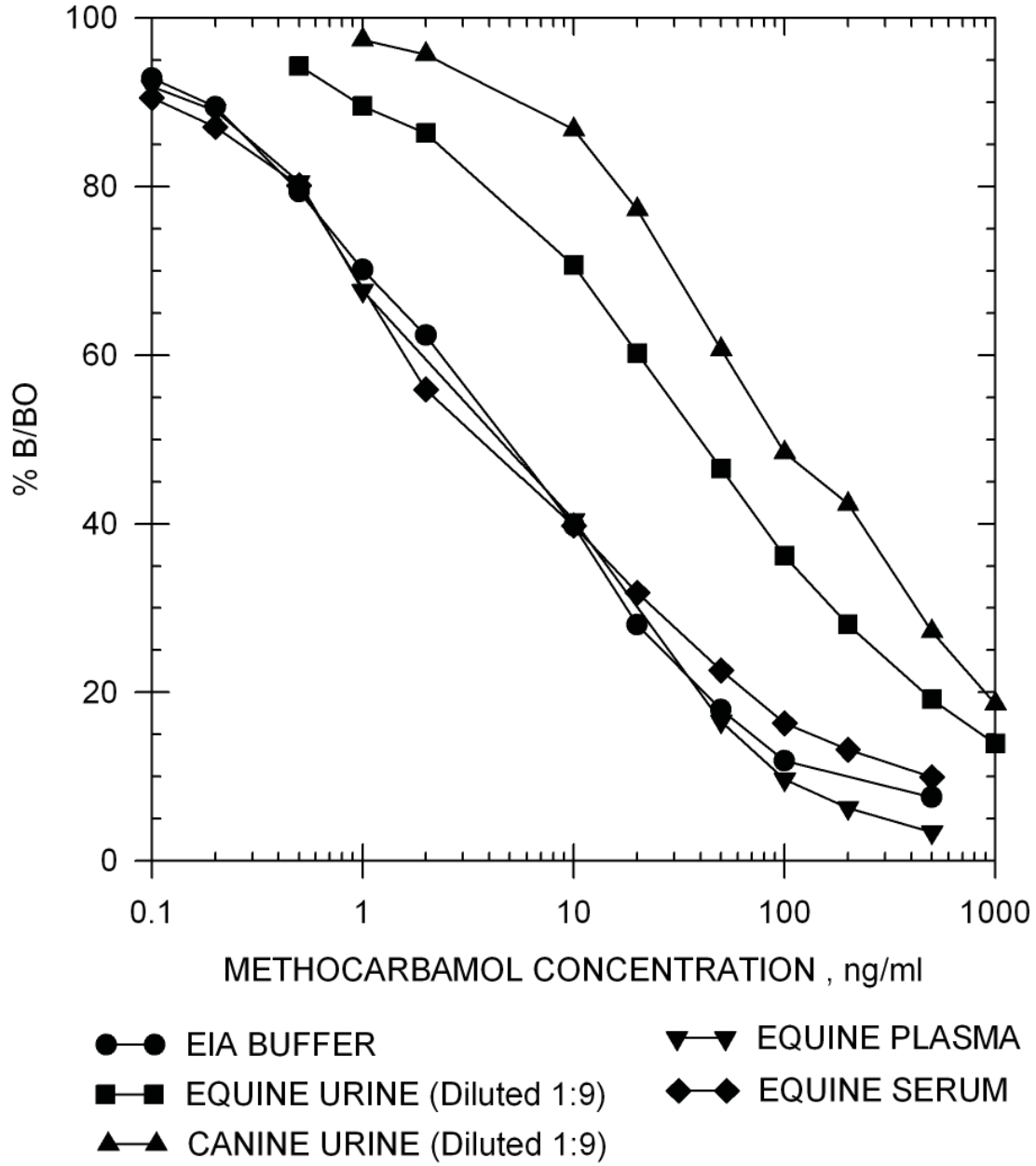
I-50 in Equine Urine (Diluted 1:9)		**I-50 in Canine Urine (Diluted 1:9)**	
Methocarbamol	45 ng/ml	Methocarbamol	90 ng/ml
Guaifenesin	380 ng/ml	Guaifenesin	1200 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Methocarbamol	8 ng/ml	Methocarbamol	5.5 ng/ml
Guaifenesin	150 ng/ml	Guaifenesin	80 ng/ml

Precision:	Intra-assay	4.58%
	Inter-assay	3.86%

Note: Measuring wavelength was 650 nm**.**

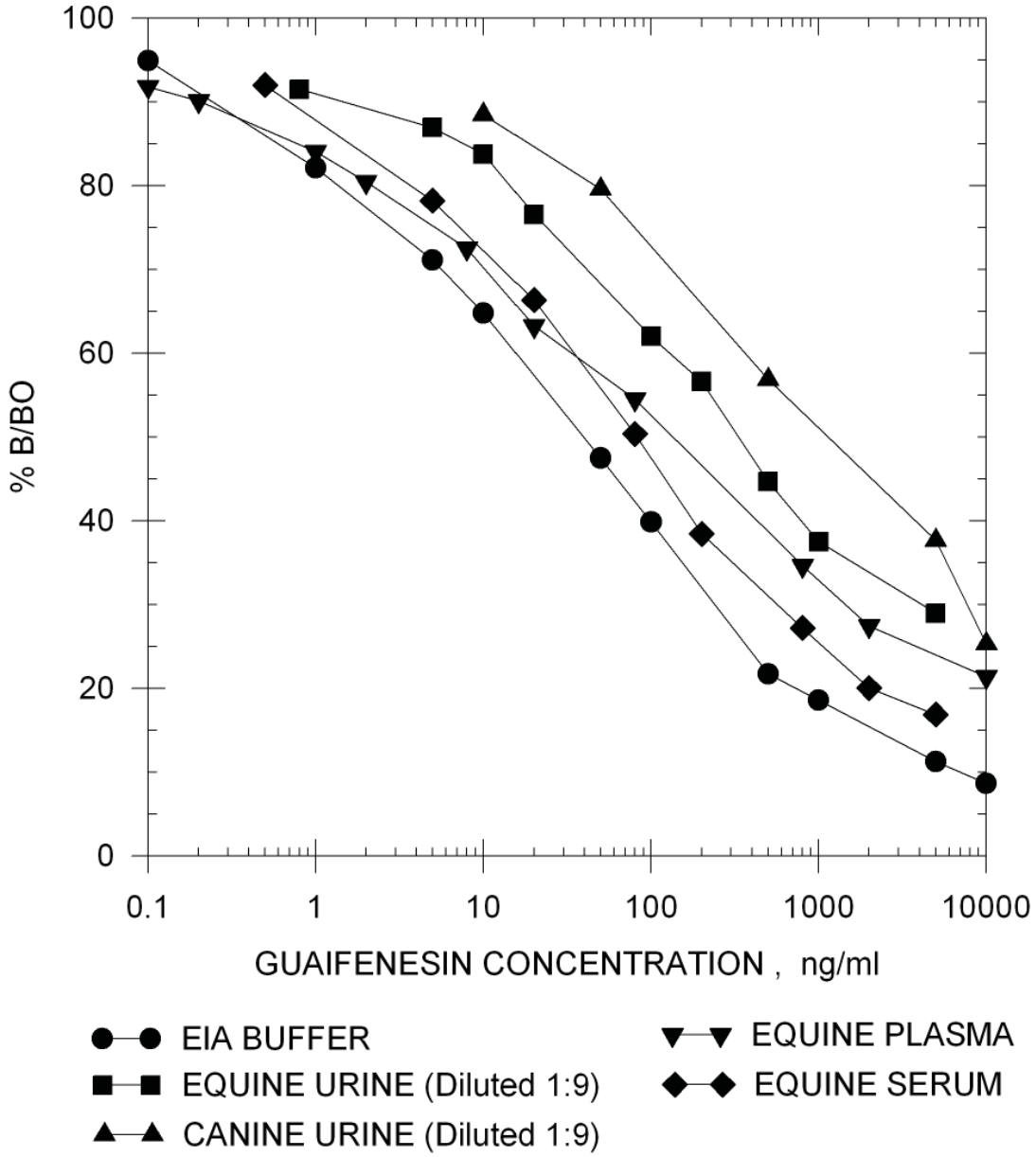
METHOCARBAMOL STANDARD CURVES

Methocarbamol



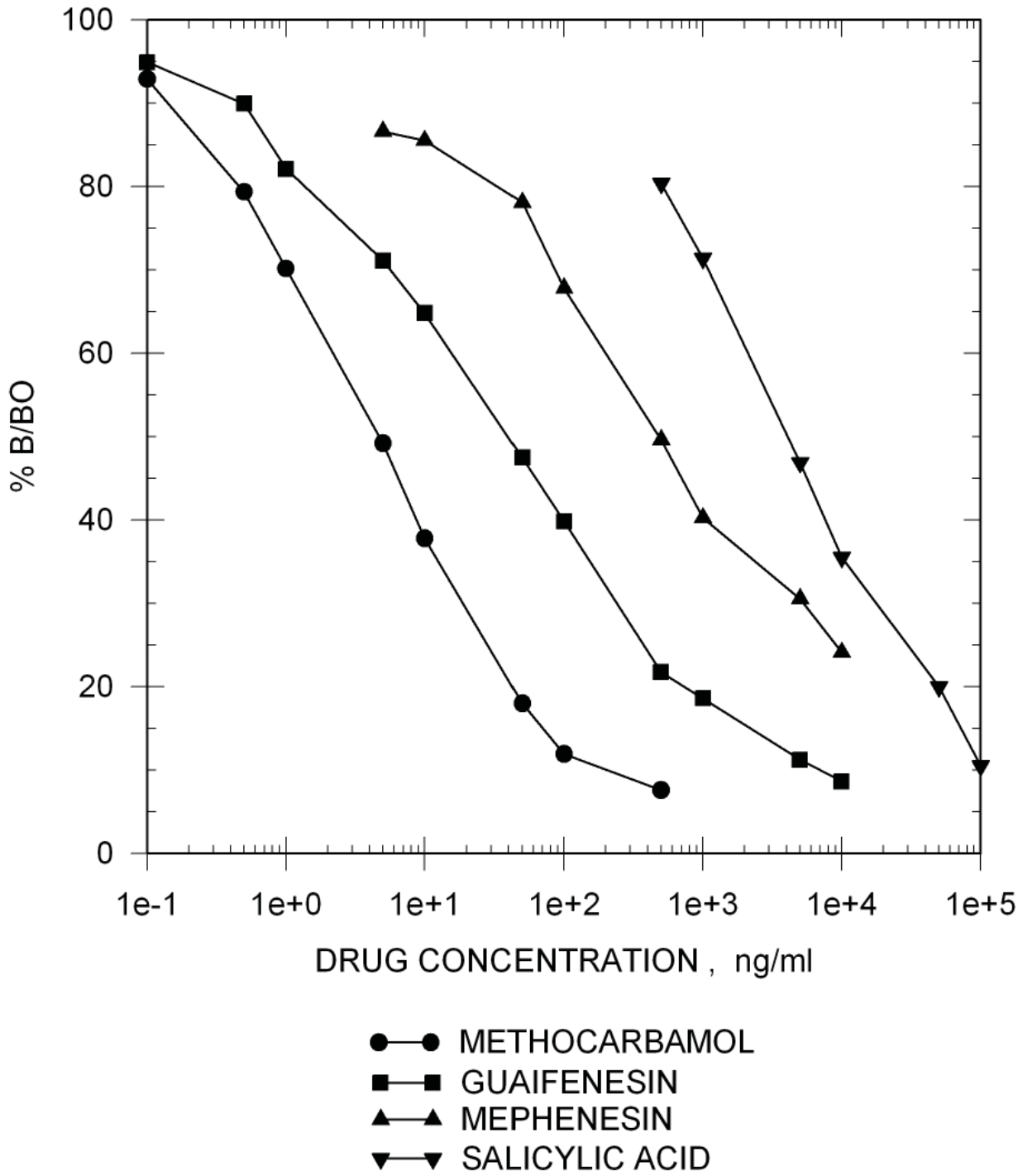
METHOCARBAMOL STANDARD CURVES

Guaifenesin



METHOCARBAMOL STANDARD CURVES

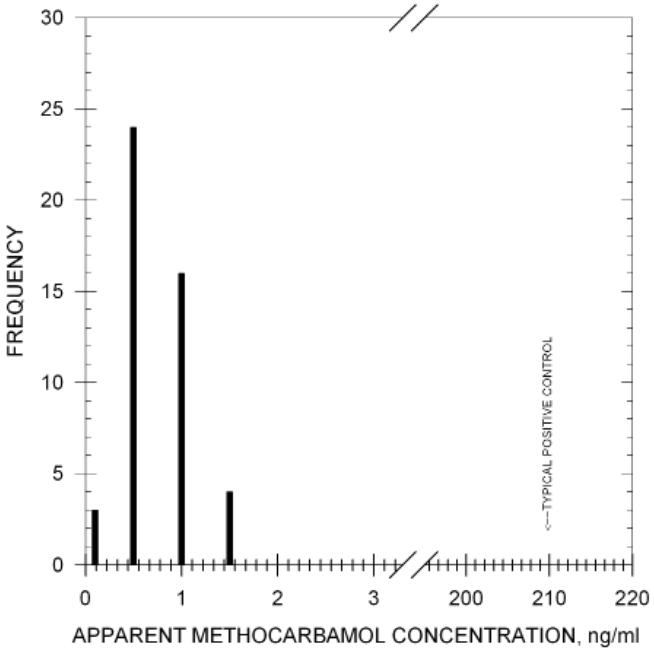
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race equine urine samples diluted 1:9 has shown no background levels above 1.5 ng/ml.

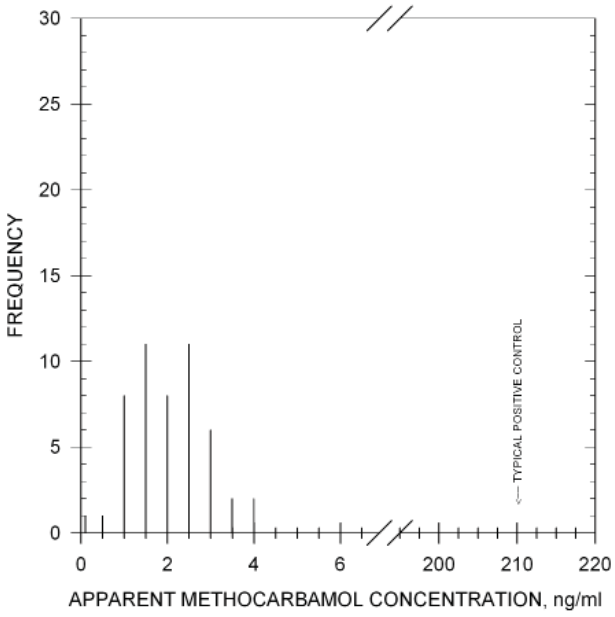
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples diluted 1:9 has shown no background levels above 4 ng/ml.

Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) is recommended to reduce natural backgrounds.

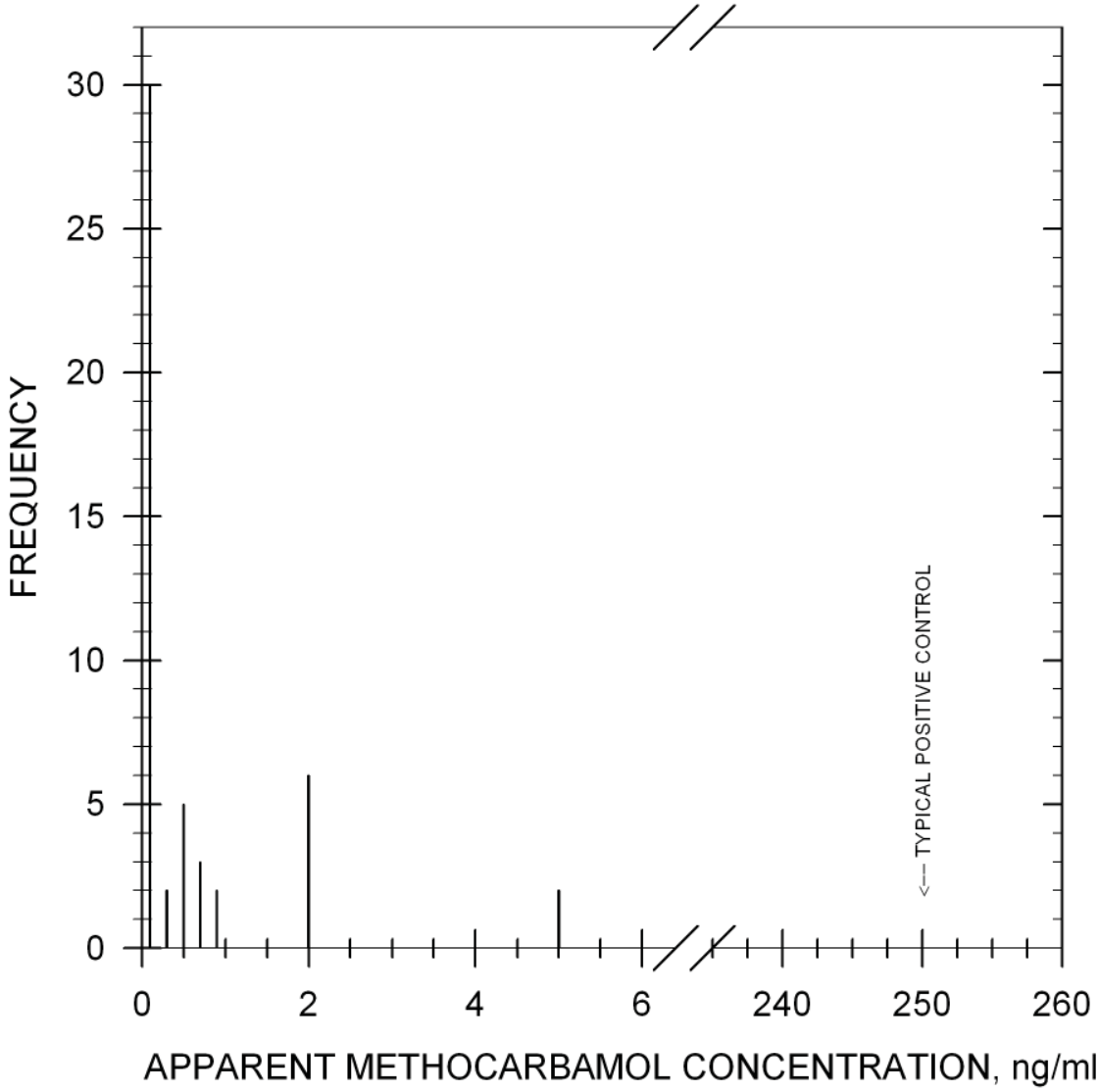


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race equine plasma samples has shown no background levels above 5 ng/ml.

Sample Treatment: No sample dilution is necessary. In some cases a small dilution (1:1) or sample extraction may be necessary.

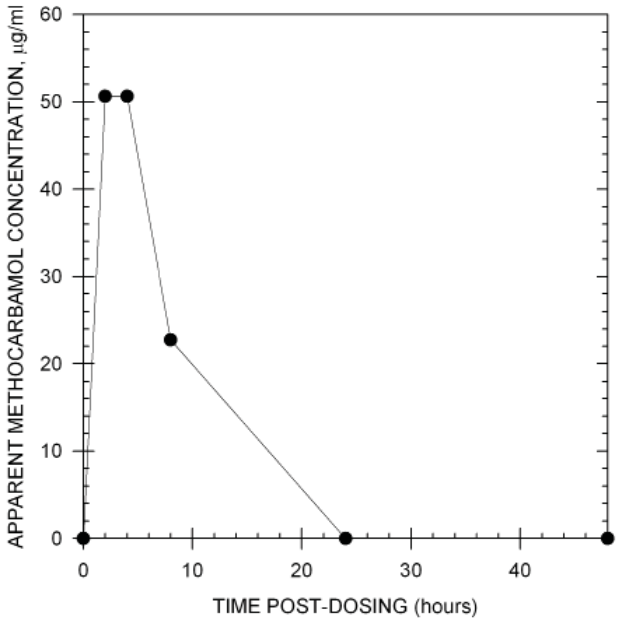
Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.



TYPICAL DURATION OF DETECTION

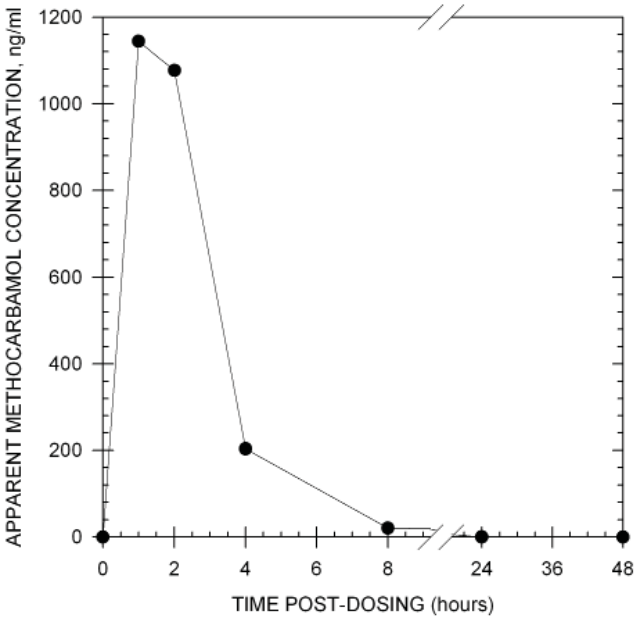
Duration of Detection:

After administration of 10 g of methocarbamol by intravenous injection to one horse (~ 1000 lb), the presence of this drug was detected for at least 8 hours in equine urine. All samples were diluted 1:9 with EIA buffer before testing according to the recommended sample treatment.



Duration of Detection:

After administration of 10 g of Methocarbamol by intravenous injection to one horse (~ 1000 lb), the presence of this drug was detected for at least 8 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Methocarbamol	100%
Guaifenesin	12.5%
Mephenesin	0.79%
Salicylic Acid	0.11%

E-Amino-n-Caproic Acid	<0.01%	Mebeverine	<0.01%
Aminophylline	<0.01%	Methylene Blue	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	6α-Methylprednisolone	<0.01%
Baclofen	<0.01%	Naproxen	<0.01%
Carisoprodol	<0.01%	Niacinamide	<0.01%
Chlorzoxazone	<0.01%	Orphenadrine	<0.01%
Clenbuterol	<0.01%	Oxymorphone	<0.01%
Codeine	<0.01%	Oxyphenbutazone	<0.01%
Curare	<0.01%	Pancuronium Bromide	<0.01%
Cyclobenzaprine	<0.01%	Papaverine	<0.01%
Dantrolene	<0.01%	Pentoxifylline	<0.01%
Decamethonium Bromide	<0.01%	Phenothiazine	<0.01%
Dezocine	<0.01%	Phenylbutazone	<0.01%
Diclofenac	<0.01%	Polyethylene Glycol	<0.01%
Dimethyl Sulfoxide	<0.01%	Prednisolone	<0.01%
Dipyrone	<0.01%	Procaine	<0.01%
Ethyl p-Amino-Benzoate	<0.01%	Procyclidine	<0.01%
(Benzocaine)	<0.01%	Pyrantel	<0.01%
Flunixin	<0.01%	Quinine Hemisulfate Salt	<0.01%
Flurazepam	<0.01%	Ritrodrine	<0.01%
Furosemide	<0.01%	Salbutamol	<0.01%
GallamineTriethiodide	<0.01%	Salicylamide	<0.01%
Glycopyrrolate	<0.01%	Succinylcholine	<0.01%
Hordenine	<0.01%	Thiamine	<0.01%
Hydrocortisone	<0.01%	Tolperison	<0.01%
Ibuprofen	<0.01%	Tubercurarine	<0.01%
Levallorphan	<0.01%	Xylazine	<0.01%
Metaproterenol	<0.01%		

ENHANCED KIT
METHOTREXATE

Product# 107510 &
107515 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Methotrexate	0.22 ng/ml
Aminopterin	0.48 ng/ml
Triamterene	21.67 ng/ml

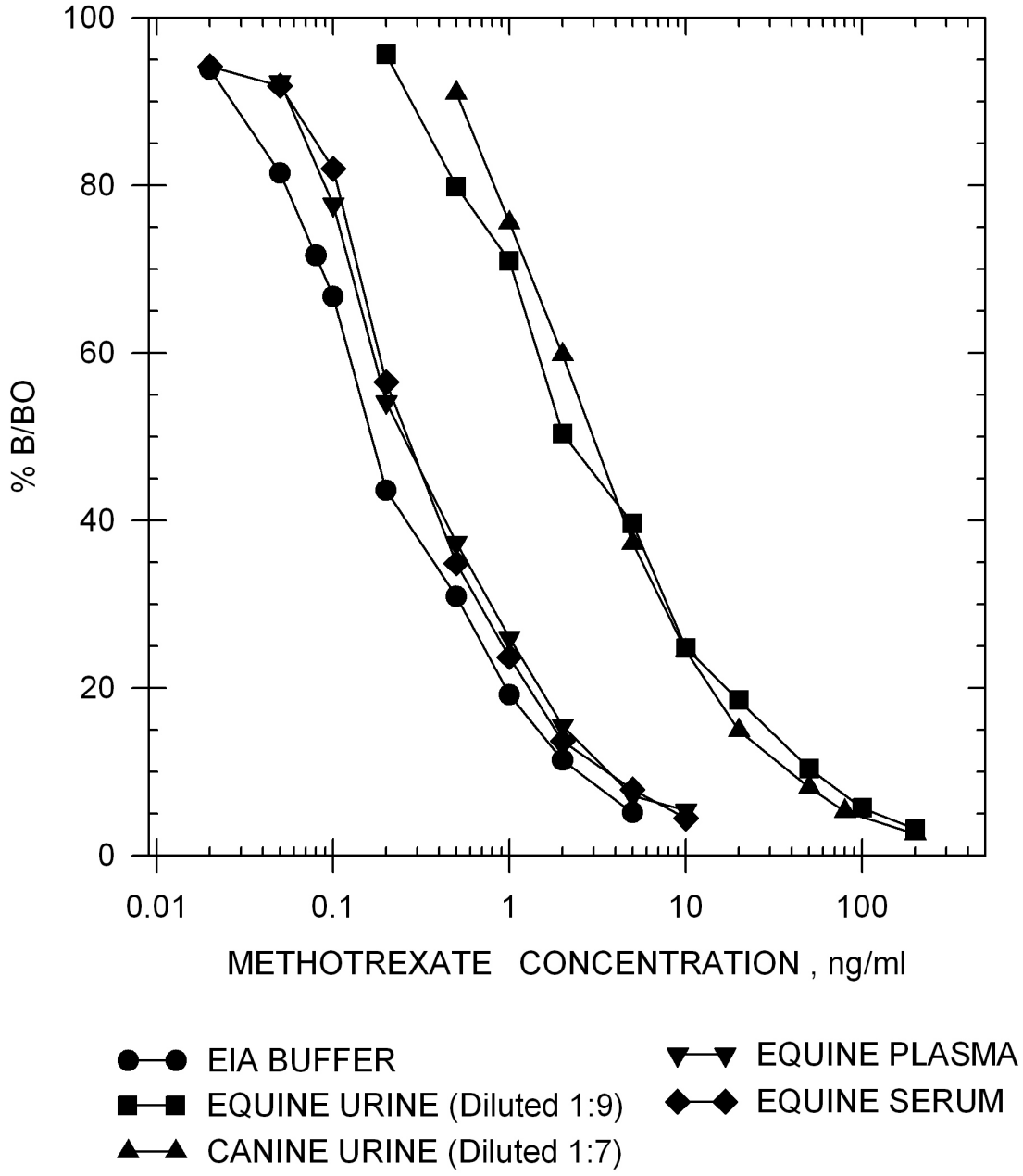
I-50 in Equine Urine (Diluted 1:9)		**I-50 in Canine Urine (Diluted 1:7)**	
Methotrexate	3.21 ng/ml	Methotrexate	3.48 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Methotrexate	0.31 ng/ml	Methotrexate	0.38 ng/ml

Precision:	Intra-assay	3.85%
	Inter-assay	3.00%

Note: Measuring wavelength was 650 nm**.**

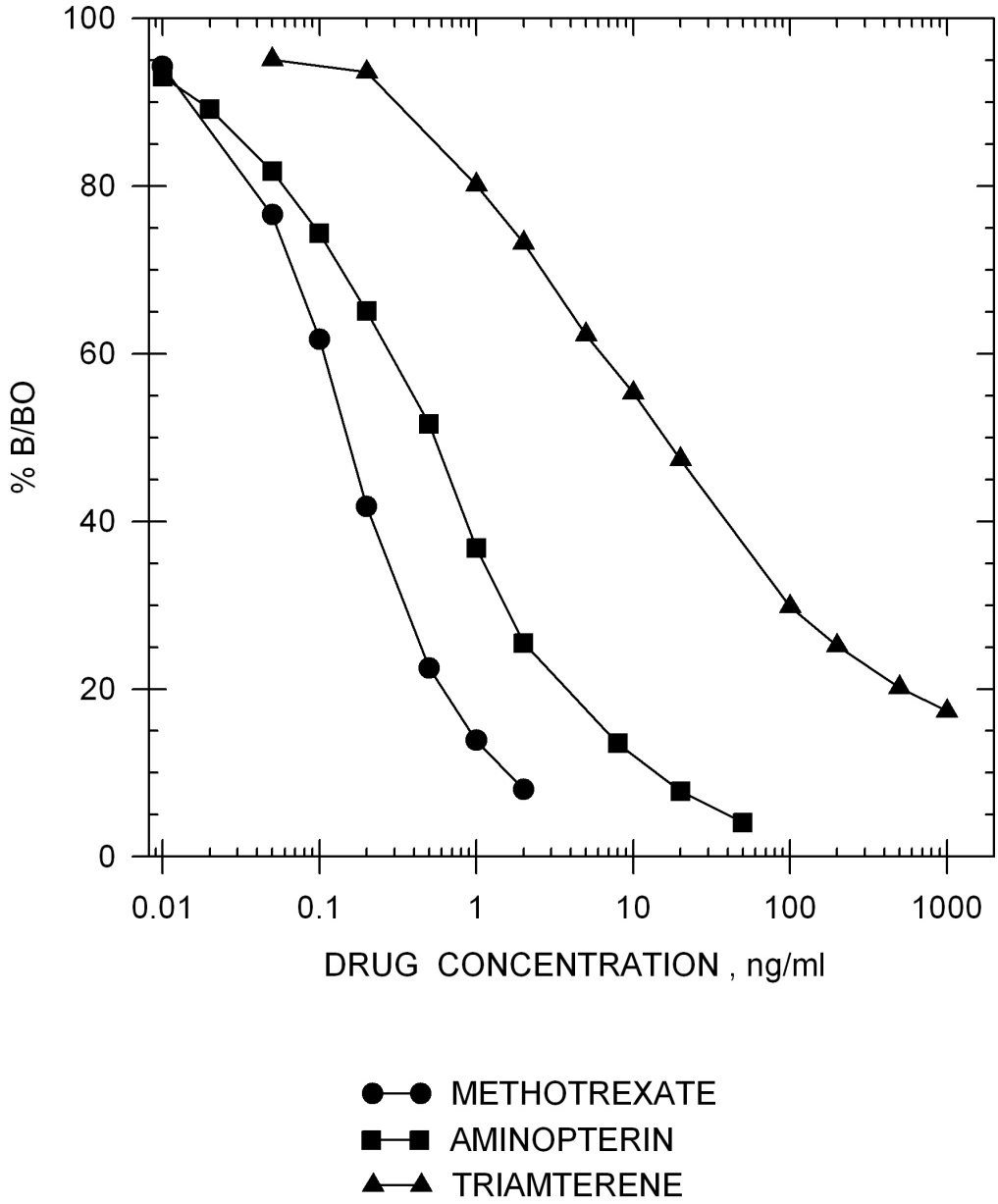
METHOTREXATE STANDARD CURVES

Methotrexate



METHOTREXATE STANDARD CURVES

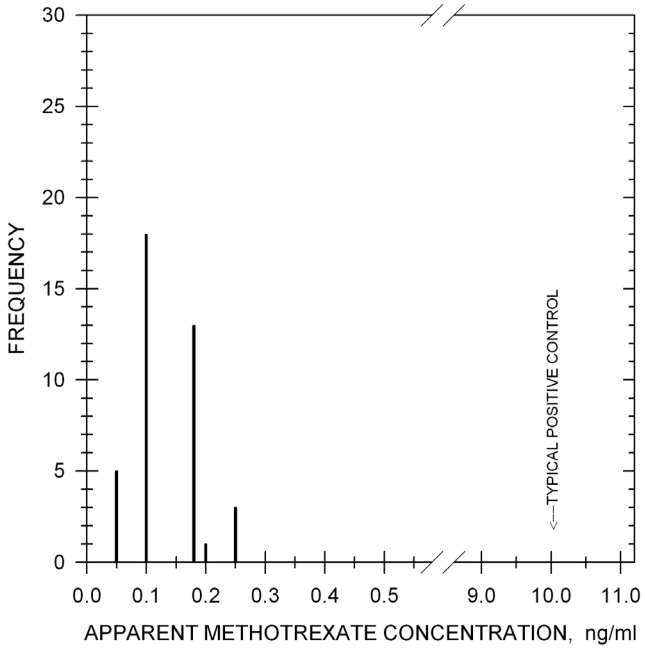
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples diluted 1:9 has shown no background levels above 0.25 ng/ml.

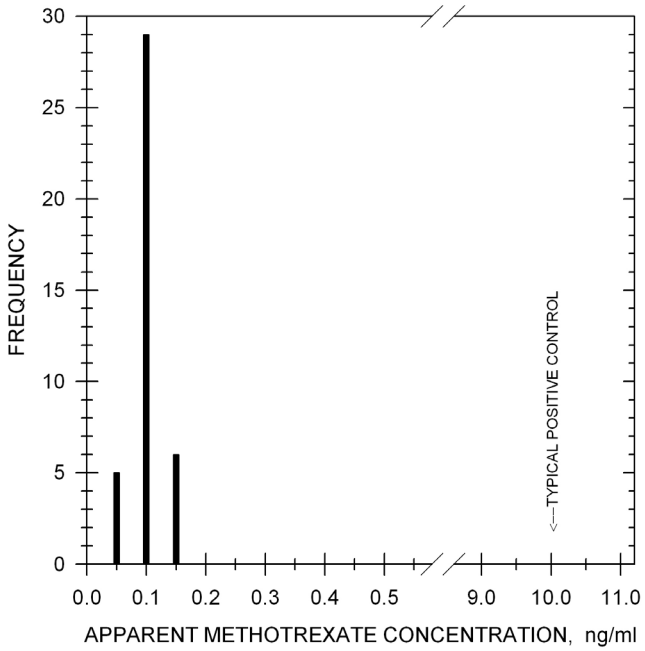
Sample Treatment: A dilution of 1:9 (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples diluted 1:7 has shown no background levels above 0.15 ng/ml.

Sample Treatment: A dilution of 1:3 to 1:7 (i.e. 1 part urine to 7 parts EIA buffer) is recommended to reduce natural backgrounds.

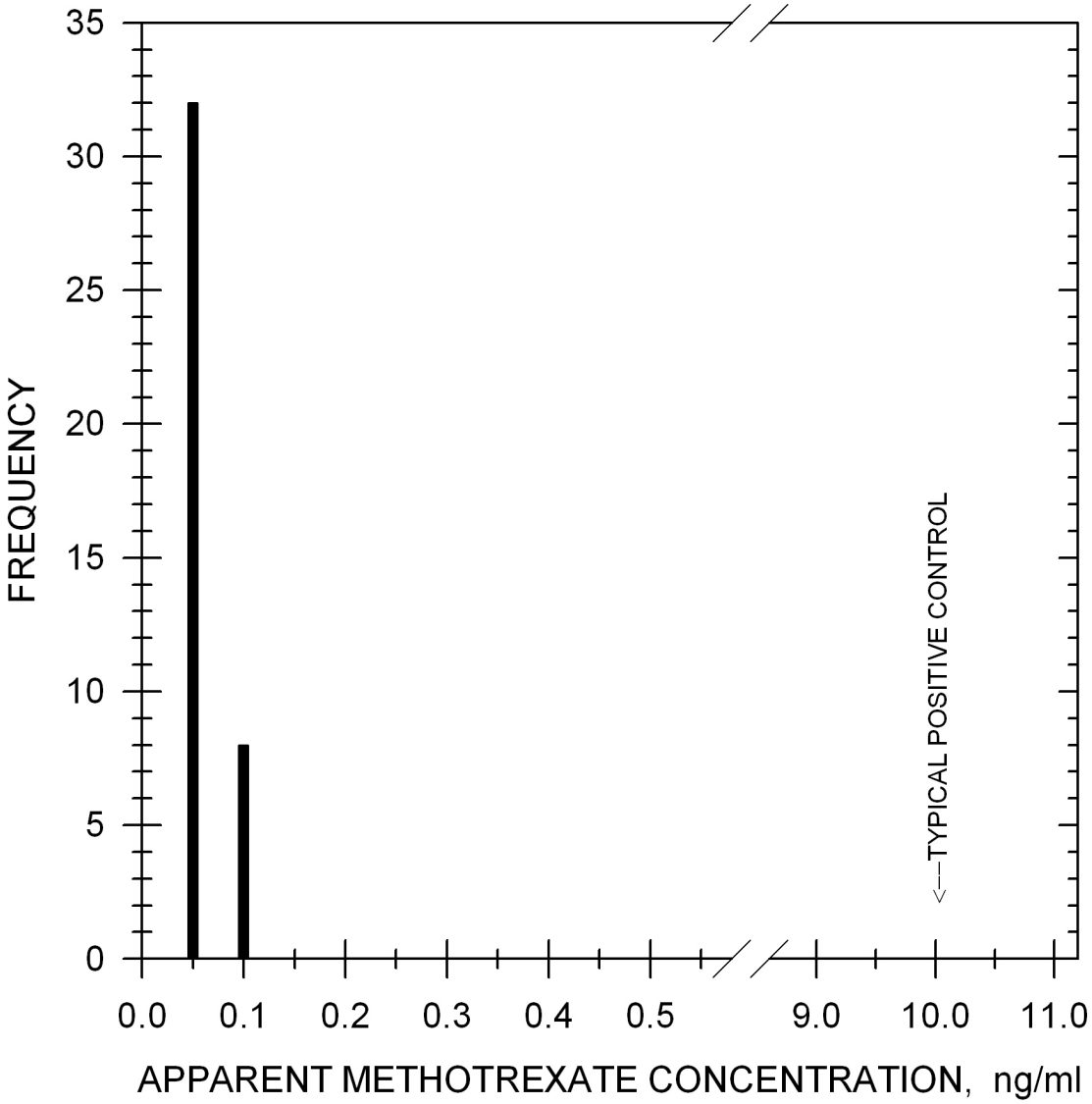


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 0.1 ng/ml.

Sample Treatment: No Sample dilution is necessary. In some cases a small dilution (1:1) or sample extraction may be necessary.

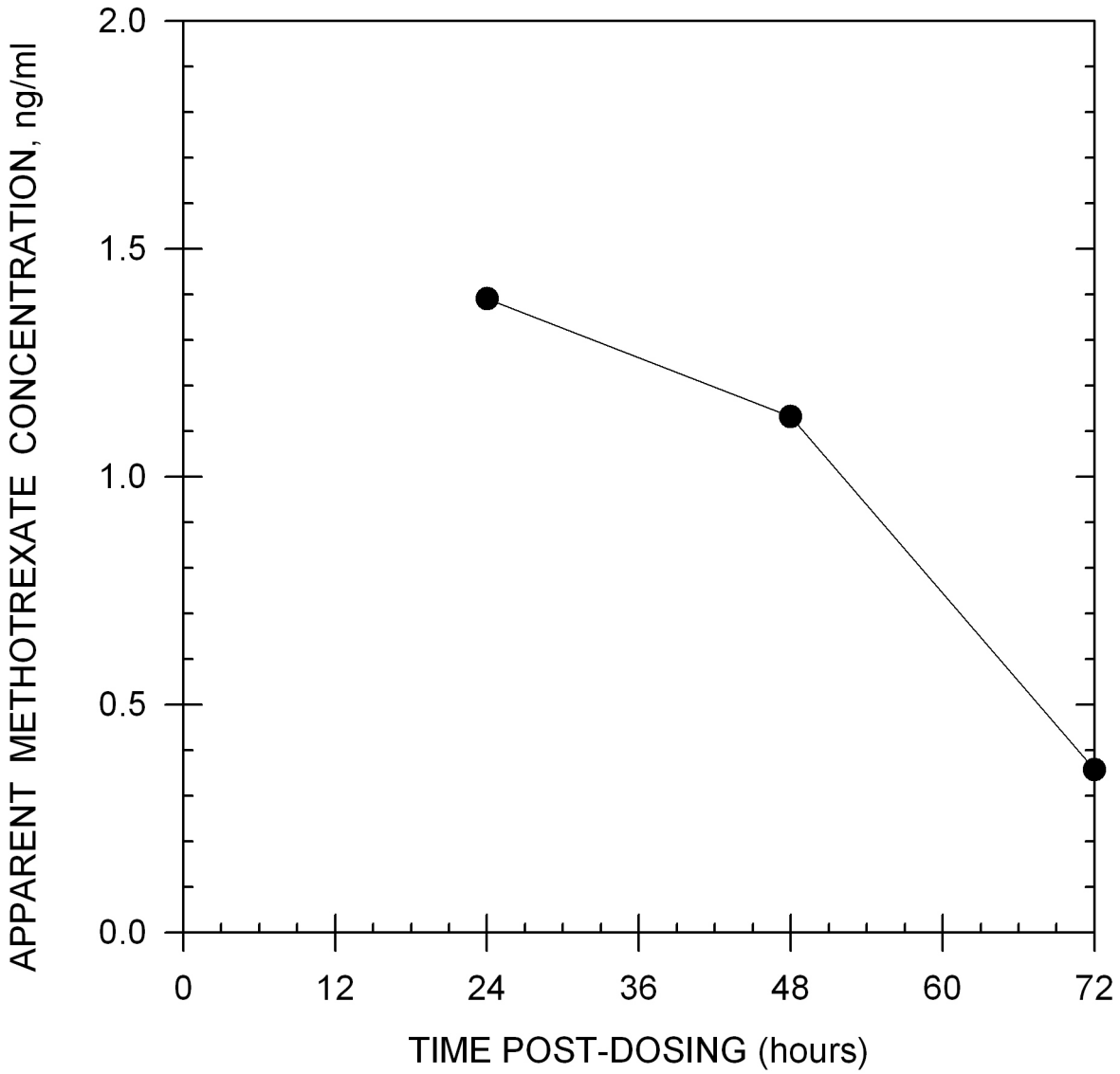
Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 75 mg of methotrexate intramuscularly to one horse, the presence of this drug was detected for 72 hours in equine urine. All samples were diluted 1:9 with EIA buffer before testing acccording to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Methotrexate	100%
Aminopterin	33%
Triamterene	0.74%
Folic Acid	0.002%
Trimethoprim	0.002%

Acepromazine	<0.01%
E-Amino-n-Caproic Acid	<0.01%
Ascorbic Acid	<0.01%
Clenbuterol	<0.01%
Dexamethasone	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%
Flunixin	<0.01%
Folinic Acid	<0.01%
Furosemide	<0.01%
L-Glutamic Acid	<0.01%
Glycopyrrolate	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Isoxsuprine	<0.01%
Lidocaine	<0.01%
Metaproterenol	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
6α-Methylprednisolone	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Prednisolone	<0.01%
Procaine	<0.01%
Promazine	<0.01%
Pyrantel	<0.01%
Pyrilamine	<0.01%
Pyrimethamine	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Thiamine	<0.01%
Uric Acid	<0.01%

METHYLPHENIDATE/RITALINIC ACID (RTU) FORENSIC KIT

Product #134219 & 134215

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

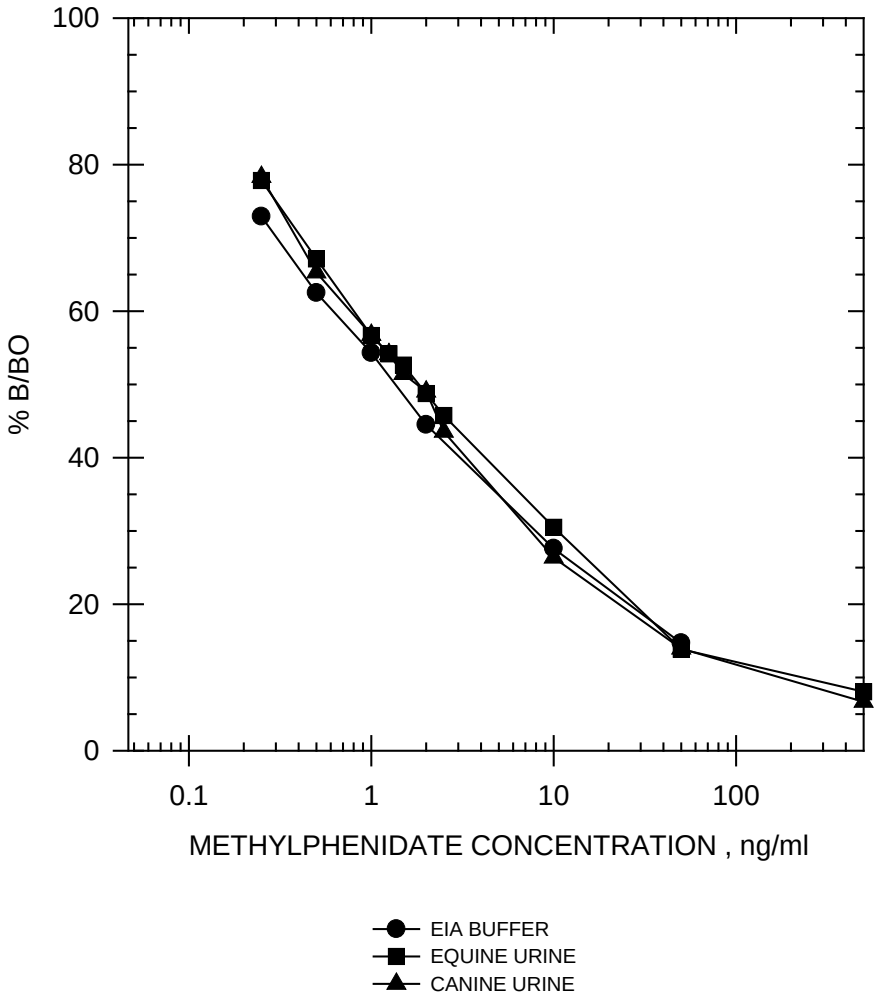
Methylphenidate	1.83 ng/mL
Ritalinic Acid	13.2 ng/mL

Precision: Intra-assay 3.96%
Inter-assay 6.39%

Note: Measuring wavelength was 650 nm**.**

METHYLPHENIDATE STANDARD CURVES

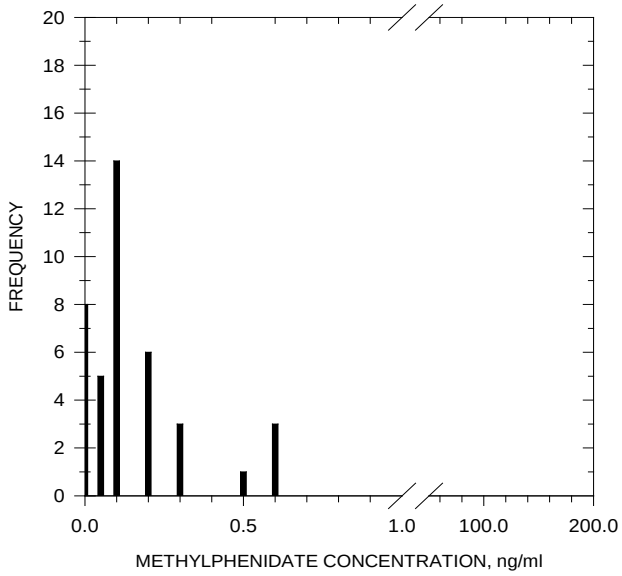
Drug Standard Curves



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 2 ng/ml.

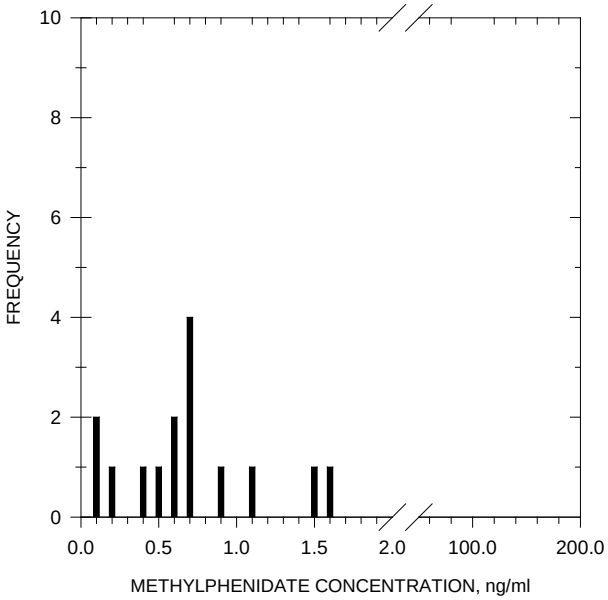
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 15 post-race canine urine samples has shown no background levels above 1.6 ng/mL.

Sample Treatment: No sample dilution is necessary.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT

METHYLPREDNISOLONE

Product# 104560 & 104565 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Methylprednisolone-21-hemisuccinate	1.47 ng/ml
Methylprednisolone	1.70 ng/ml
Prednisolone	211 ng/ml
Isoflupredone	540 ng/ml
Hydrocortisone	1121 ng/ml

I-50 in Equine Urine (Diluted 1:3)		**I-50 in Canine Urine**	
Methylprednisolone-21-hemisuccinate	4.96 ng/ml	Methylprednisolone-21-hemisuccinate	0.88 ng/ml
Methylprednisolone	5.91 ng/ml	Methylprednisolone	0.80 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Methylprednisolone-21-hemisuccinate	2.12 ng/ml	Methylprednisolone-21-hemisuccinate	2.19 ng/ml
Methylprednisolone	1.98 ng/ml	Methylprednisolone	1.43 ng/ml

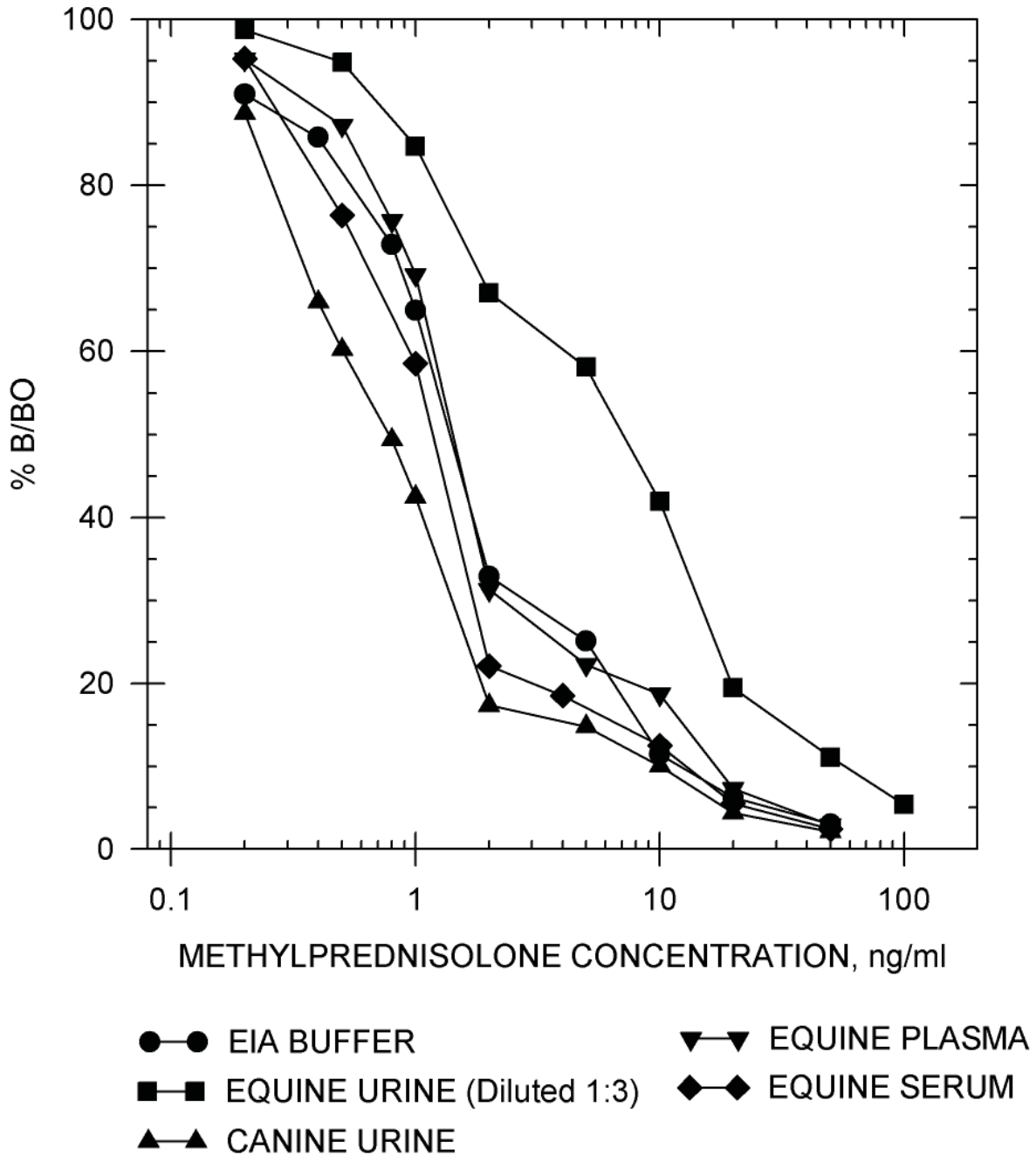
Precision:

Intra-assay	3.59%
Inter-assay	4.13%

Note: Measuring wavelength was 650 nm**.**

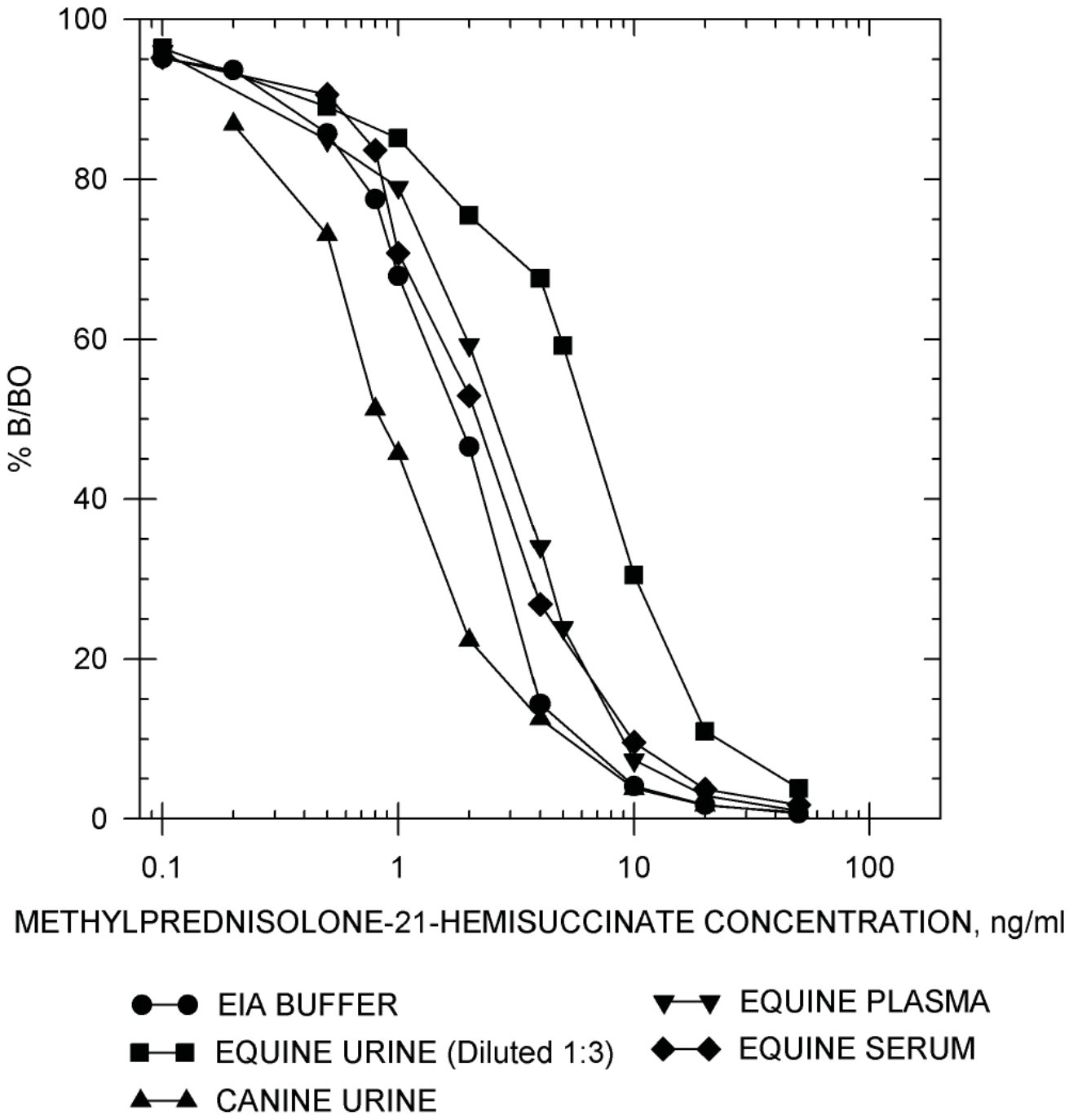
METHYLPREDNISOLONE STANDARD CURVES

Methylprednisolone



METHYLPREDNISOLONE STANDARD CURVES

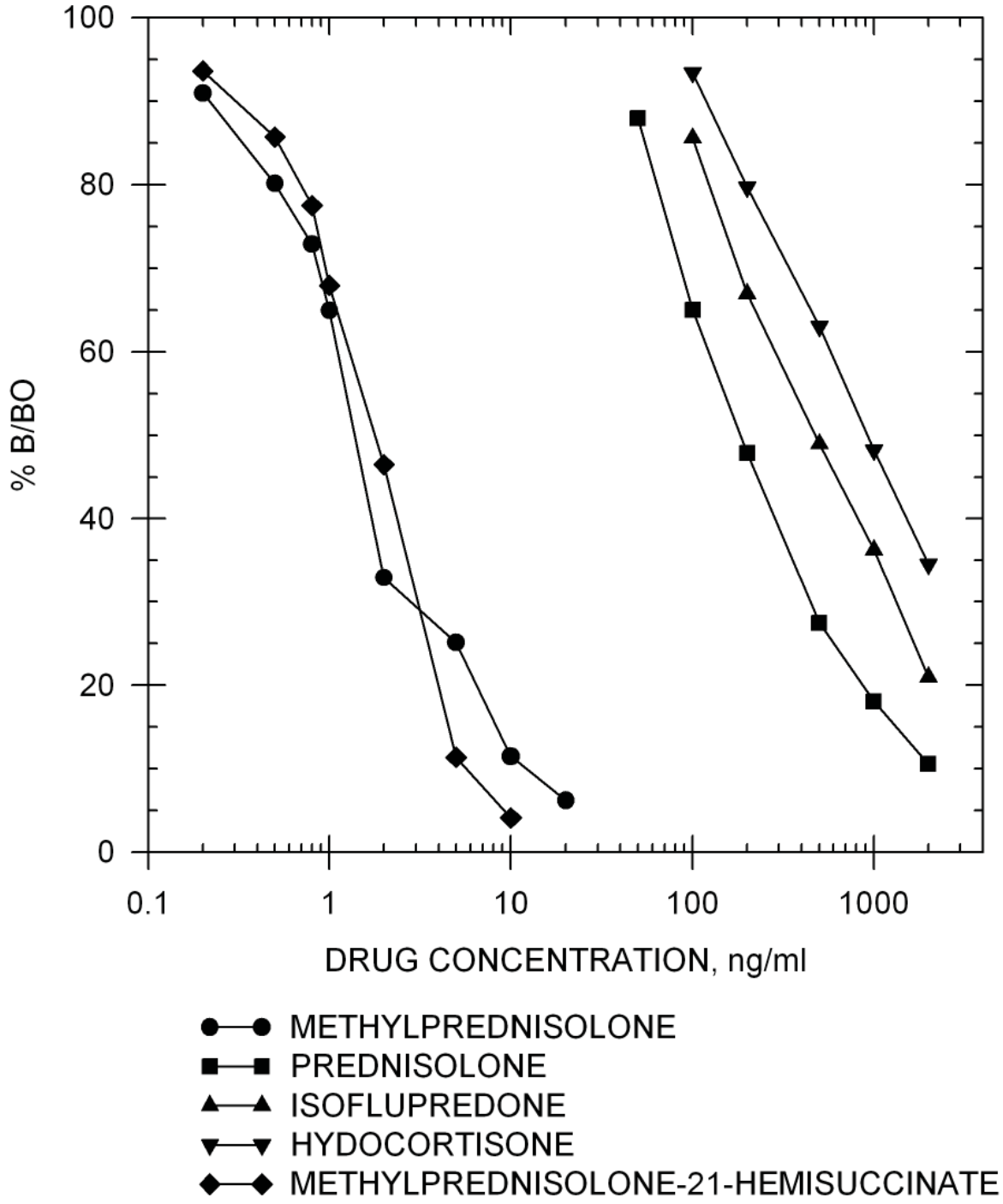
Methylprednisolone-21-hemisuccinate



METHYLPREDNISOLONE STANDARD CURVES

Isoflupredone and Prednisolone

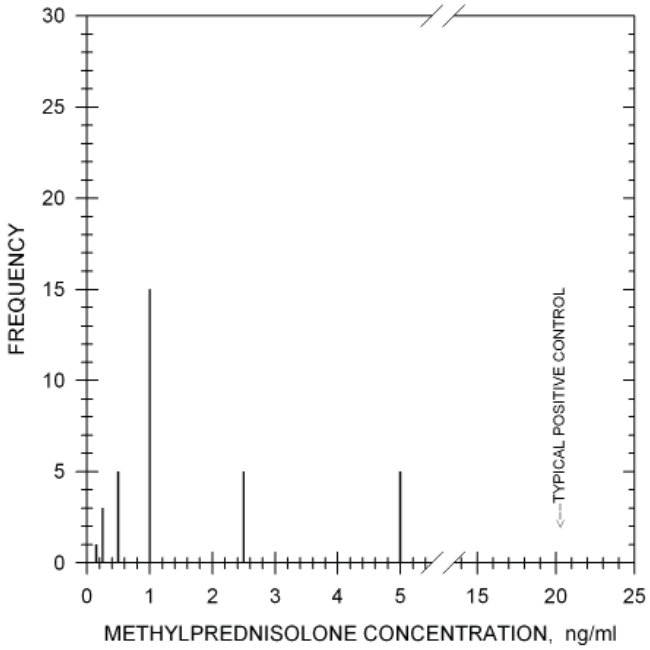
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 34 post-race equine urine samples diluted 1:3 has shown no background levels above 5 ng/ml.

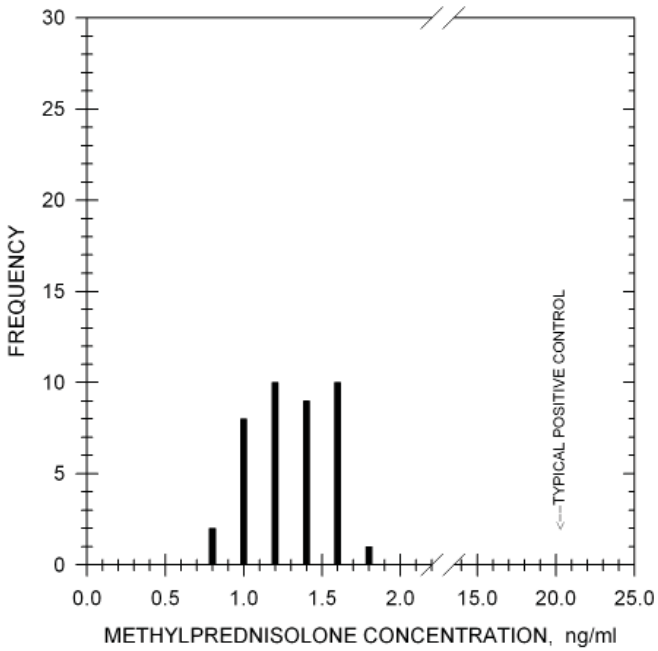
Sample Treatment: A dilution of 1:3 (i.e. 1 part sample to 3 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, undiluted, has shown no background levels above 1.8 ng/ml.

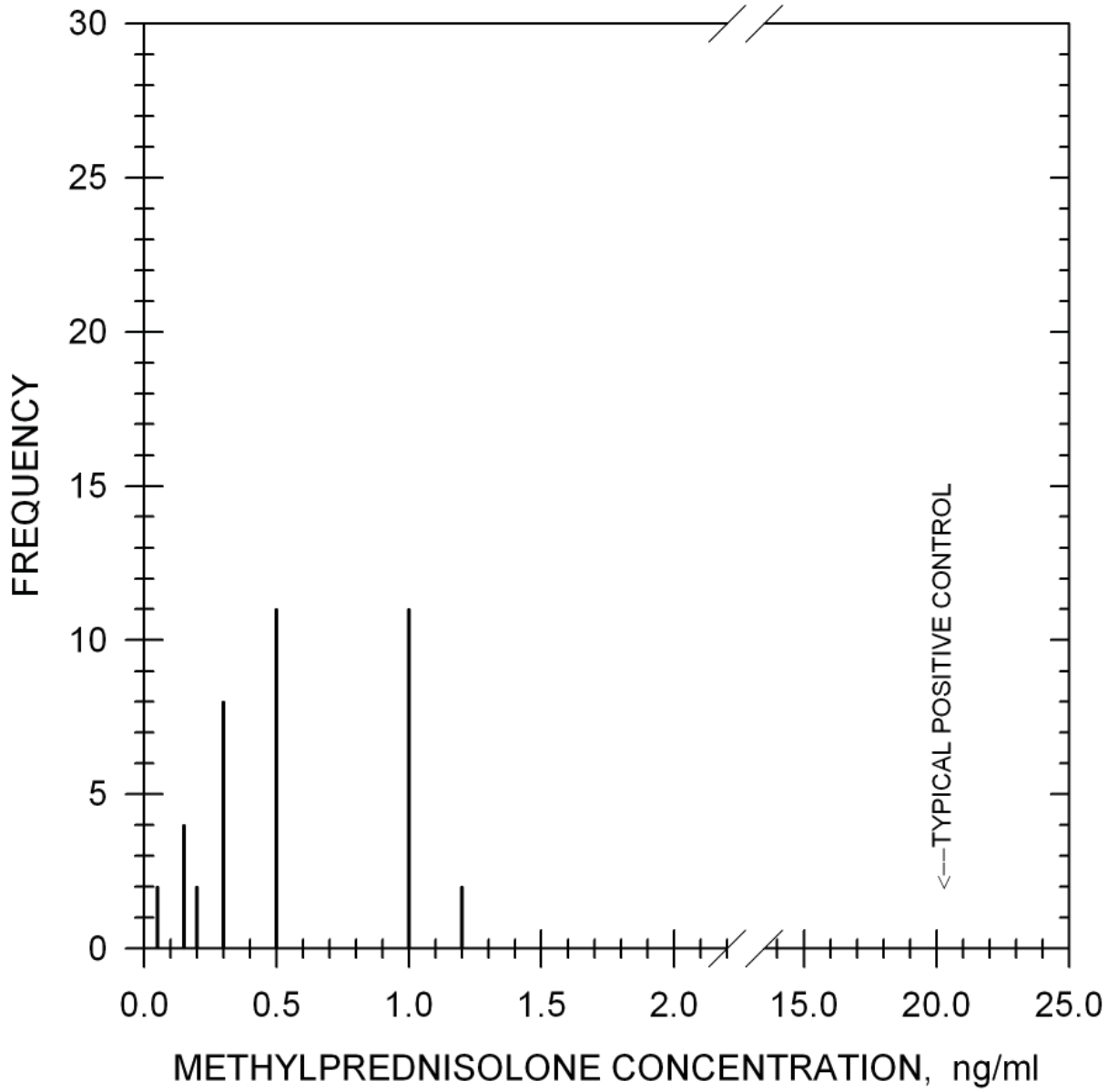
Sample Treatment: No sample dilution is necessary.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, undiluted, has shown no background levels above 1.2 ng/ml.

Sample Treatment: No sample dilution is necessary.

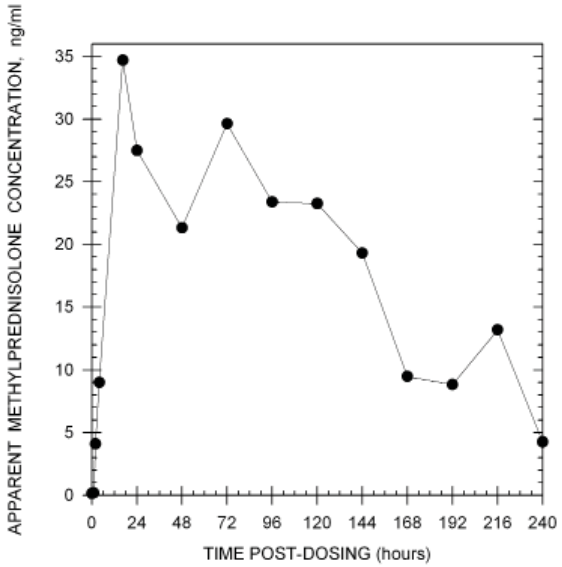


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 200 mg of Depo-medrol by intramuscular injection to one horse, the presence of this drug was detected at 2 hour post-dose and up to 10 days post-dose in equine urine. Time points were diluted 1:3 according to the recommended sample treatment.

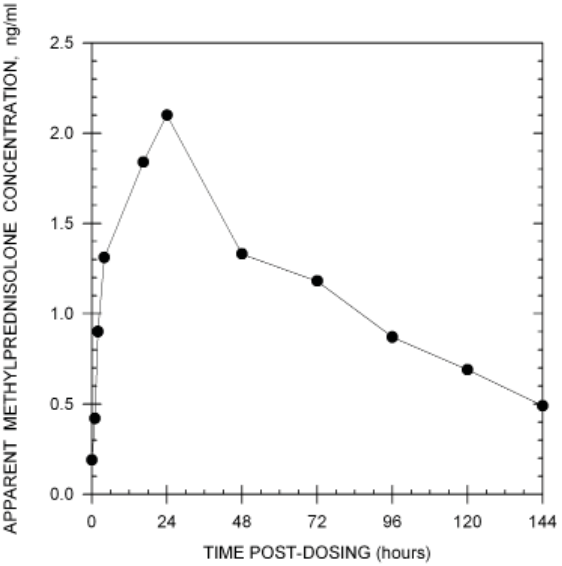
Because post-dose time points 4 to 144 hours exceeded the range of the assay, samples were diluted 1:24 with EIA buffer and backcalculated to the recommended 1:3 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 200 mg of Depo-medrol by intramuscular injection to one horse, the presence of this drug was detected at 16 to 24 hours in equine plasma.

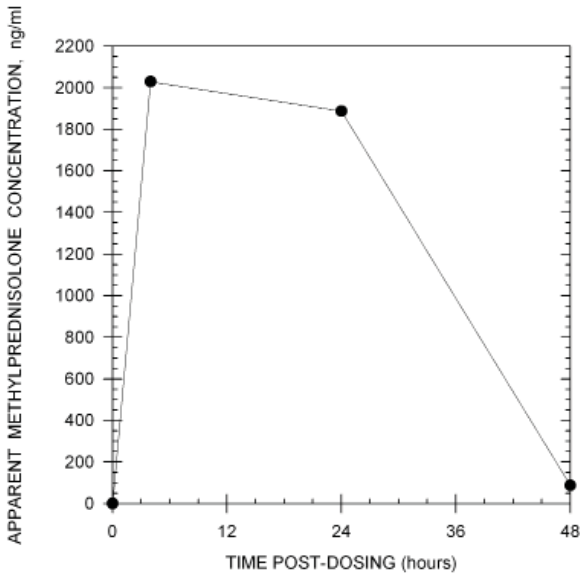


TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 16 mg of PO of Methylprednisolone, the presence of this drug was detected at for at least 48 hours in canine urine.

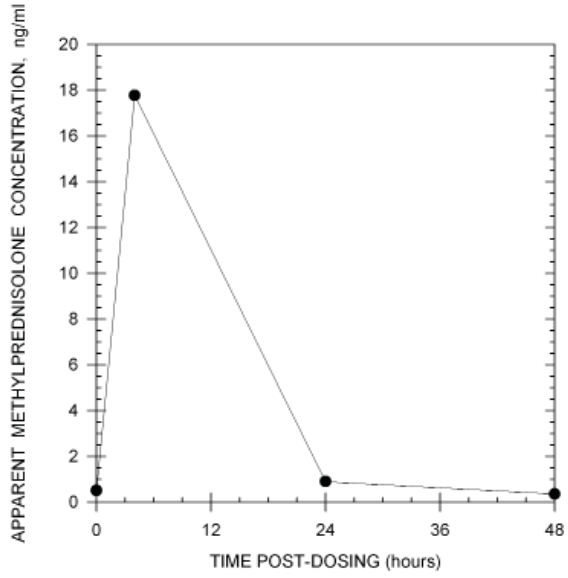
Because post-dose samples exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated.



TYPICAL DURATION OF DETECTION

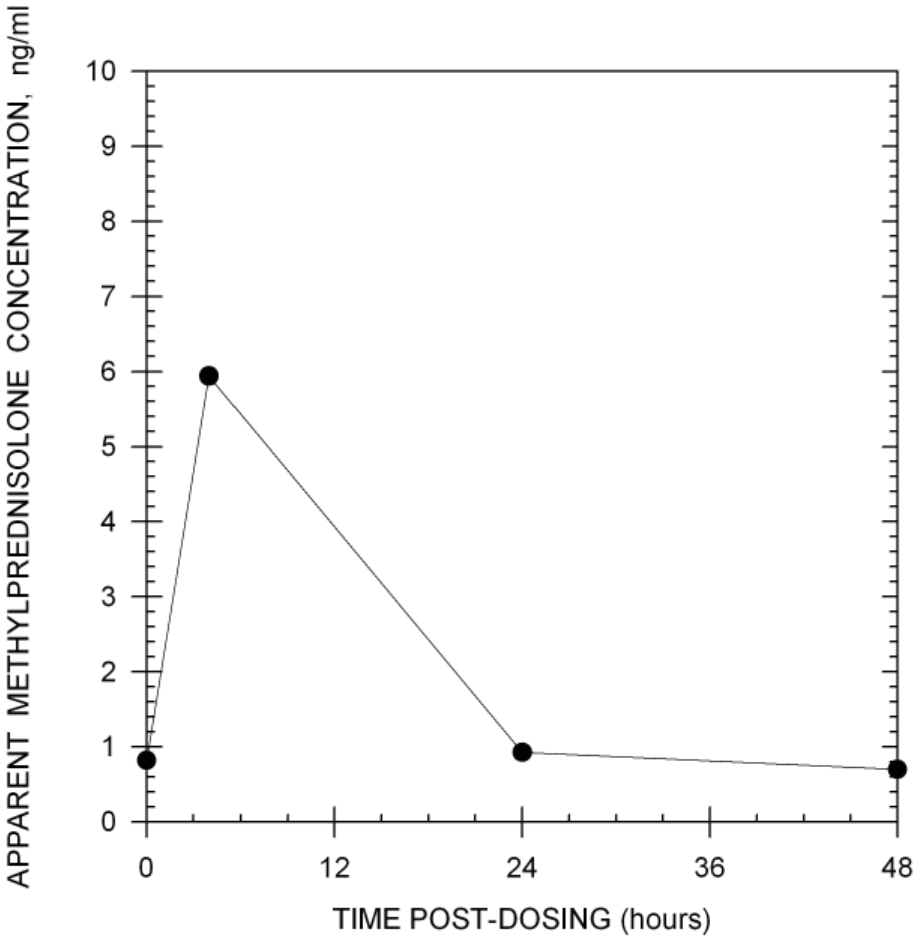
Duration of Detection:

After administration of 0.64 mg PO of Prednisolone, the presence of this drug was detected up to 4 hours in canine urine.



PREDNISONE TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 5 mg PO of Prednisone, the presence of this drug was detected up to 4 hours in canine urine.



HYDROCORTISONE DETECTION

Undiluted samples were NOT detectable at an administation of 20 mg PO of Hydrocortisone. Samples gave concentration levels below the I-50 for Methylprednisolone.

Higher doses and/or different routes of administration may increase detectability.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Methylprednisolone-21-hemisuccinate	115%
6α-Methylprednisolone	100%
Prednisolone	0.95%
Isoflupredone	0.34%
Hydrocortisone	0.14%
Desoximetasone	0.14%
Fluoromethalone	0.13%
Diflucortolone Pivalate	0.11%
Methandrostenolone	0.11%
Corticosterone	0.10%
Betamethasone	0.09%
Fludrocortisone	0.08%
Dexamethasone	0.07%
Deoxycortisone	0.07%
Prednisone	0.07%
Progesterone	0.07%
Flumethasone	0.05%
Beclomethasone	0.04%
Diflorasone Diacetate	0.03%
Fluoxymesterone	0.03%
Meprednisone (16β-Methylprednisone)	0.03%
Bolasterone	0.02%
Clobestasol Propionate	0.02%
Fluocinolone Acetonide	0.02%

Acepromazine	<0.01%
Aldosterone	<0.01%
Amcinonide	<0.01%
E-Amino-n-Caproic Acid	<0.01%
5-Androstene-3β-17β-diol	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%
Boldenone	<0.01%
4-Chlorotestosterone-17-Acetate	<0.01%
Clenbuterol	<0.01%
Clobestasone Butyrate	<0.01%
Cortisone	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Dipyrone	<0.01%
Estradiol	<0.01%
Estriol	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%
Fluinisolide	<0.01%
Flunixin	<0.01%
Fluocinonide	<0.01%
Furosemide	<0.01%
Glycopyrrolate	<0.01%
Hordenine	<0.01%
Ibuprofen	<0.01%
Isoxsuprine	<0.01%
Lidocaine	<0.01%
Meclofenamic Acid	<0.01%
Mesterolone	<0.01%
Metaproterenol	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
17α-Methyltestosterone	<0.01%
Nandrolone	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Orphenadrine	<0.01%
Oxymetholone	<0.01%
Oxyphenbutazone	<0.01%
Paramethasone Acetate	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene Glycol	<0.01%
Procaine	<0.01%
Promazine	<0.01%
Pyrantel	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Stanozolol	<0.01%
Testosterone	<0.01%
Thiamine	<0.01%
Triamcinolone	<0.01%
Triamcinolone Acetonide	<0.01%
Zearalenone	<0.01%

ENHANCED KIT
MODAFINIL

Product #181210 &
181215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Modafinil	1.4 ng/ml
Adrafinil	0.9 ng/ml
R-Modafinil	0.4 ng/ml
Modafinil Acid	65 ng/ml

I-50 in Equine Urine (Diluted 1:4)

Modafinil	7.6 ng/ml
Adrafinil	12 ng/ml
R-Modafinil	7.4 ng/ml
Modafinil Acid	359 ng/ml

I-50 in Canine Urine (Diluted 1:4)

Modafinil	5.7 ng/ml
Adrafinil	19 ng/ml
R-Modafinil	2.4 ng/ml
Modafinil Acid	395 ng/ml

I-50 in Equine Plasma (Diluted 1:4)

Modafinil	4.3 ng/ml
Adrafinil	1.3 ng/ml
R-Modafinil	8.3 ng/ml
Modafinil Acid	390 ng/ml

I-50 in Equine Serum (Diluted 1:4)

Modafinil	6.2 ng/ml
Adrafinil	6.3 ng/ml
R-Modafinil	8.1 ng/ml
Modafinil Acid	399 ng/ml

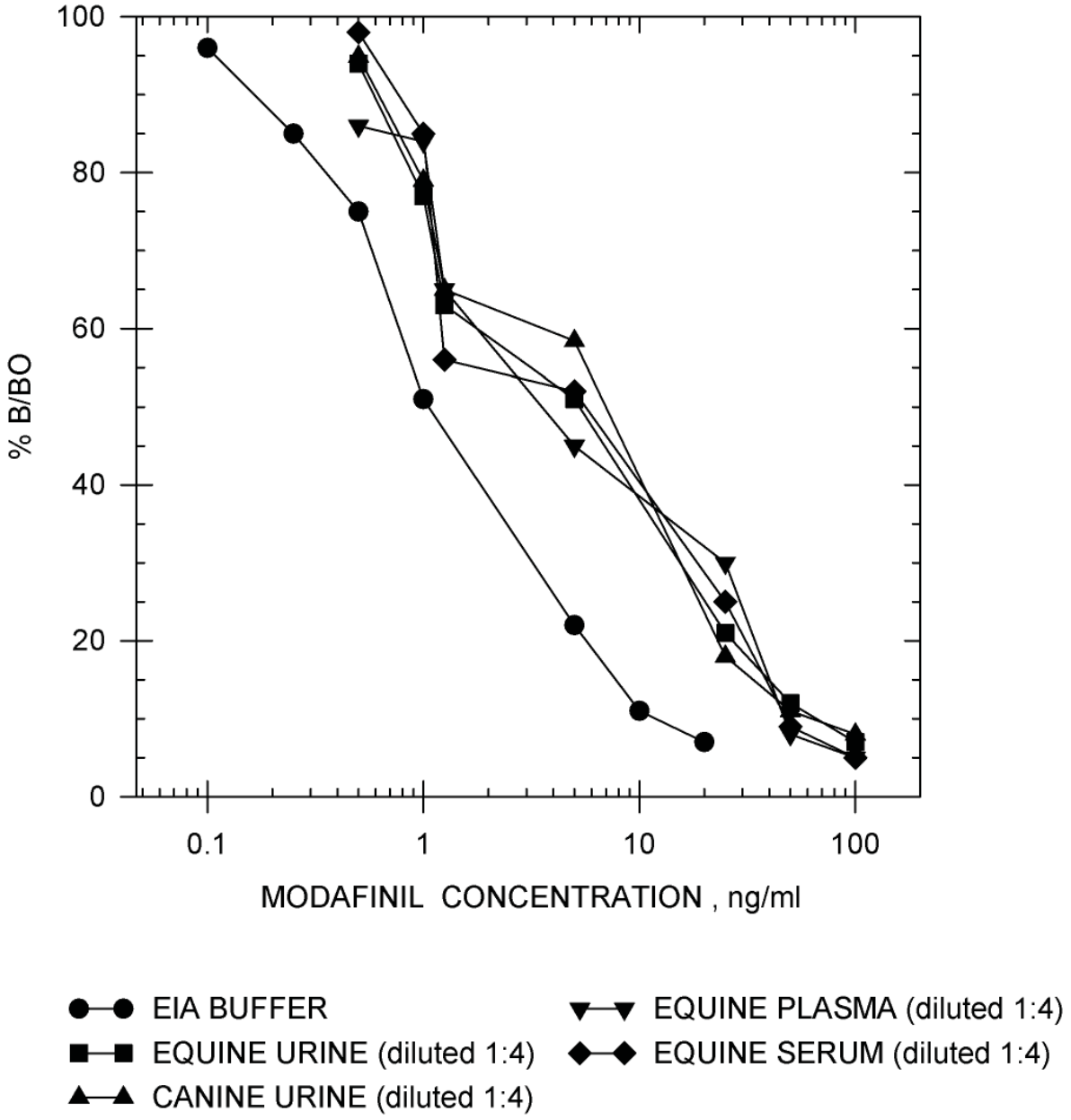
Note: Measuring wavelength was 650 nm**.**

Precision:

Intra-assay	3.25 %
Inter-assay	3.38 %

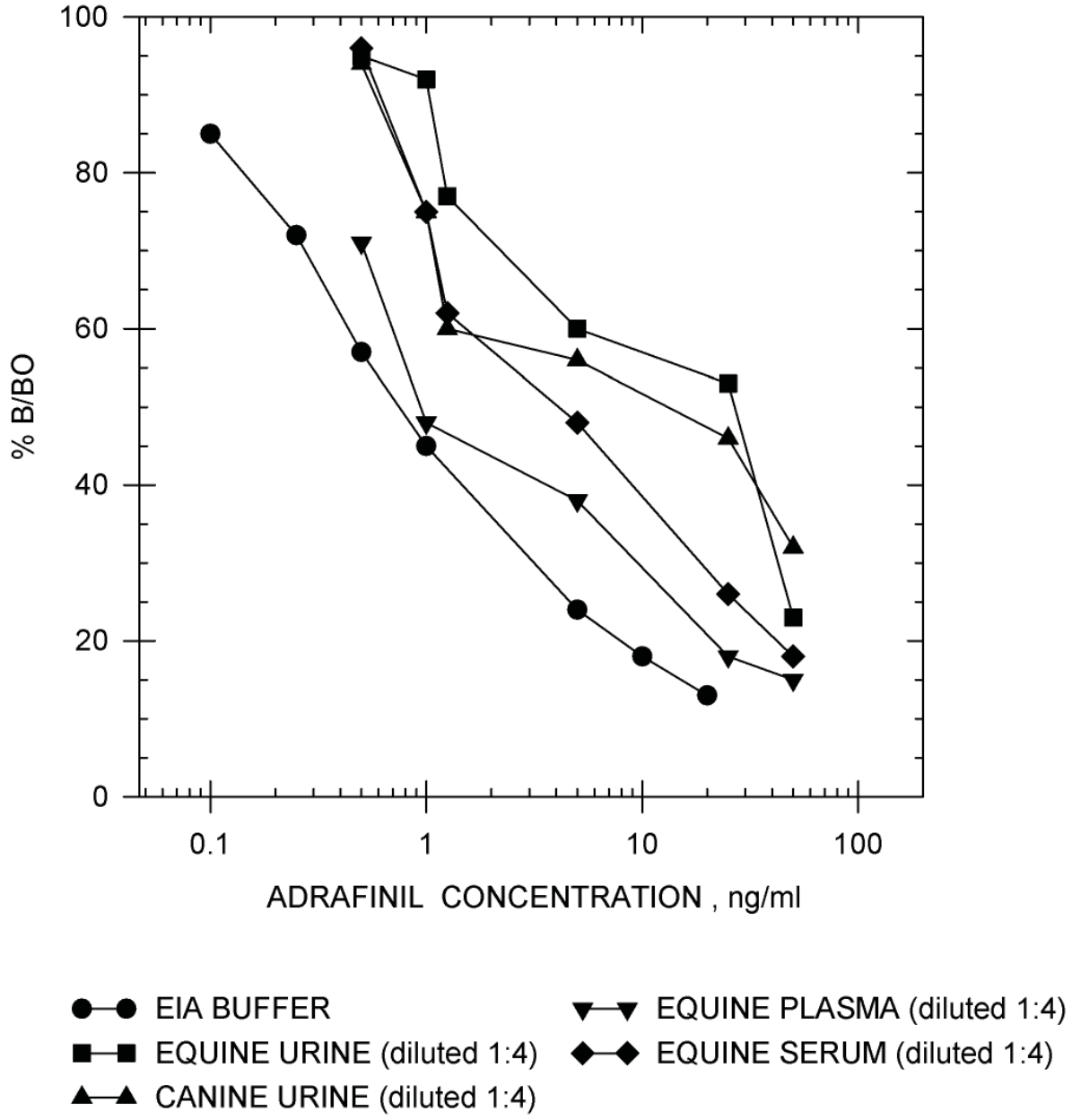
MODAFINIL STANDARD CURVE

Modafinil



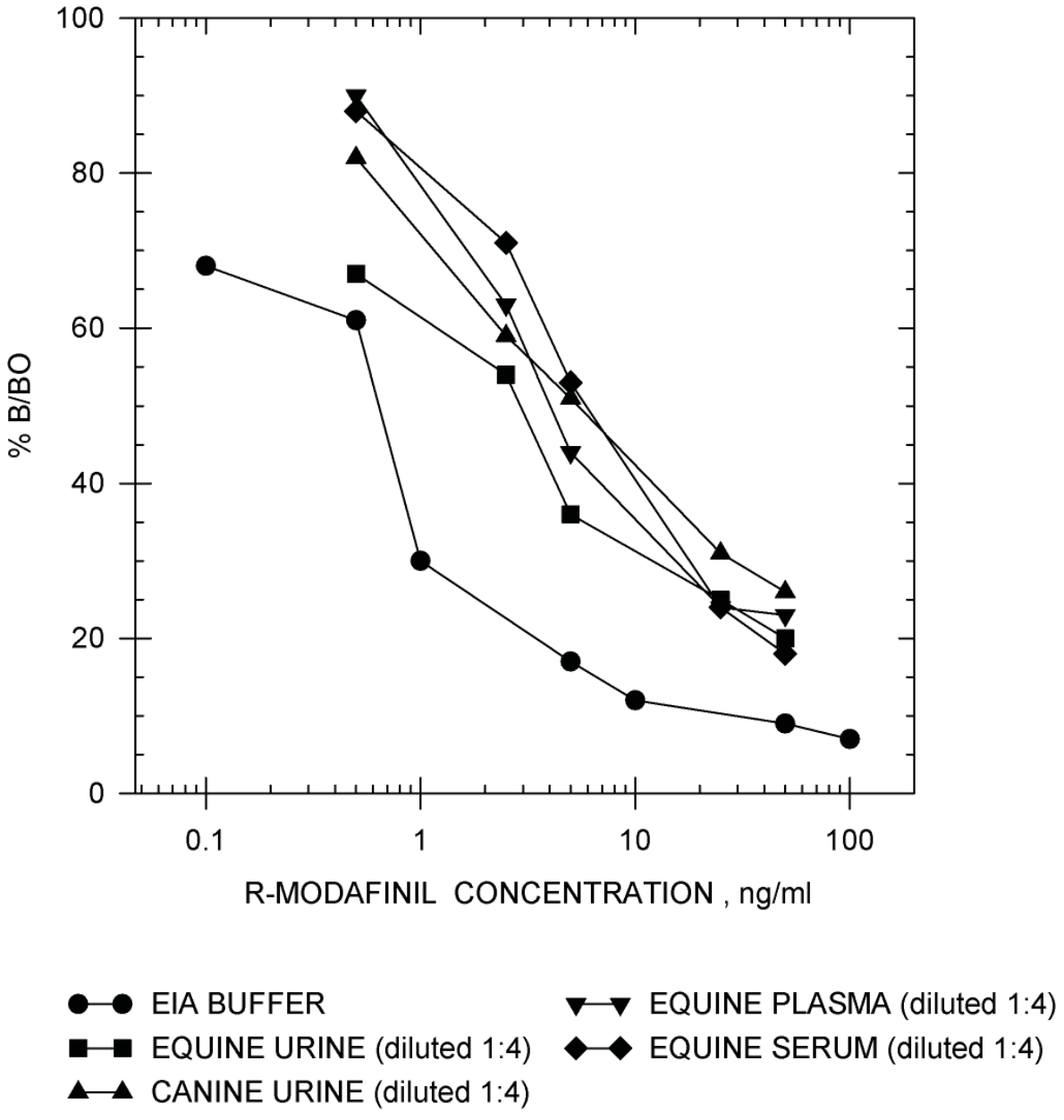
MODAFINIL STANDARD CURVE

Adrafinil



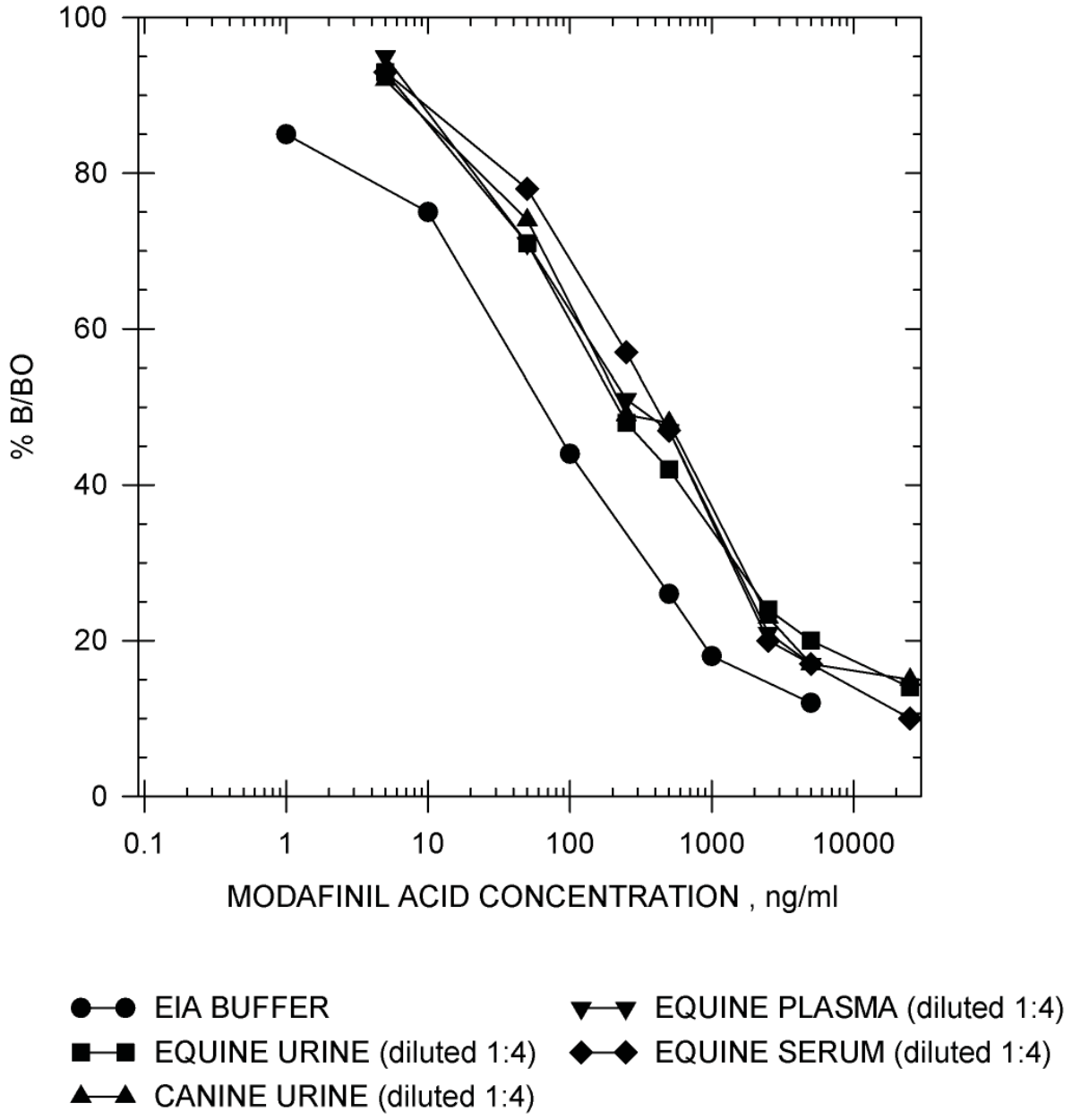
MODAFINIL STANDARD CURVE

R-Modafinil



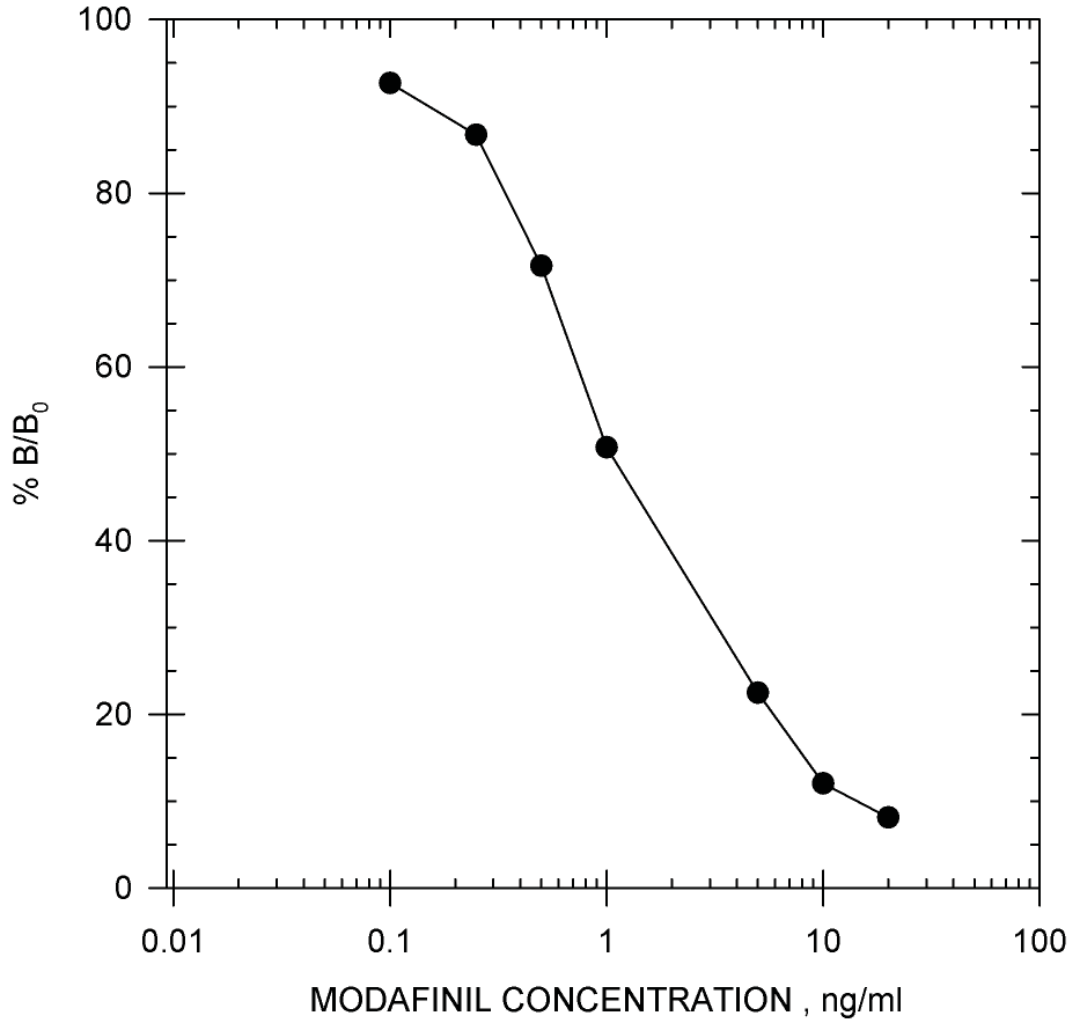
MODAFINIL STANDARD CURVE

Modafinil Acid



MODAFINIL STANDARD CURVE

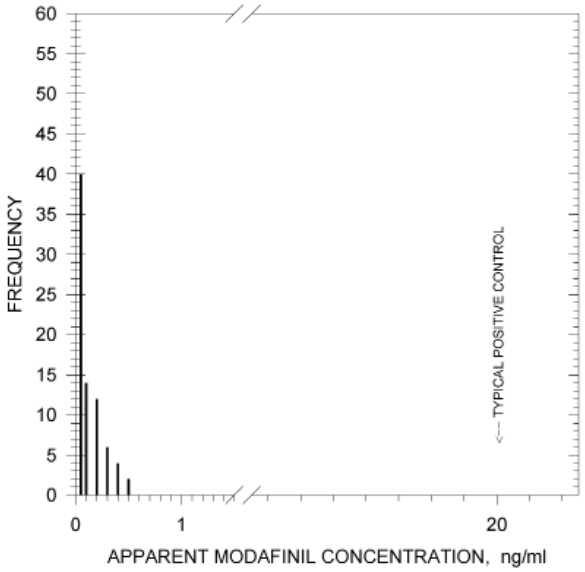
Modafinil Standard Curve in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples has shown no background levels above 0.58 ng/ml.

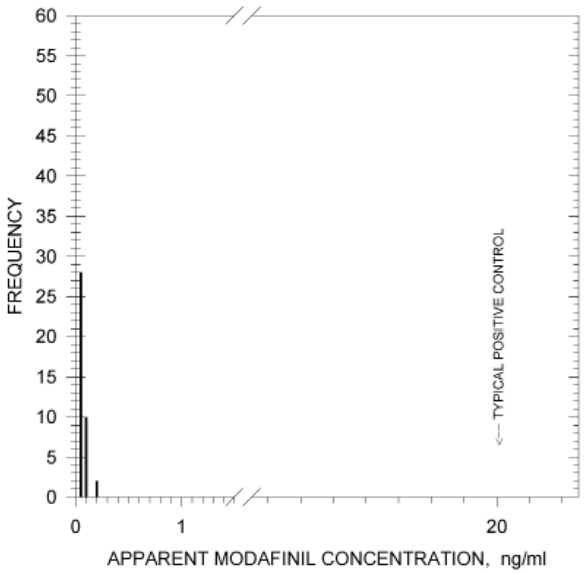
Sample Treatment: A dilution of 1:4 (i.e., 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.25 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e., 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Modafinil	100%
Adrafinil	153%
R-Modafinil	354%
Modafinil Acid	2.5%

Acepromazine	< 0.01%	Gentisic Acid	< 0.01%	Penicillin G-Procaine	< 0.01%
Acetaminophen	< 0.01%	Glipizide	< 0.01%	Pentoxifylline	< 0.01%
Acetylsalicylic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Phenylbutazone	< 0.01%
E-Amino-n-Caproic Acid	< 0.01%	Glutethimide	< 0.01%	Polyethylene Glycol	< 0.01%
Amitriptyline	< 0.01%	Glycopyrrolate	< 0.01%	Prednisolone	< 0.01%
Ascorbic Acid (Vitamin C)	< 0.01%	Heparin	< 0.01%	Primidone	< 0.01%
Benzoic Acid	< 0.01%	Hippuric Acid	< 0.01%	Procainamide	< 0.01%
Caffeine	< 0.01%	Hordenine	< 0.01%	Procaine	< 0.01%
Chlordiazepoxide	< 0.01%	Hydrocortisone	< 0.01%	Promazine	< 0.01%
Chlorpromazine	< 0.01%	Ibuprofen	< 0.01%	Pseudoephedrine	< 0.01%
Clenbuterol	< 0.01%	Imipramine	< 0.01%	Pyrantel	< 0.01%
Cotinine	< 0.01%	Isoxsuprine	< 0.01%	Pyrilamine	< 0.01%
Dexamethasone	< 0.01%	Lidocaine	< 0.01%	Pyrimethamine	< 0.01%
Diclofenac	< 0.01%	Meperidine	< 0.01%	Quinidine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaproterenol	< 0.01%	Quinine	< 0.01%
Dipyrone	< 0.01%	Methadone	< 0.01%	Salbutamol	< 0.01%
Doxepin	< 0.01%	Methaqualone	< 0.01%	Salicylamide	< 0.01%
Ephedrine	< 0.01%	Methocarbamol	< 0.01%	Salicylic Acid	< 0.01%
Erythromycin	< 0.01%	Methylprednisolone	< 0.01%	Theophylline	< 0.01%
Ethyl-p-Amino-Benzoate (Benzocaine)	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
		Niacinamide	< 0.01%	Trimethoprim	< 0.01%
Fenoprofen	< 0.01%	Nicotine	< 0.01%	Trimipramine	< 0.01%
Flunixin	< 0.01%	Nortriptyline	< 0.01%	Uric Acid	< 0.01%
Folic Acid	< 0.01%	Orphenadrine	< 0.01%		
Folinic Acid	< 0.01%	Oxyphenbutazine	< 0.01%		
Furosemide	< 0.01%	PCP	< 0.01%		
Gemfibrozil	< 0.01%	Penicillin G-Potassium	< 0.01%		

NALBUPHINE

Product #102810 & 102815 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

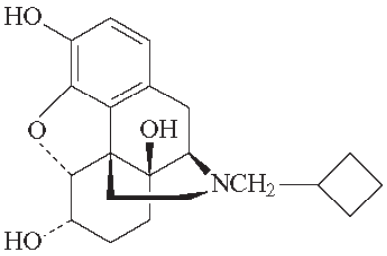
Nalbuphine	0.15 ng/ml
Butorphanol	0.37 ng/ml
Naltrexone	0.87 ng/ml
Naloxone	33 ng/ml

Precision:	Intra-assay	5.40 %
	Inter-assay	6.49 %

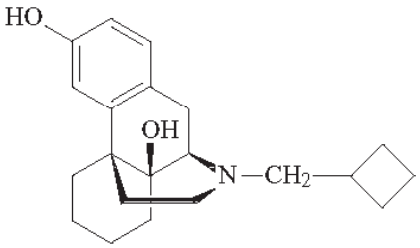
Note: Measuring wavelength was 650 nm**.**

NALBUPHINE STANDARD CURVES

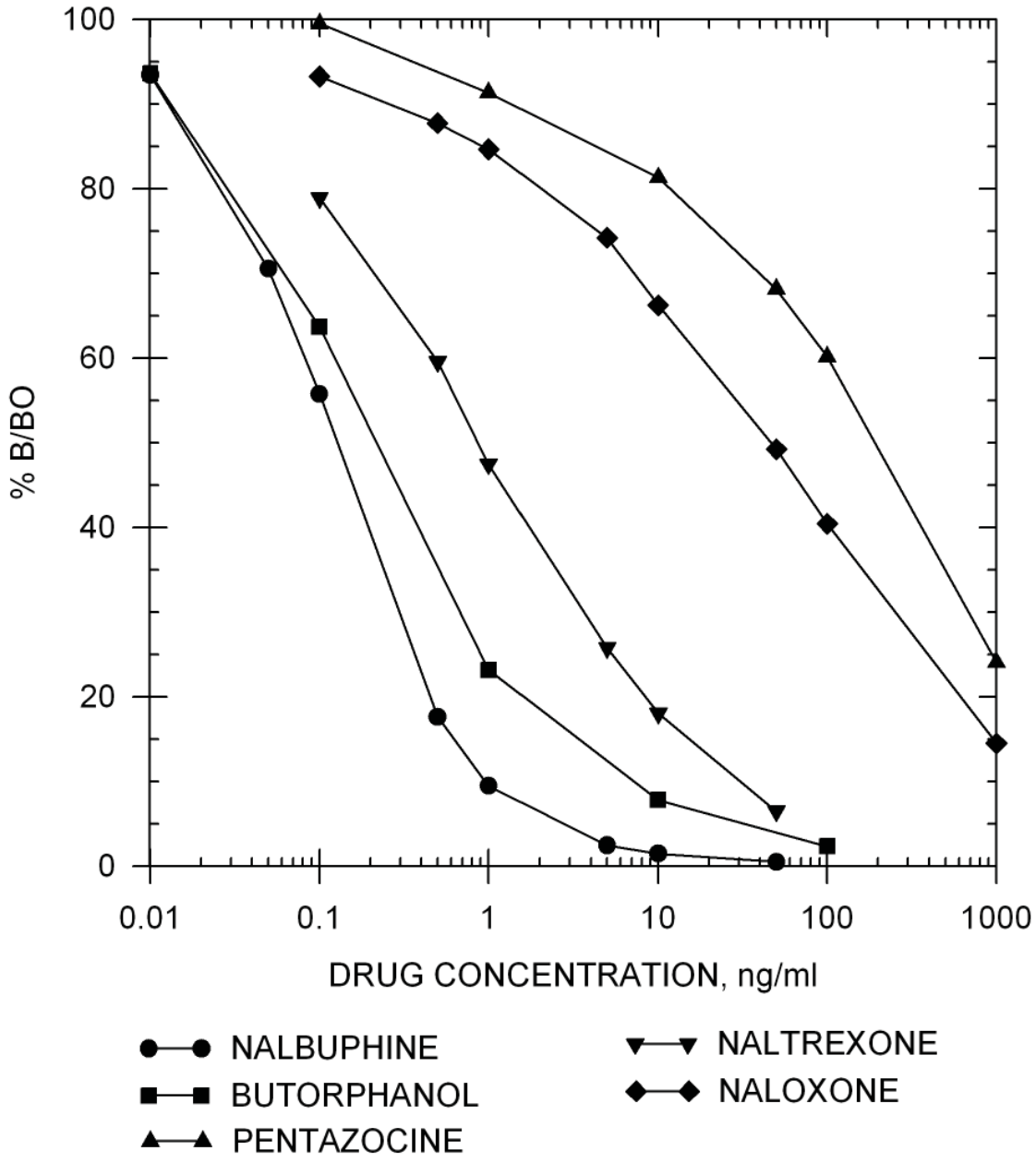
Nalbuphine



Butorphanol



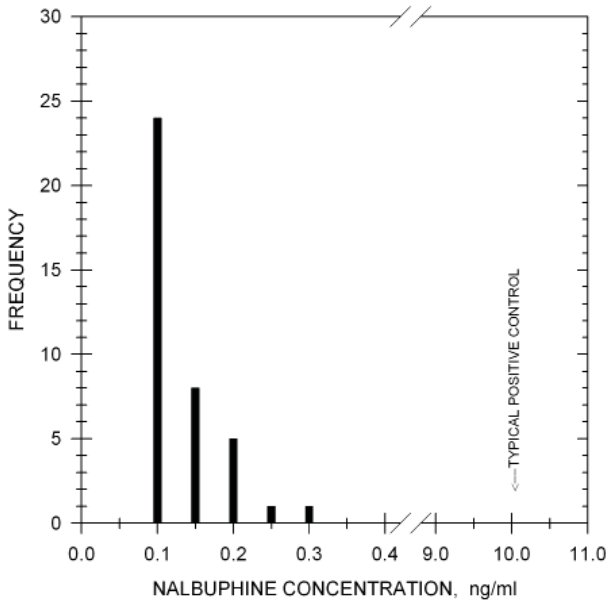
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

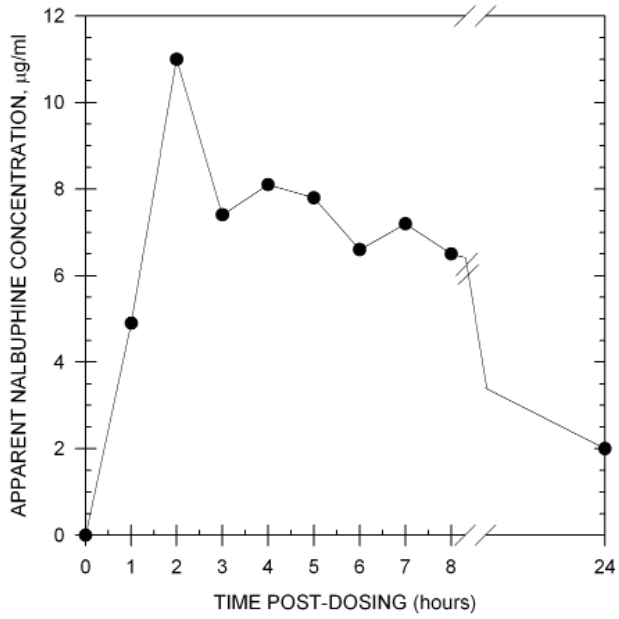
Backgrounds: Analysis of 39 post-race equine urine samples has shown no background levels above 0.3 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 50 mg of nalbuphine by intramuscular injection to one horse, the presence of this drug was detected for at least 24 hours in equine urine. Because all post-dose samples exceeded the range of the assay, samples were diluted 1:10,000 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Nalbuphine	100%
Butorphanol	40%
Naltrexone	12%
Naloxone	0.4%
Pentazocine	0.1%
Nalorphine	0.07%
Buprenorphine	0.02%

Acepromazine	< 0.01%	Folinic Acid	< 0.01%	Oxphenbutazone	< 0.01%
Acetaminophen	< 0.01%	Furosemide	< 0.01%	Oxymorphone	< 0.01%
Acetylsalicylic Acid	< 0.01%	Gemfibrozil	< 0.01%	PCP	< 0.01%
Alfentanil	< 0.01%	Gentisic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	L-Glutamic Acid	< 0.01%	Pentoxifylline	< 0.01%
Anileridine		Glutethimide	< 0.01%	Phenothiazine	< 0.01%
< 0.01% Ascorbic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenylbutazone	< 0.01%
Benzoic Acid	< 0.01%	Heparin	< 0.01%	Polyethylene Glycol	< 0.01%
Chlordiazepoxide	< 0.01%	Hippuric Acid	< 0.01%	Prednisolone	< 0.01%
Chlorpromazine	< 0.01%	Hordenine	< 0.01%	Primadone	< 0.01%
Clenbuterol	< 0.01%	Hydrocodone	< 0.01%	Procainamide	< 0.01%
Codeine	< 0.01%	Hydrocortisone	< 0.01%	Procaine	< 0.01%
Cotinine	< 0.01%	Ibuprofen	< 0.01%	Promazine	< 0.01%
Dexamethasone	< 0.01%	Imipramine	< 0.01%	Propoxyphene	< 0.01%
Dextromethorphan	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Dextromoramide	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
Dezocine	< 0.01%	Lofentanil	< 0.01%	Pyrilamine	< 0.01%
Diclofenac	< 0.01%	Meperidine	< 0.01%	Pyrimethamine	< 0.01%
Dihydrocodeine	< 0.01%	Metaproterenol	< 0.01%	Quinidine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methadone	< 0.01%	Quinine	< 0.01%
Dipyrone	< 0.01%	Methaqualone	< 0.01%	Salbutamol	< 0.01%
Doxepin	< 0.01%	Methocarbamol	< 0.01%	Salicylamide	< 0.01%
Ephedrine	< 0.01%	Methylene Blue	< 0.01%	Salicylic Acid	< 0.01%
Erythromycin	< 0.01%	Methylprednisolone	< 0.01%	Sufentanil	< 0.01%
Ethylmorphine	< 0.01%	Morphine	< 0.01%	Theophylline	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
Etorphine	< 0.01%	Niacinamide	< 0.01%	Tramadol	< 0.01%
Fenoprofen	< 0.01%	Nicotine	< 0.01%	Trimethoprim	< 0.01%
Fentanyl	< 0.01%	Normorphine	< 0.01%	Trimipramine	< 0.01%
Flunixin	< 0.01%	Nortriptyline	< 0.01%	Uric Acid	< 0.01%
Folic Acid	< 0.01%	Orphenadrine	< 0.01%		

NANDROLONE

Product #104610 & 104615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

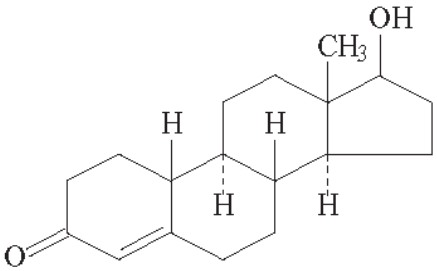
Nandrolone	0.07 ng/ml
Testosterone	0.6 ng/ml
Bolandiol	0.6 ng/ml
Boldenone	2.6 ng/ml
Naltrexone	0.9 ng/ml

Precision:	Intra-assay	5.48 %
	Inter-assay	9.09 %

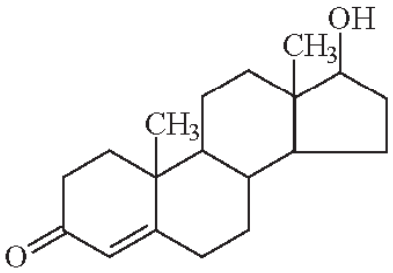
Note: Measuring wavelength was 650 nm**.**

NANDROLONE STANDARD CURVES

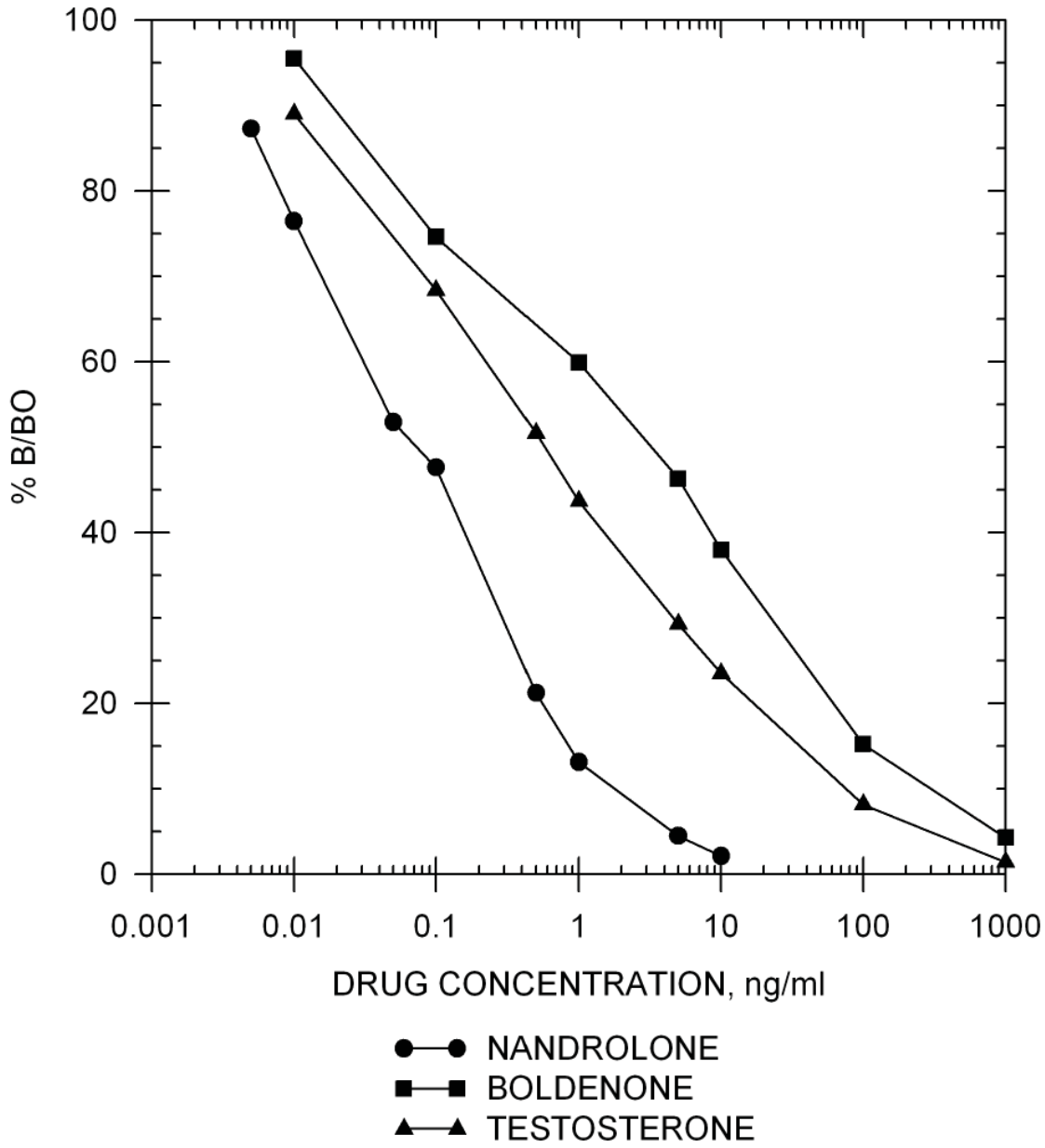
Nandrolone



Testosterone

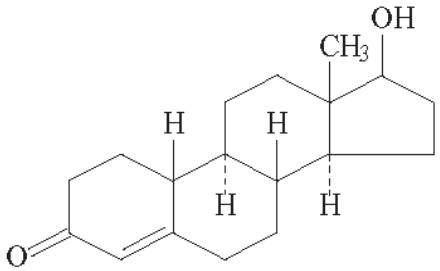


Drug Standard Curve Comparison in EIA Buffer

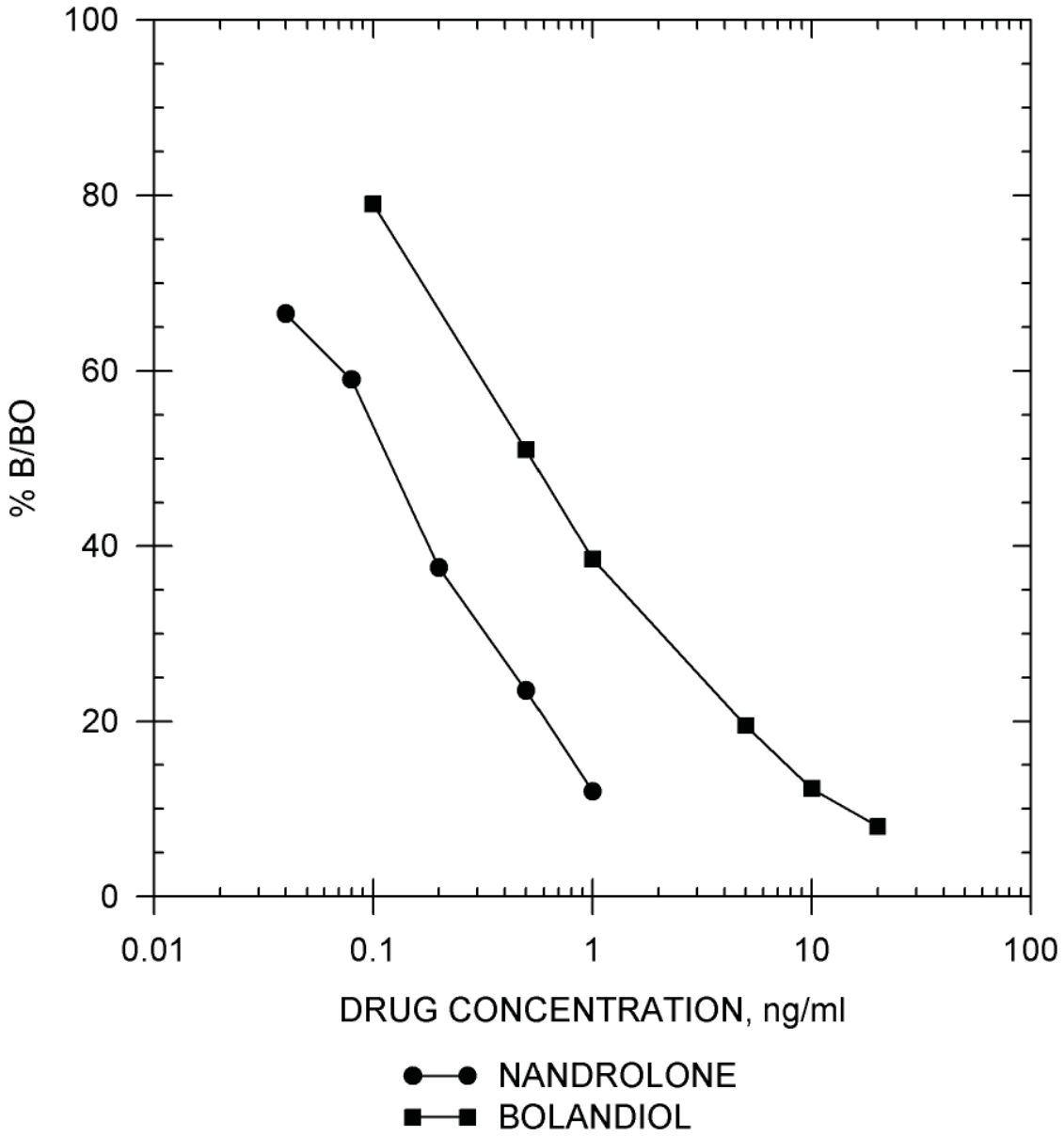


NANDROLONE STANDARD CURVES

Nandrolone



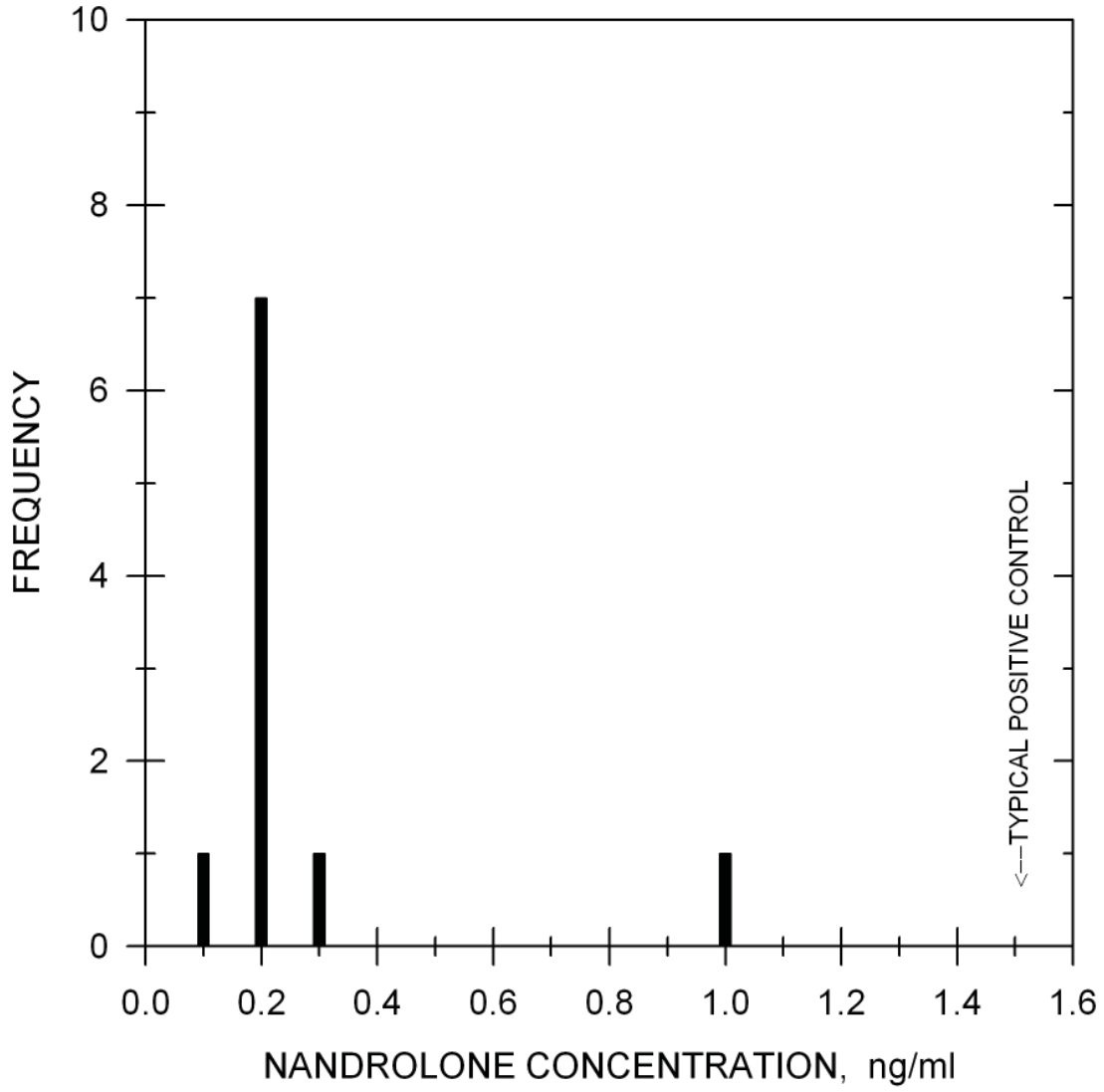
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 10 post-race equine urine samples, diluted 1:9, has shown no background levels above 1 ng/ml.

Sample Treatment: It appears likely that sample hydrolysis and sample extraction will be needed for most effective use of this ELISA as a screening test for nandrolone. If testing samples without an extraction, a 1:9 dilution (i.e. 1 part sample to 9 parts EIA buffer) with EIA buffer is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection: No information on the duration of detection of nandrolone with this assay is available.

CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Nandrolone	100%	Bolasterone	0.1%
Bolandiol	19%	Trenbolone	0.06%
Naltrexone	11.5%	Stanozolol	0.04%
Testosterone	11.3%	3'Hydroxystanozolol	0.03%
Boldenone	2.7%	Methandriol	0.02%
Naloxone	0.4%	Oxymetholone	0.02%
Estradiol	0.3%	Oxandrolone	0.01%
Androstenedione	0.2%	Progesterone	0.01%
Methandrostenelone	0.2%		

Acepromazine	< 0.01%	Furosemide	< 0.01%	Orphenadrine	< 0.01%
Acetaminophen	< 0.01%	Gemfibrozil	< 0.01%	Oxphenbutazone	< 0.01%
Acetylsalicylic Acid	< 0.01%	Gentisic Acid	< 0.01%	PCP	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Potassium	< 0.01%
Amitriptyline	< 0.01%	L-Glutamic Acid	< 0.01%	Penicillin G-Procaine	< 0.01%
Ascorbic Acid	< 0.01%	Glutethimide	< 0.01%	Pentoxifylline	< 0.01%
Benzoic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenothiazine	< 0.01%
Chlordiazepoxide	< 0.01%	Heparin	< 0.01%	Phenylbutazone	< 0.01%
Chlorpromazine	< 0.01%	Hippuric Acid	< 0.01%	Polyethylene Glycol	< 0.01%
Clenbuterol	< 0.01%	Hordenine	< 0.01%	Prednisolone	< 0.01%
Codeine	< 0.01%	Hydrocortisone	< 0.01%	Primadone	< 0.01%
Cotinine	< 0.01%	16β-Hydroxystanozolol	< 0.01%	Procainamide	< 0.01%
Dexamethasone	< 0.01%	Ibuprofen	< 0.01%	Procaine	< 0.01%
Dextromethorphan	< 0.01%	Imipramine	< 0.01%	Promazine	< 0.01%
Diclofenac	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
Dipyrone	< 0.01%	Meperidine	< 0.01%	Pyrilamine	< 0.01%
Doxepin	< 0.01%	Metaproterenol	< 0.01%	Pyrimethamine	< 0.01%
Ephedrine	< 0.01%	Methadone	< 0.01%	Quinidine	< 0.01%
Equilenin	< 0.01%	Methaqualone	< 0.01%	Quinine	< 0.01%
Erythromycin	< 0.01%	Methocarbamol	< 0.01%	Salbutamol	< 0.01%
5α-Estran-3β,17α-diol	< 0.01%	Methylene Blue	< 0.01%	Salicylamide	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Methylprednisolone	< 0.01%	Salicylic Acid	< 0.01%
Fenoprofen	< 0.01%	Nalorphine	< 0.01%	Theophylline	< 0.01%
Flunixin	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
Fluoxymesterlone	< 0.01%	Niacinamide	< 0.01%	Trimethoprim	< 0.01%
Folic Acid	< 0.01%	Nicotine	< 0.01%	Trimipramine	< 0.01%
Folinic Acid	< 0.01%	Nortriptyline	< 0.01%	Uric Acid	< 0.01%

ENHANCED KIT

NIKETHAMIDE

Product #109910 & 109915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Nikethamide	12 ng/ml
Nikethamide 1-oxide	83 ng/ml

I-50 in Equine Urine (Diluted 1:29)		**I-50 in Canine Urine (Diluted 1:19)**	
Nikethamide	516 ng/ml	Nikethamide	374 ng/ml
Nikethamide 1-oxide	1974 ng/ml	Nikethamide 1-oxide	2865 ng/ml
I-50 in Equine Plasma (Diluted 1:1)		**I-50 in Equine Serum (Diluted 1:1)**	
Nikethamide	83 ng/ml	Nikethamide	192 ng/ml
Nikethamide 1-oxide	271 ng/ml	Nikethamide 1-oxide	660 ng/ml

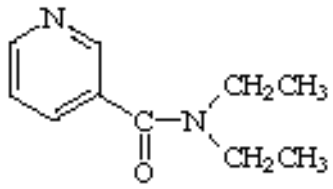
Precision:

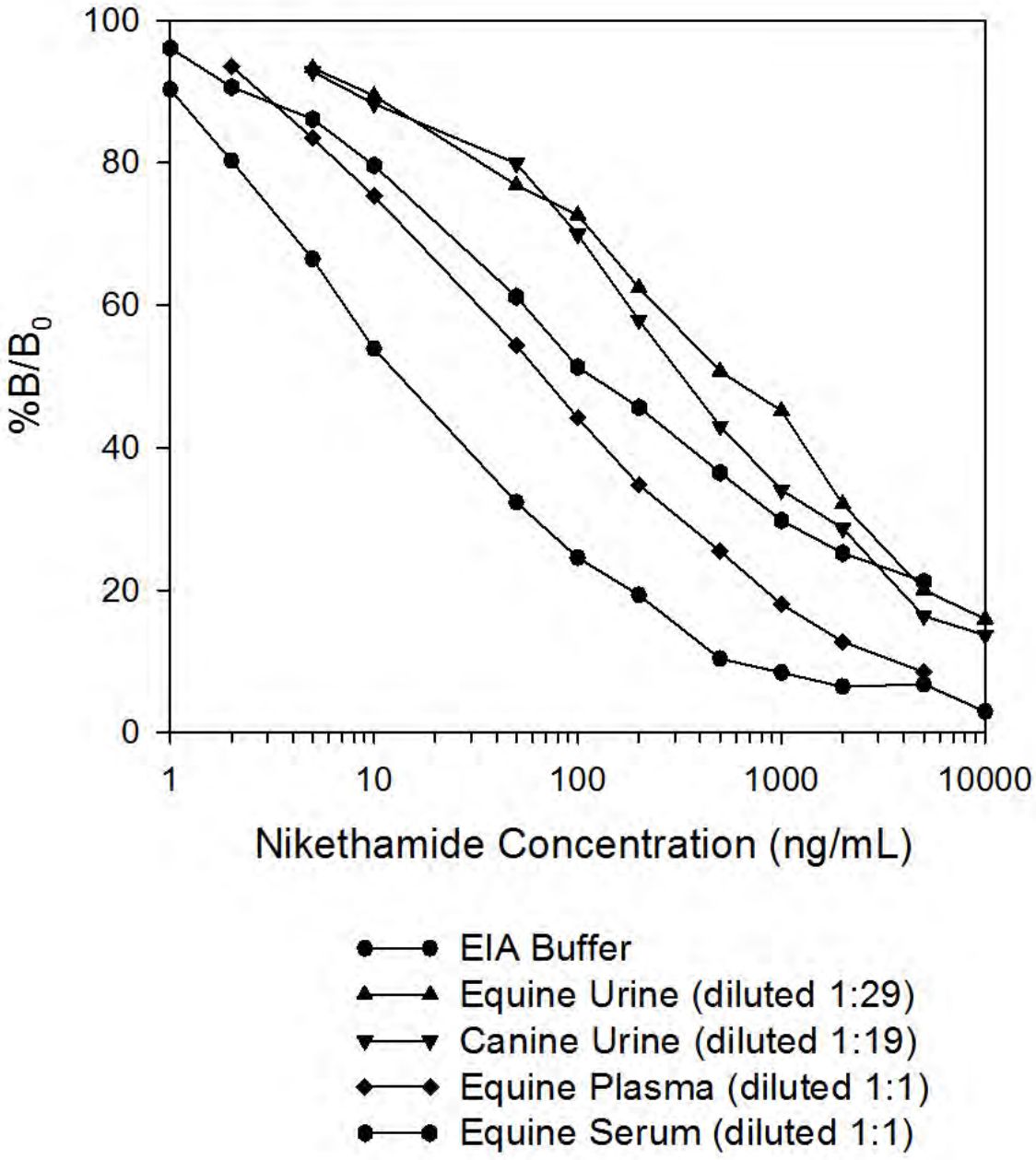
Intra-Assay	5.05%
Inter-Assay	5.30%

Note: Measuring wavelength was 650 nm.

NIKETHAMIDE STANDARD CURVES

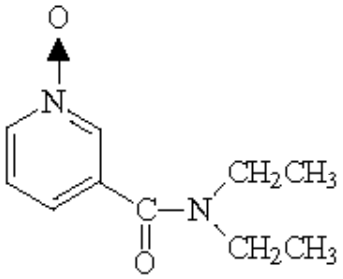
Nikethamide

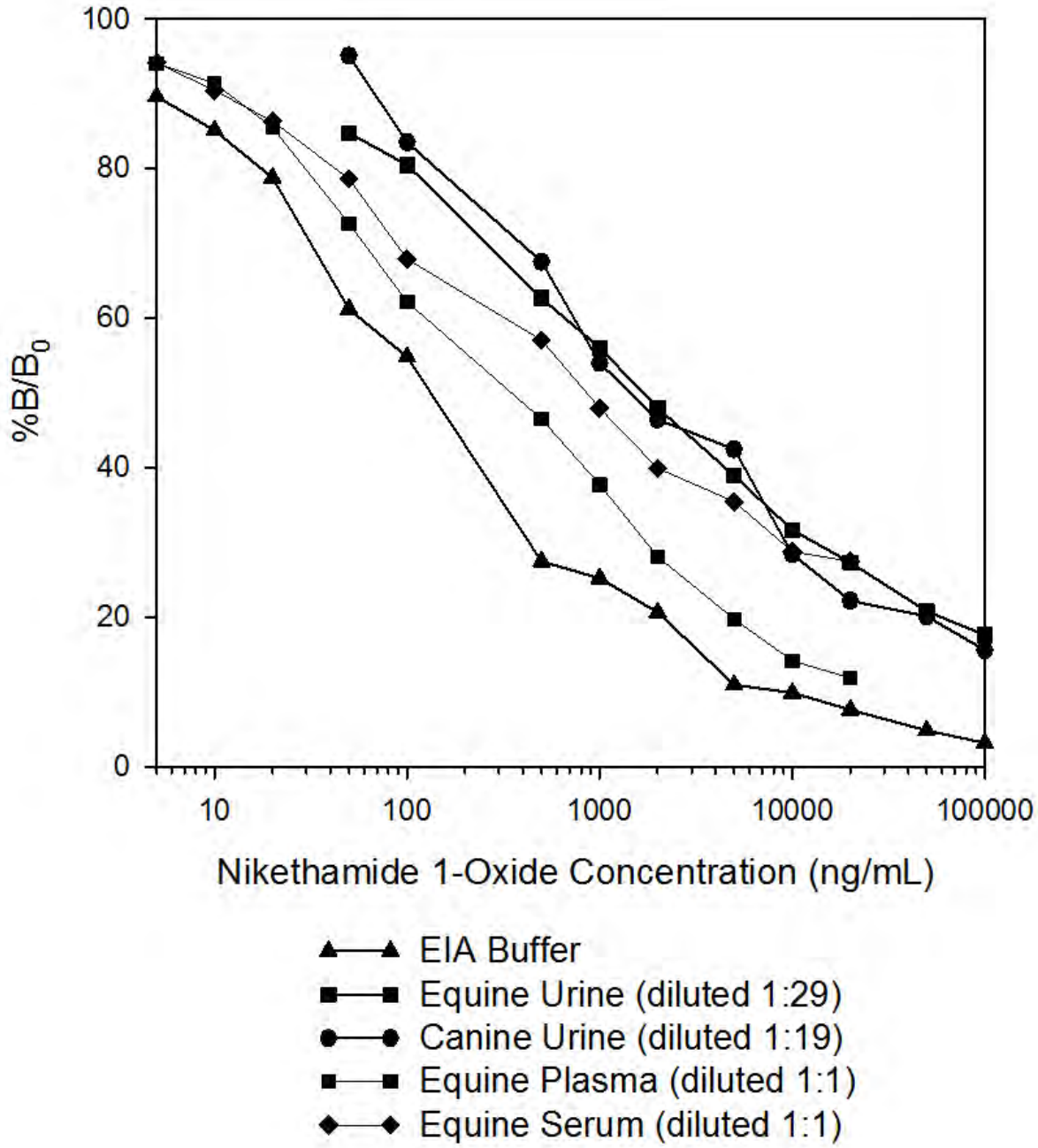




NIKETHAMIDE STANDARD CURVES

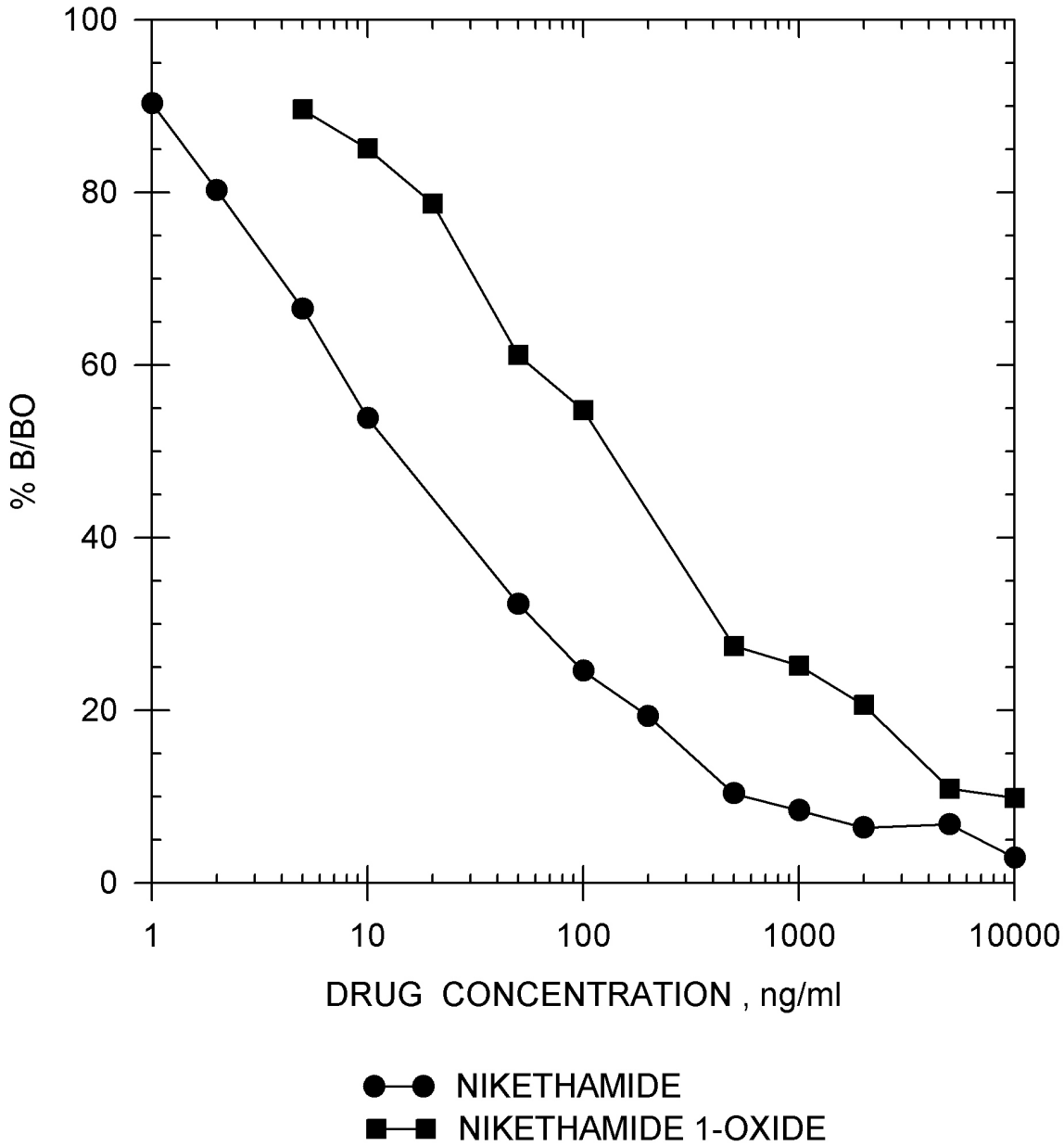
Nikethamide 1-oxide





NIKETHAMIDE STANDARD CURVES

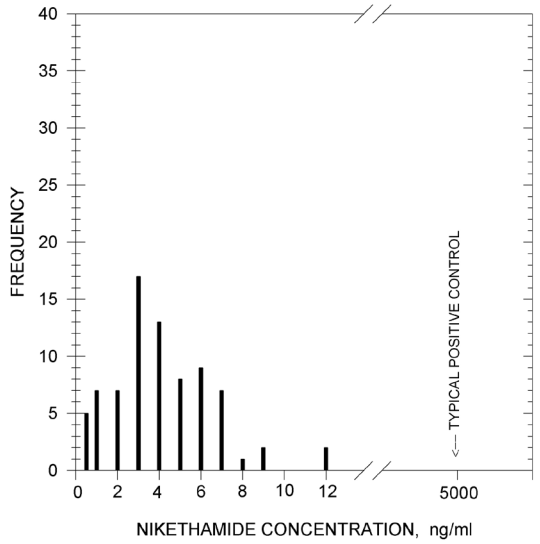
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 78 post-race equine urine samples, diluted 1:29, has shown no background levels above 12.1 ng/ml.

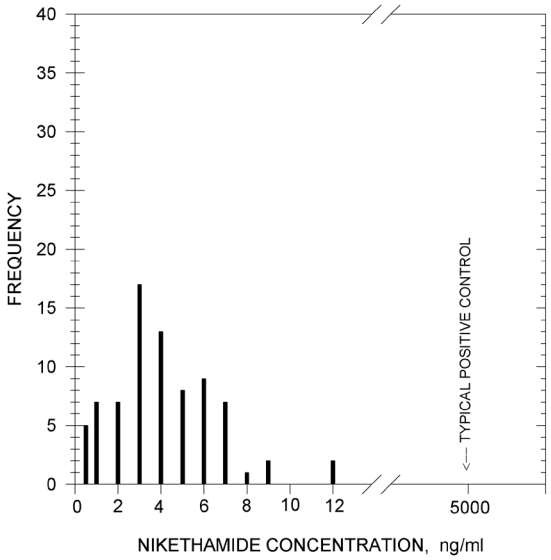
Sample Treatment: A dilution of 1:29 (i.e. 1 part urine to 29 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 41 post-race canine urine samples, diluted 1:19, has shown no background levels above 7.6 ng/ml.

Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) will reduce natural backgrounds.

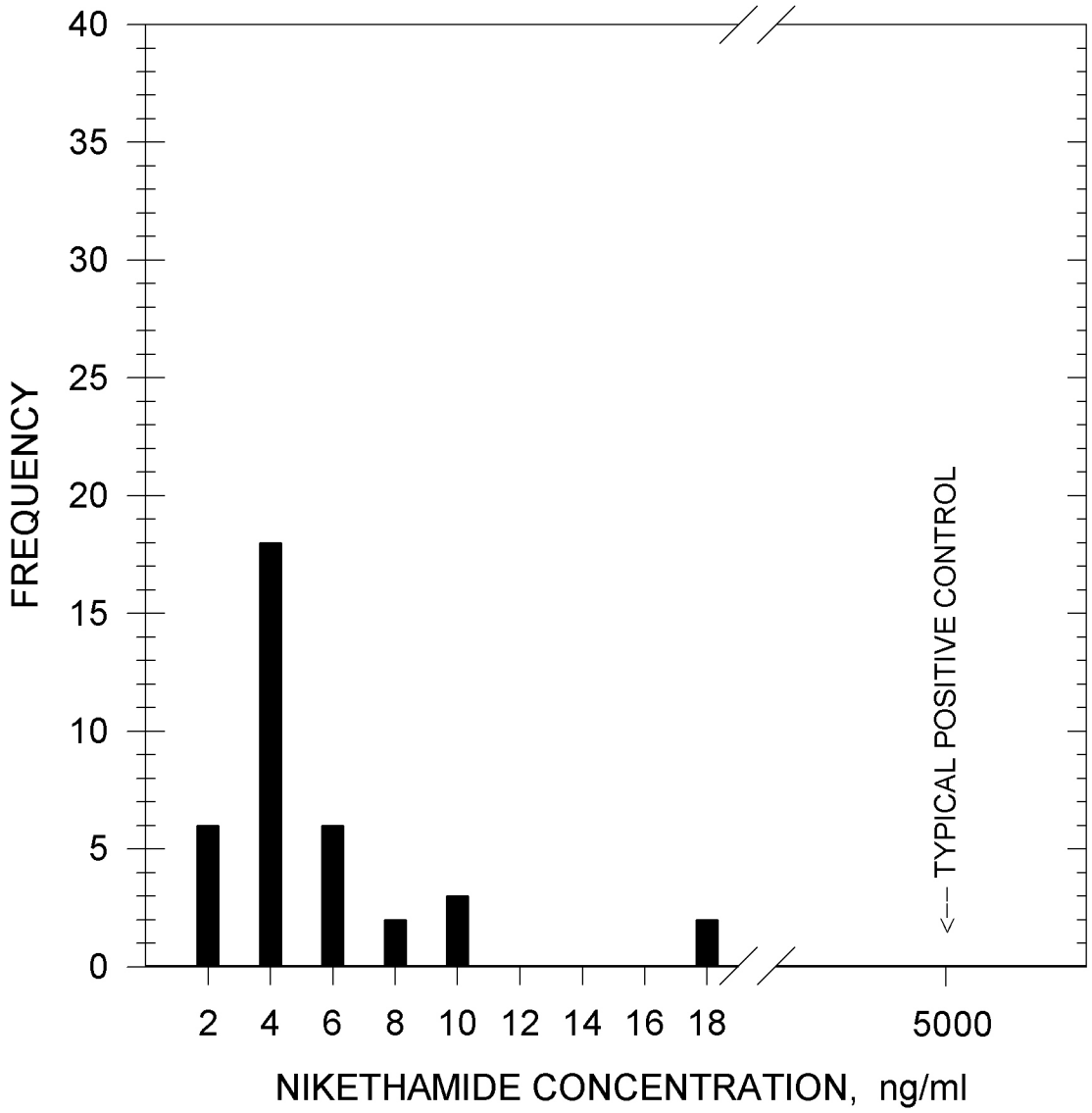


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 37 post-race equine plasma samples, diluted 1:1, has shown no background levels above 16.2 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) will reduce natural backgrounds.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Nikethamide	100%
Nikethamide 1-oxide	4.6%

Acepromazine	<0.01%	Meperidine	<0.01%
Acetaminophen	<0.01%	Metaproterenol	<0.01%
Acetylsalicylic Acid	<0.01%	Methadone	<0.01%
E-Amino-n-caproic Acid	<0.01%	Methaqualone	<0.01%
Amitriptyline	<0.01%	Methocarbamol	<0.01%
Ascorbic Acid	<0.01%	Methylene Blue	<0.01%
Benzoic Acid	<0.01%	6 α-Methylprednisolone	<0.01%
Caffeine	<0.01%	Nalorphine	<0.01%
Chlordiazepoxide	<0.01%	Naproxen	<0.01%
Chlorpromazine	<0.01%	Niacin	<0.01%
Clenbuterol	<0.01%	Niacinamide	<0.01%
Codeine	<0.01%	Nicotine	<0.01%
Cotinine	<0.01%	Nortriptyline	<0.01%
Dexamethasone	<0.01%	Orphenadrine	<0.01%
Dextromethorphan	<0.01%	Oxyphenbutazone	<0.01%
Diclofenac	<0.01%	PCP	<0.01%
Dimethyl Sulfoxide	<0.01%	Penicillin G-Potassium	<0.01%
Dipyrone	<0.01%	Penicillin G-Procaine	<0.01%
Doxepin	<0.01%	Pentoxifylline	<0.01%
Ephedrine	<0.01%	Phenothiazine	<0.01%
Erythromycin	<0.01%	Phenylbutazone	<0.01%
N-Ethylnicotinamide	<0.01%	Polyethylene Glycol	<0.01%
Ethyl p-Amino-n-Caproic Acid	<0.01%	Prednisolone	<0.01%
Fenoprofen	<0.01%	Primadone	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Folic Acid	<0.01%	Procainamide	<0.01%
Folinic Acid	<0.01%	Promazine	<0.01%
Furosemide	<0.01%	Pseudoephedrine	<0.01%
Gemfibrozil	<0.01%	Pyrantel	<0.01%
Gentisic Acid	<0.01%	Pyrilamine	<0.01%
Glipizide	<0.01%	Pyrimethamine	<0.01%
L-Glutamic Acid	<0.01%	Quinidine	<0.01%
Glutethimide	<0.01%	Quinine	<0.01%
Glycopyrrolate	<0.01%	Salbutamol	<0.01%
Heparin	<0.01%	Salicylamide	<0.01%
Hippuric Acid	<0.01%	Salicylic Acid	<0.01%
Hordenine	<0.01%	Theophylline	<0.01%
Hydrocortisone	<0.01%	Thiamine	<0.01%
Ibuprofen	<0.01%	Trimethoprim	<0.01%
Imipramine	<0.01%	Trimipramine	<0.01%
Isoxsuprine	<0.01%	Uric Acid	<0.01%
Lidocaine	<0.01%		

ENHANCED KIT
OPIATE GROUP

Product #103010 &
103015 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Hydrocodone	0.05 ng/ml	Morphine 6-β-D-Glucuronide	0.61 ng/ml
Codeine	0.06 ng/ml	Morphine 3-β-D-Glucuronide	0.71 ng/ml
Ethylmorphine	0.06 ng/ml	Levorphanol	0.87 ng/ml
Hydromorphone	0.08 ng/ml	Oxycodone	1.26 ng/ml
Morphine	0.08 ng/ml	Oxymorphone	1.59 ng/ml
6-Acetylcodeine	0.08 ng/ml	Norcodeine	6.67 ng/ml
6-Acetylmorphine	0.16 ng/ml	Normorphine	53.5 ng/ml
Heroin	0.22 ng/ml	Amitriptyline	134.1 ng/ml
Thebaine	0.41 ng/ml		

I-50 in Equine Urine (Diluted 1:1)

Hydrocodone	0.12 ng/ml
Codeine	0.11 ng/ml
Ethylmorphine	0.09 ng/ml
Hydromorphone	0.21 ng/ml
Morphine	0.23 ng/ml
6-Acetylcodeine	0.19 ng/ml
6-Acetylmorphine	0.32 ng/ml
Heroin	0.41 ng/ml
Thebaine	0.89 ng/ml
Morphine 6-β-D-Glucuronide	1.35 ng/ml
Morphine 3-β-D-Glucuronide	1.42 ng/ml
Levorphanol	1.91 ng/ml
Oxycodone	2.50 ng/ml
Oxymorphone	9.91 ng/ml
Norcodeine	14.44 ng/ml

I-50 in Canine Urine (Diluted 1:1)

Hydrocodone	0.12 ng/ml
Codeine	0.13 ng/ml
Ethylmorphine	0.10 ng/ml
Hydromorphone	0.26 ng/ml
Morphine	0.24 ng/ml
6-Acetylcodeine	0.20 ng/ml
6-Acetylmorphine	0.36 ng/ml
Heroin	0.51 ng/ml
Thebaine	0.76 ng/ml
Morphine 6-β-D-Glucuronide	1.24 ng/ml
Morphine 3-β-D-Glucuronide	151 ng/ml
Levorphanol	1.54 ng/ml
Oxycodone	1.97 ng/ml
Oxymorphone	4.52 ng/ml
Norcodeine	12.53 ng/ml

I-50 in Equine Plasma

Hydrocodone	0.13 ng/ml
Codeine	0.12 ng/ml
Ethylmorphine	0.15 ng/ml
Hydromorphone	0.14 ng/ml
Morphine	0.16 ng/ml
Heroin	0.21 ng/ml
Thebaine	0.57 ng/ml
Oxycodone	1.50 ng/ml
Oxymorphone	1.58 ng/ml

I-50 in Equine Serum

Hydrocodone	0.11 ng/ml
Codeine	0.12 ng/ml
Ethylmorphine	0.13 ng/ml
Hydromorphone	0.15 ng/ml
Morphine	0.16 ng/ml
Heroin	0.38 ng/ml
Thebaine	2.01 ng/ml
Oxycodone	1.08 ng/ml
Oxymorphone	2.57 ng/ml

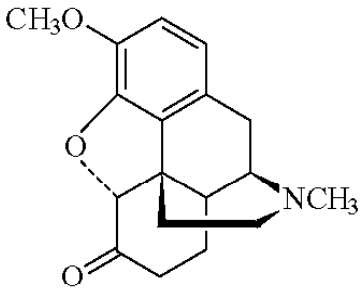
Precision:

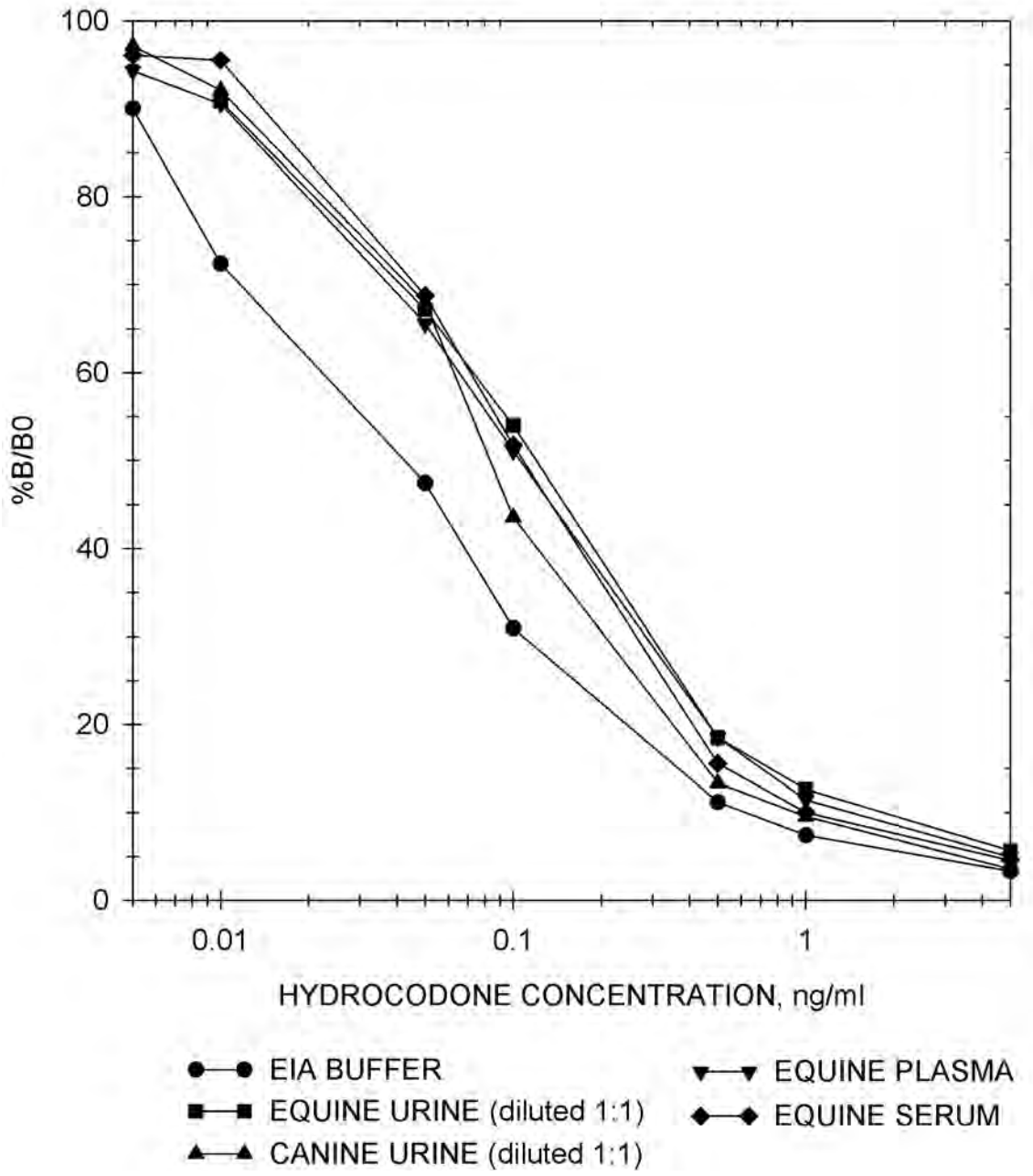
Intra-assay	4.51%
Inter-assay	3.31%

Note: Measuring wavelength was 650 nm.

OPIATE GROUP STANDARD CURVES

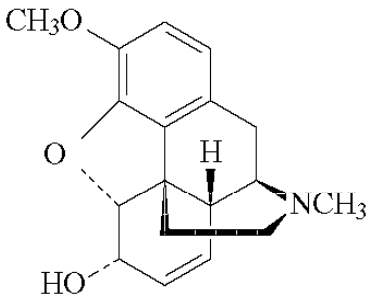
Hydrocodone

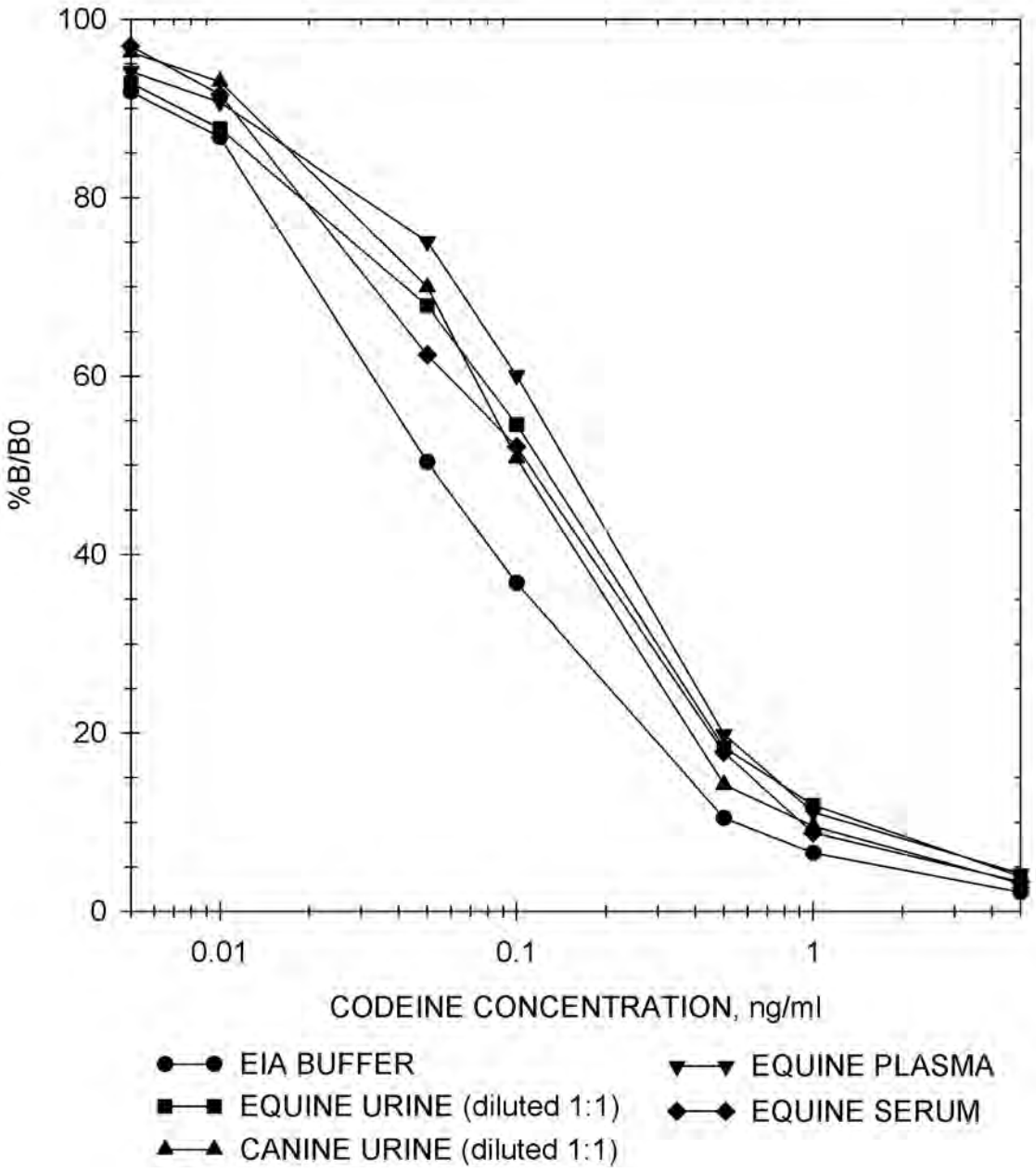




OPIATE GROUP STANDARD CURVES

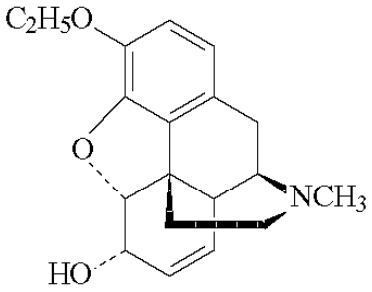
Codeine

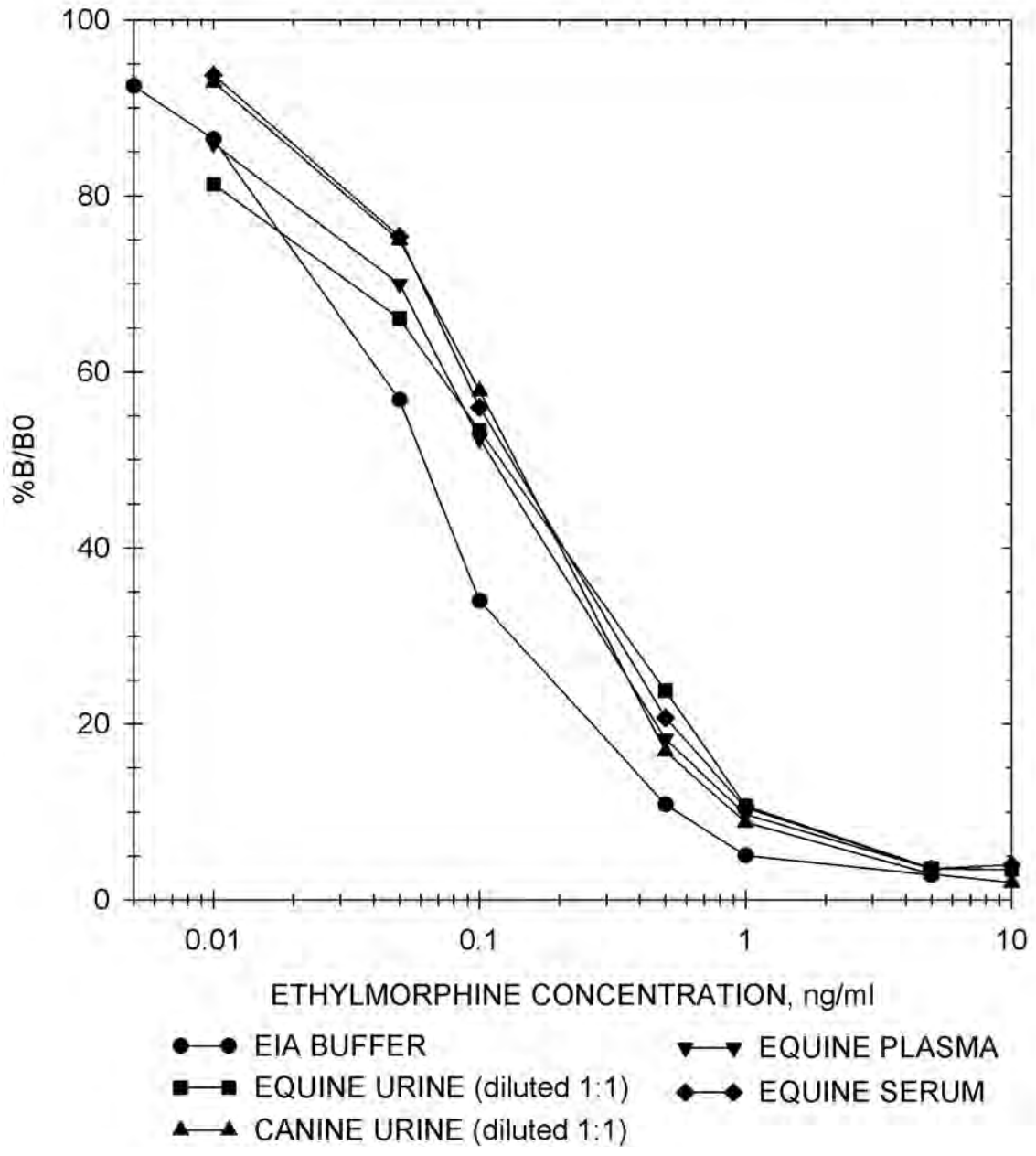




OPIATE GROUP STANDARD CURVES

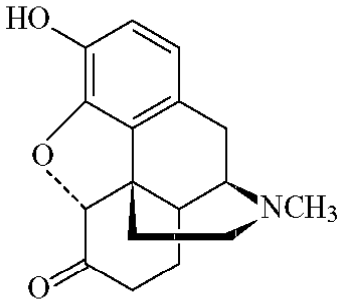
Ethylmorphine

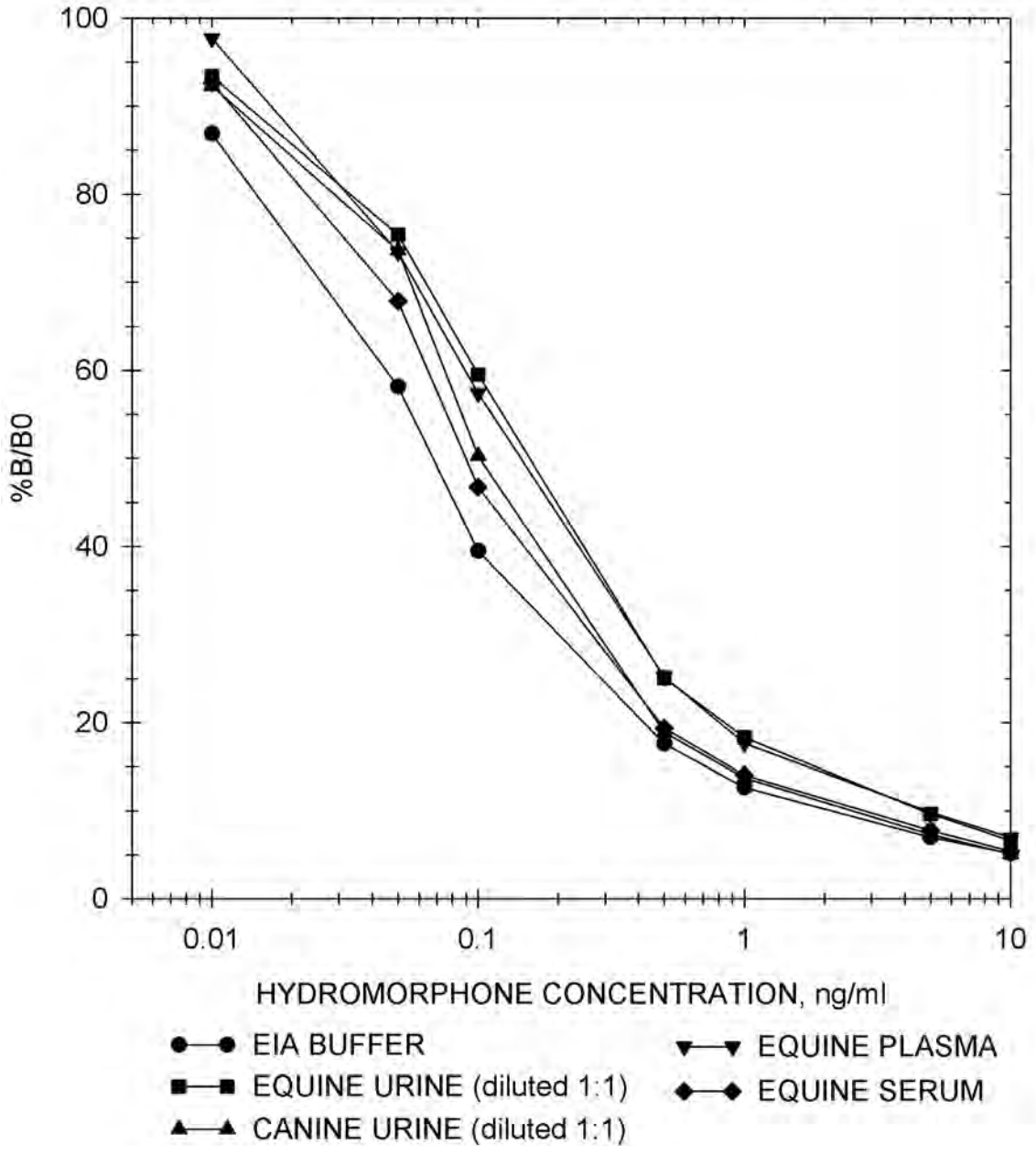




OPIATE GROUP STANDARD CURVES

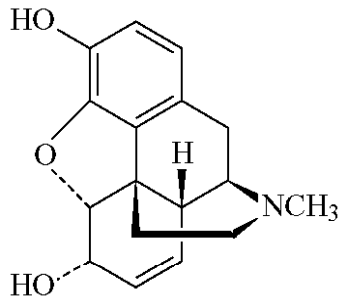
Hydromorphone

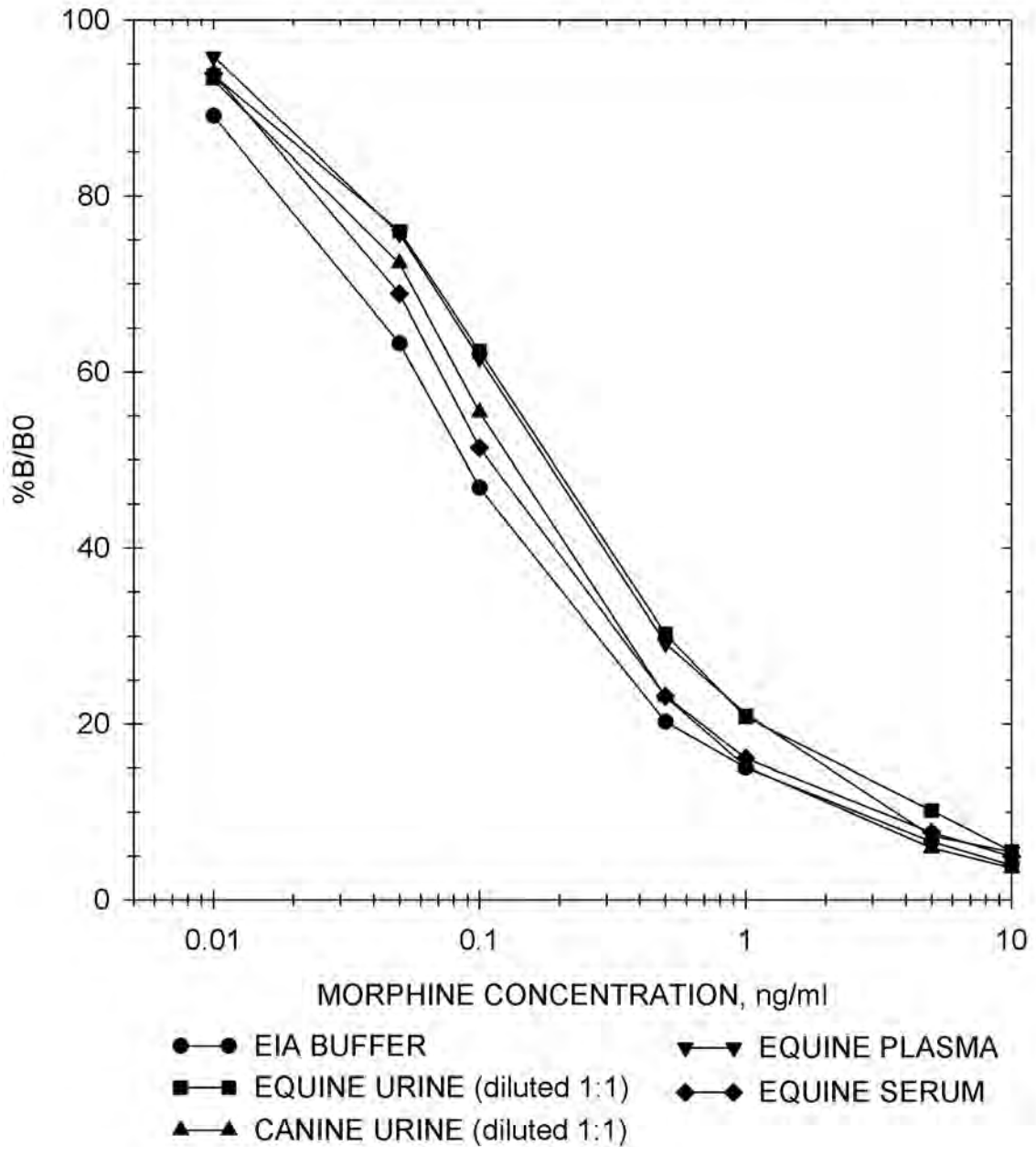




OPIATE GROUP STANDARD CURVES

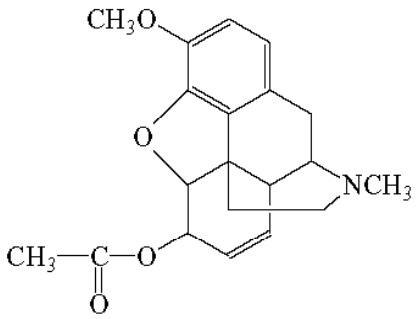
Morphine

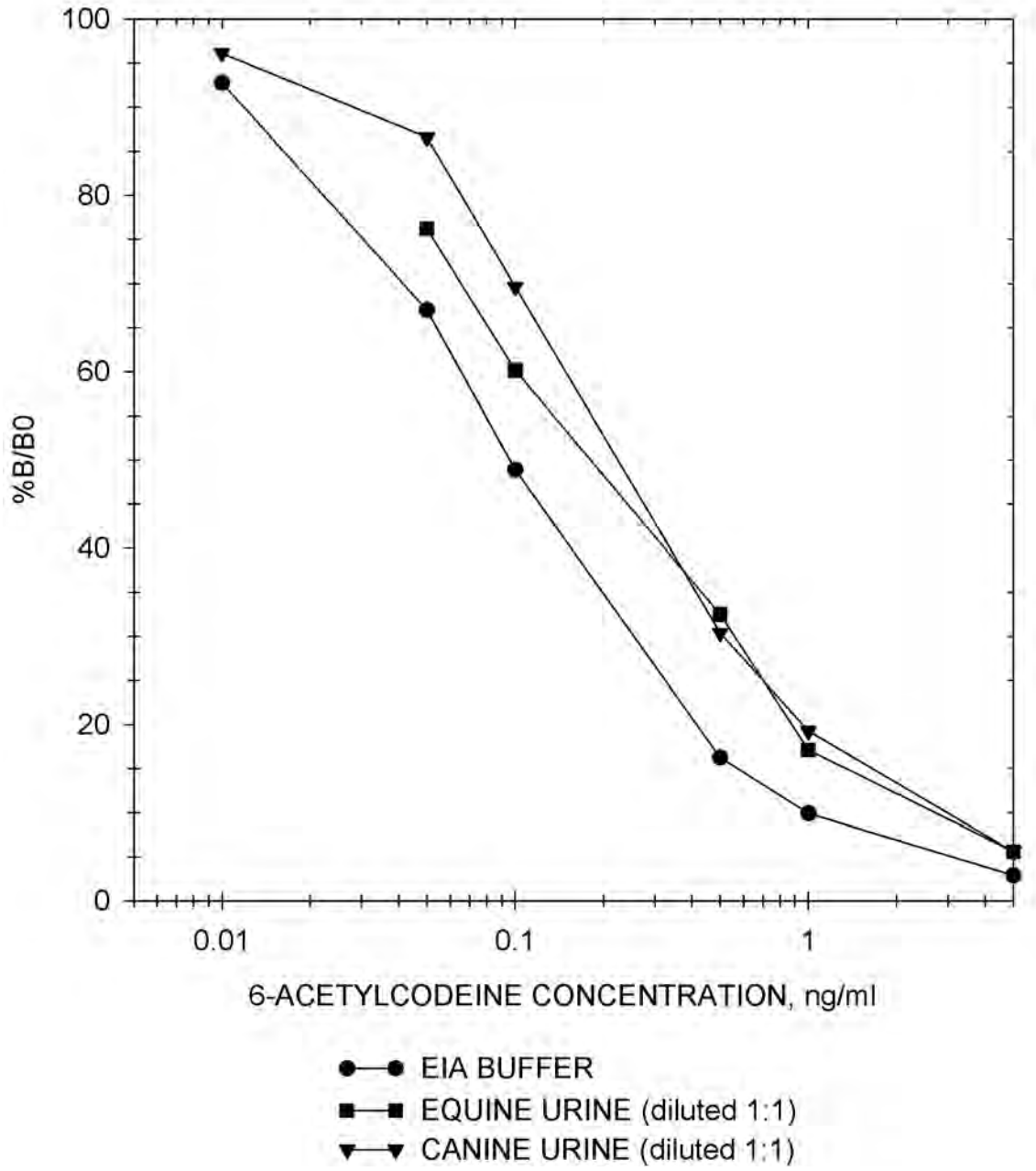




OPIATE GROUP STANDARD CURVES

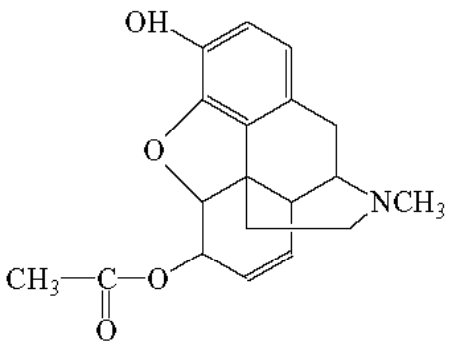
6-Acetylcodeine

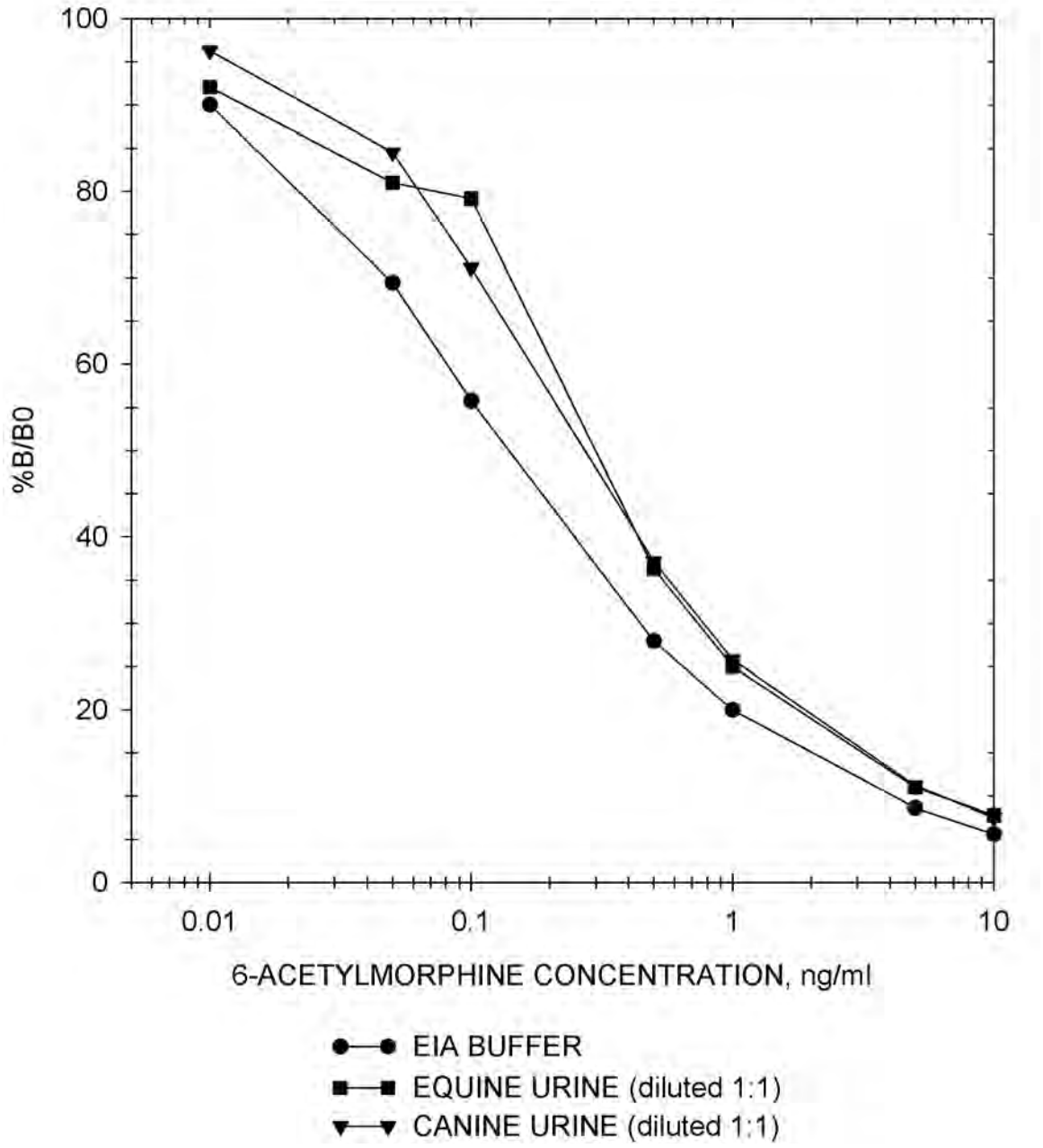




OPIATE GROUP STANDARD CURVES

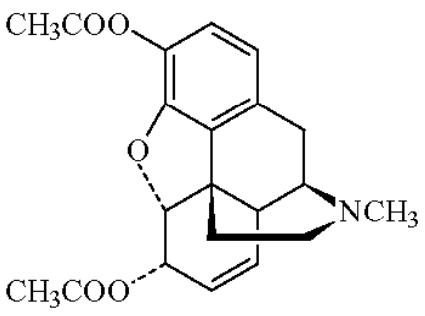
6-Acetylmorphine

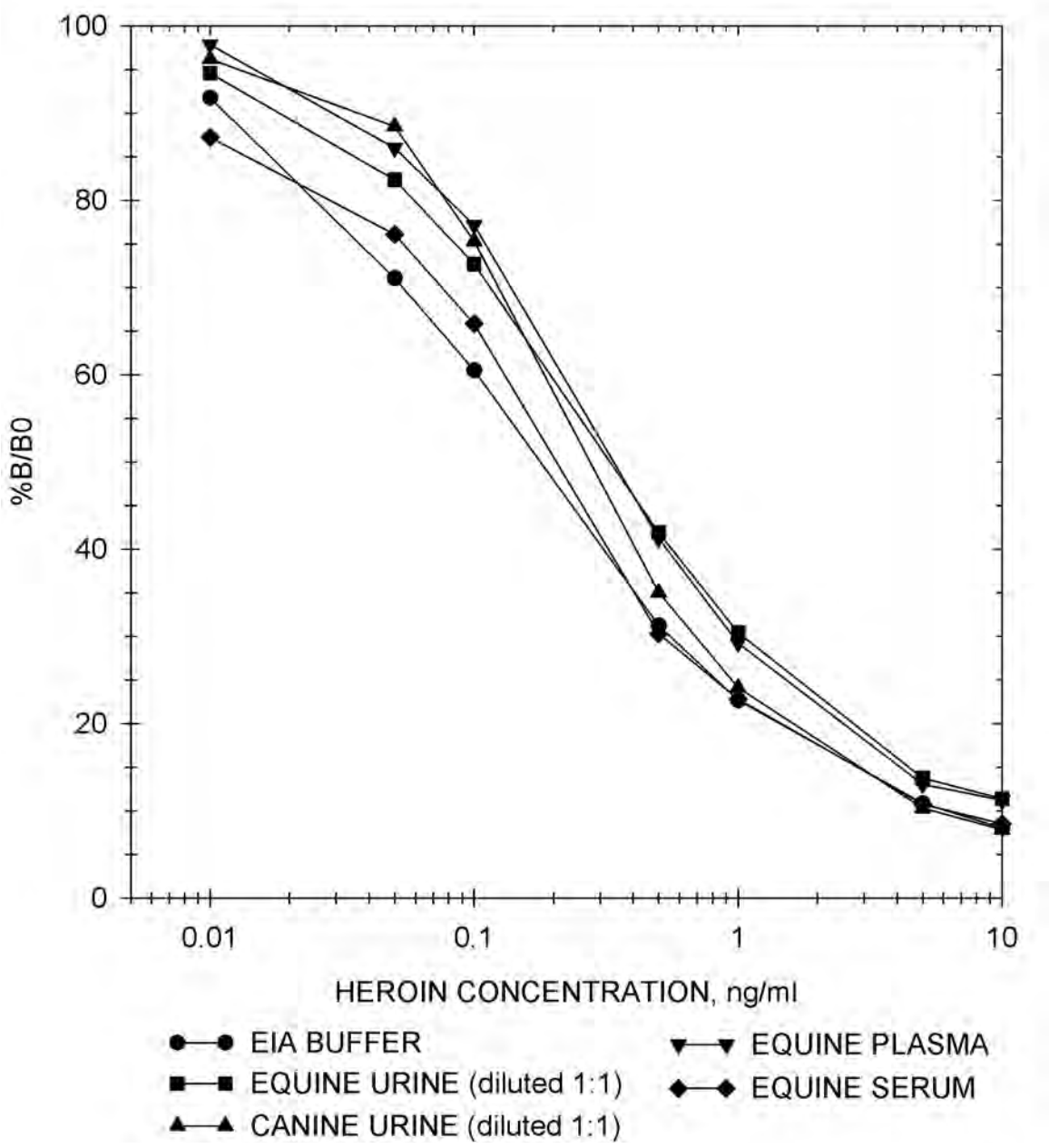




OPIATE GROUP STANDARD CURVES

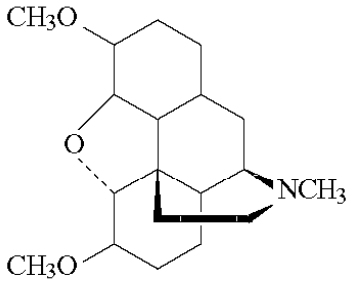
Heroin

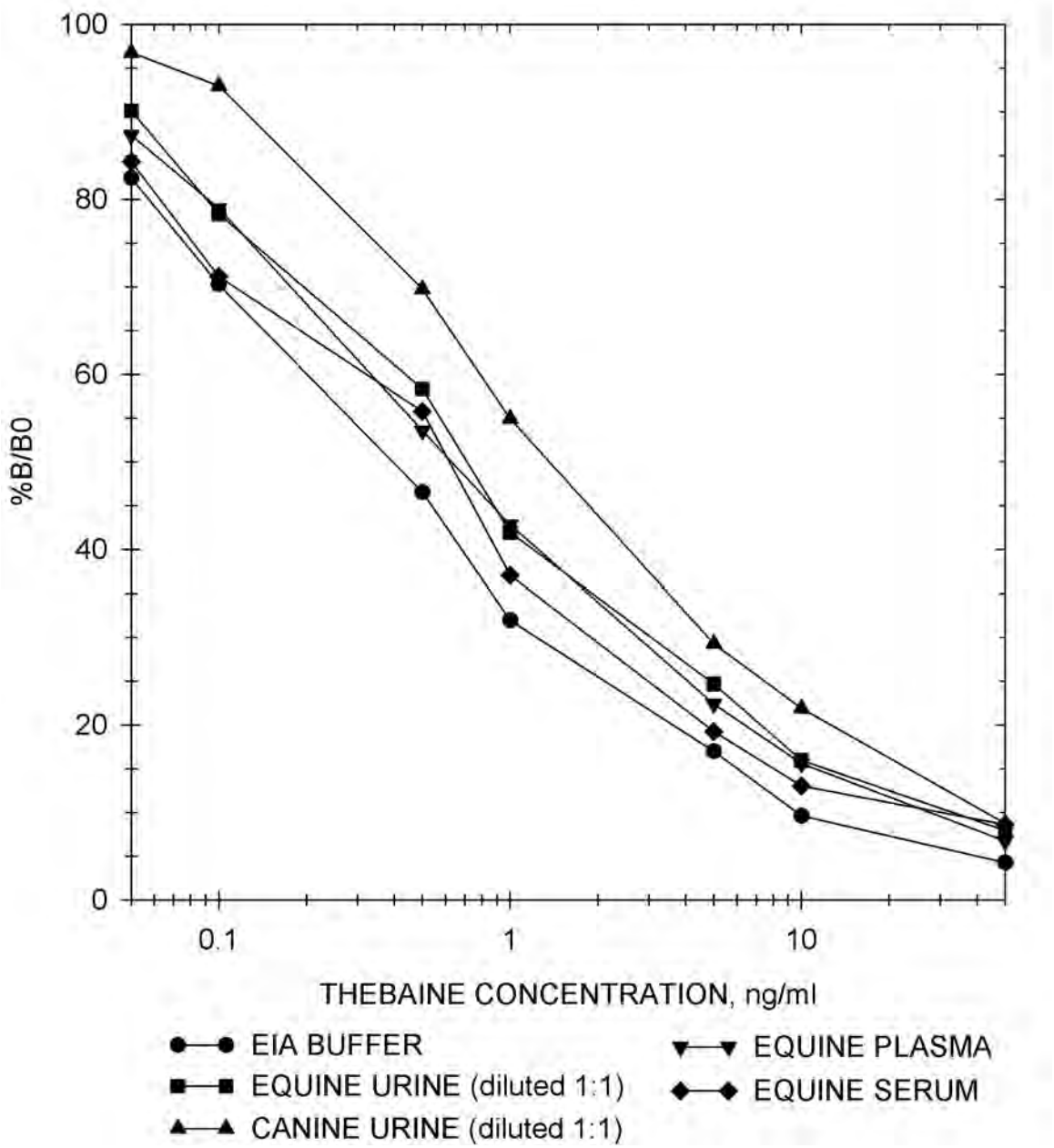




OPIATE GROUP STANDARD CURVES

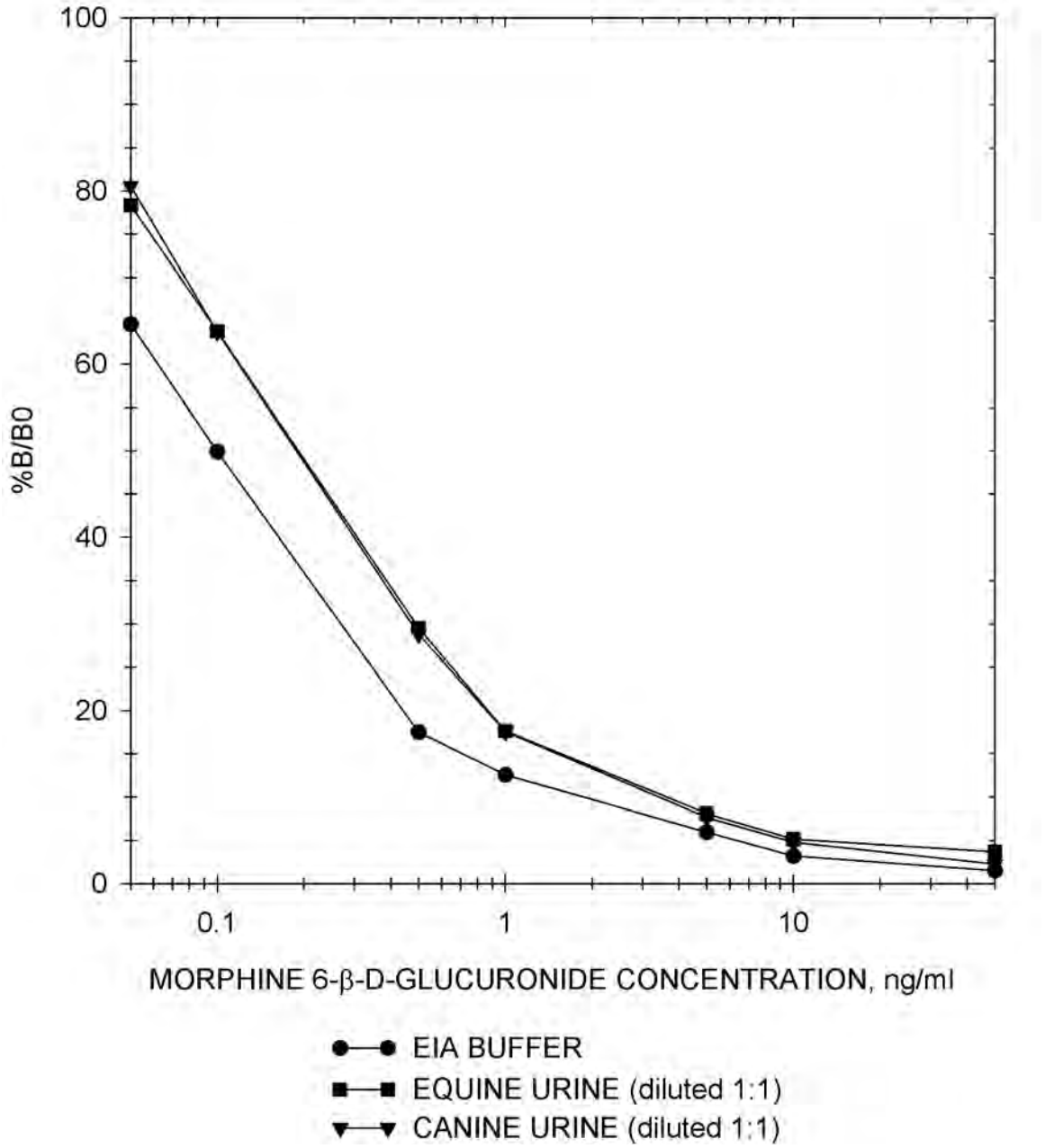
Thebaine





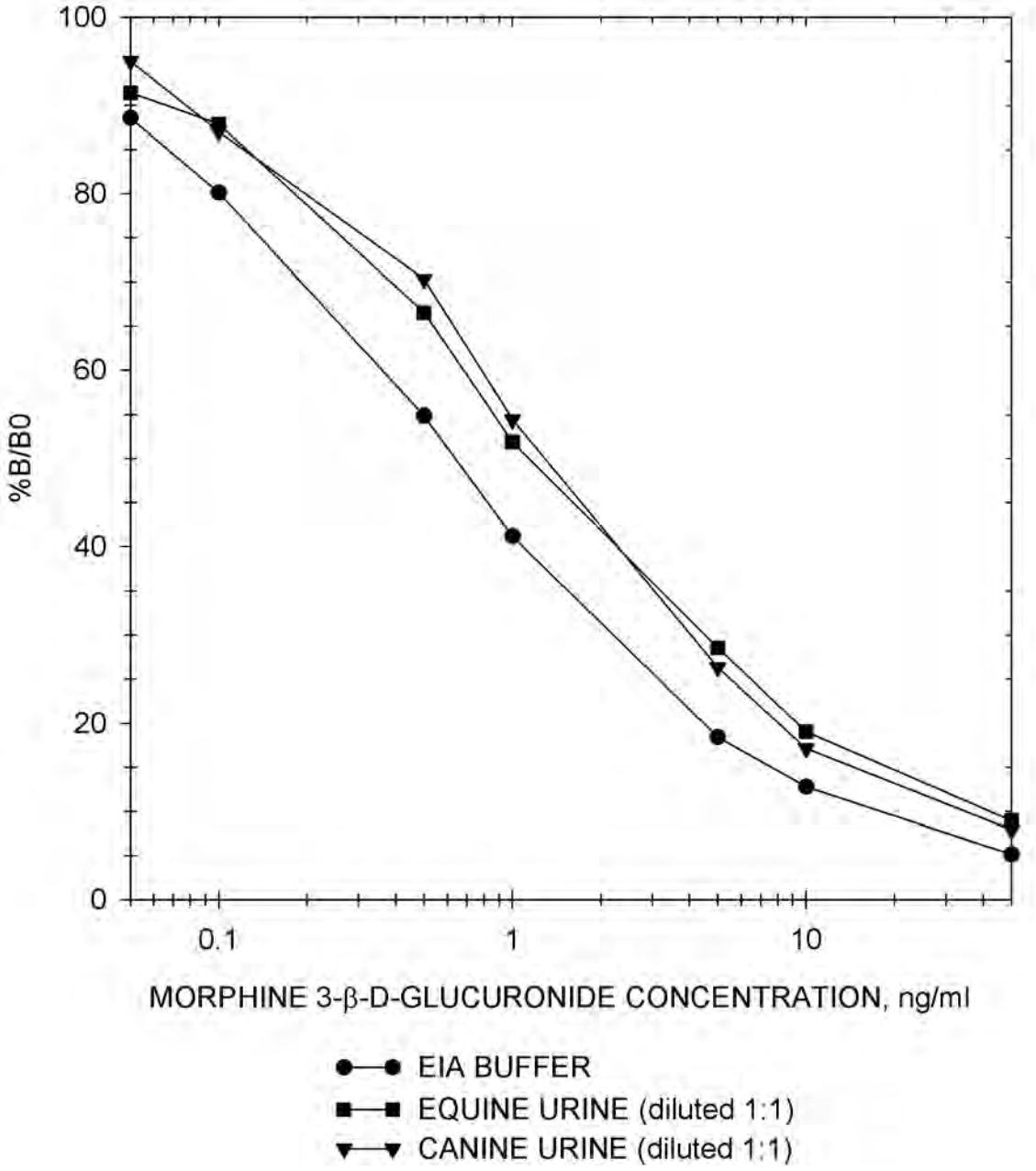
OPIATE GROUP STANDARD CURVES

Morphine 6-β-D-Glucuronide



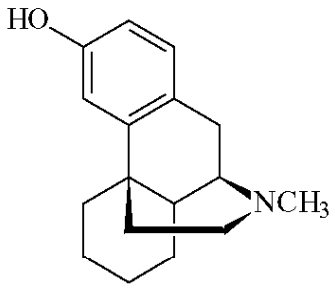
OPIATE GROUP STANDARD CURVES

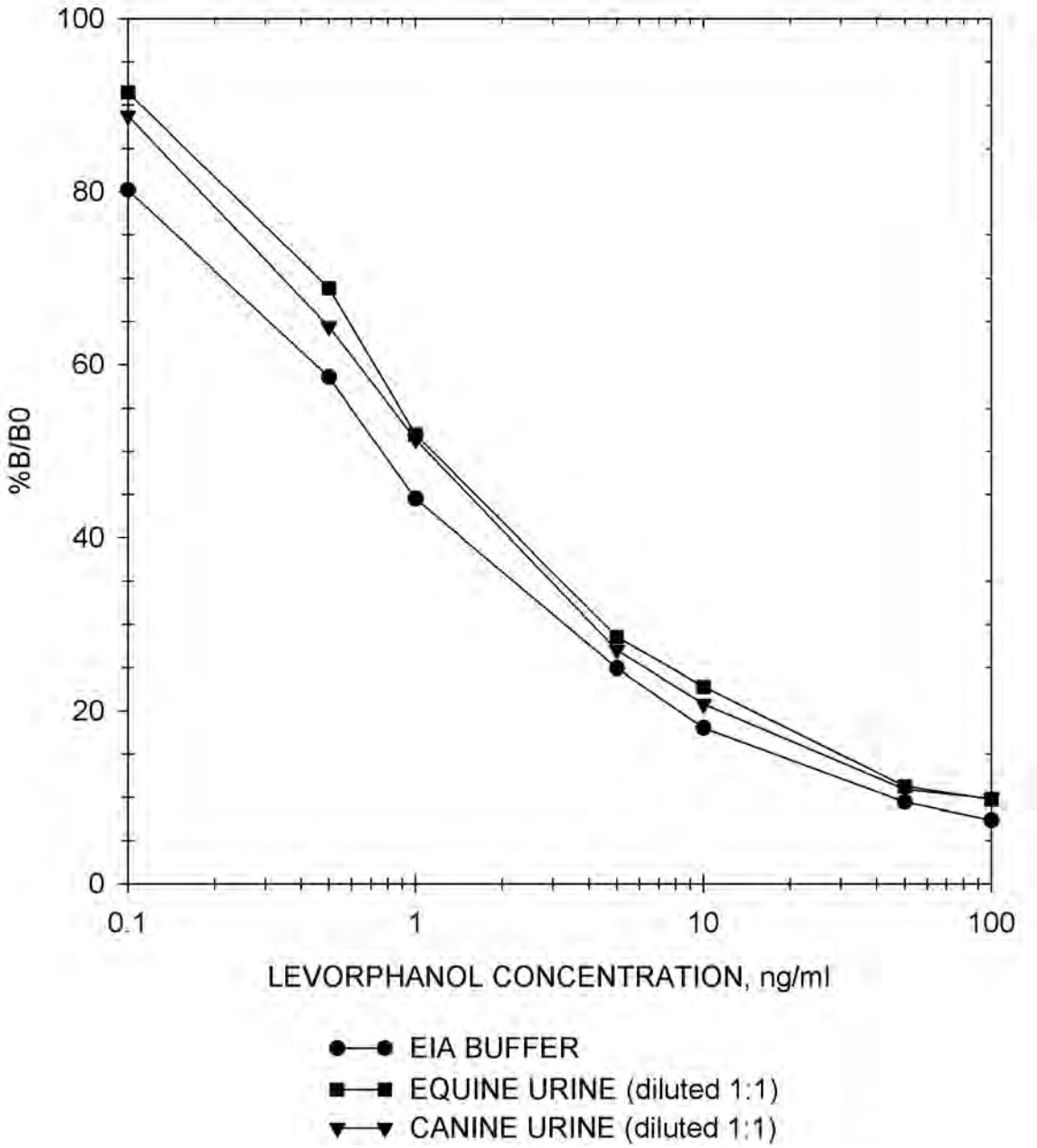
Morphine 3-β-D-Glucuronide



OPIATE GROUP STANDARD CURVES

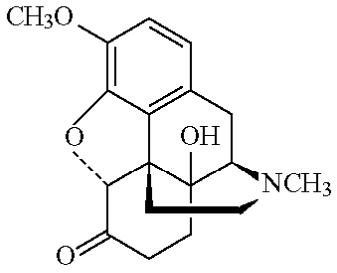
Levorphanol

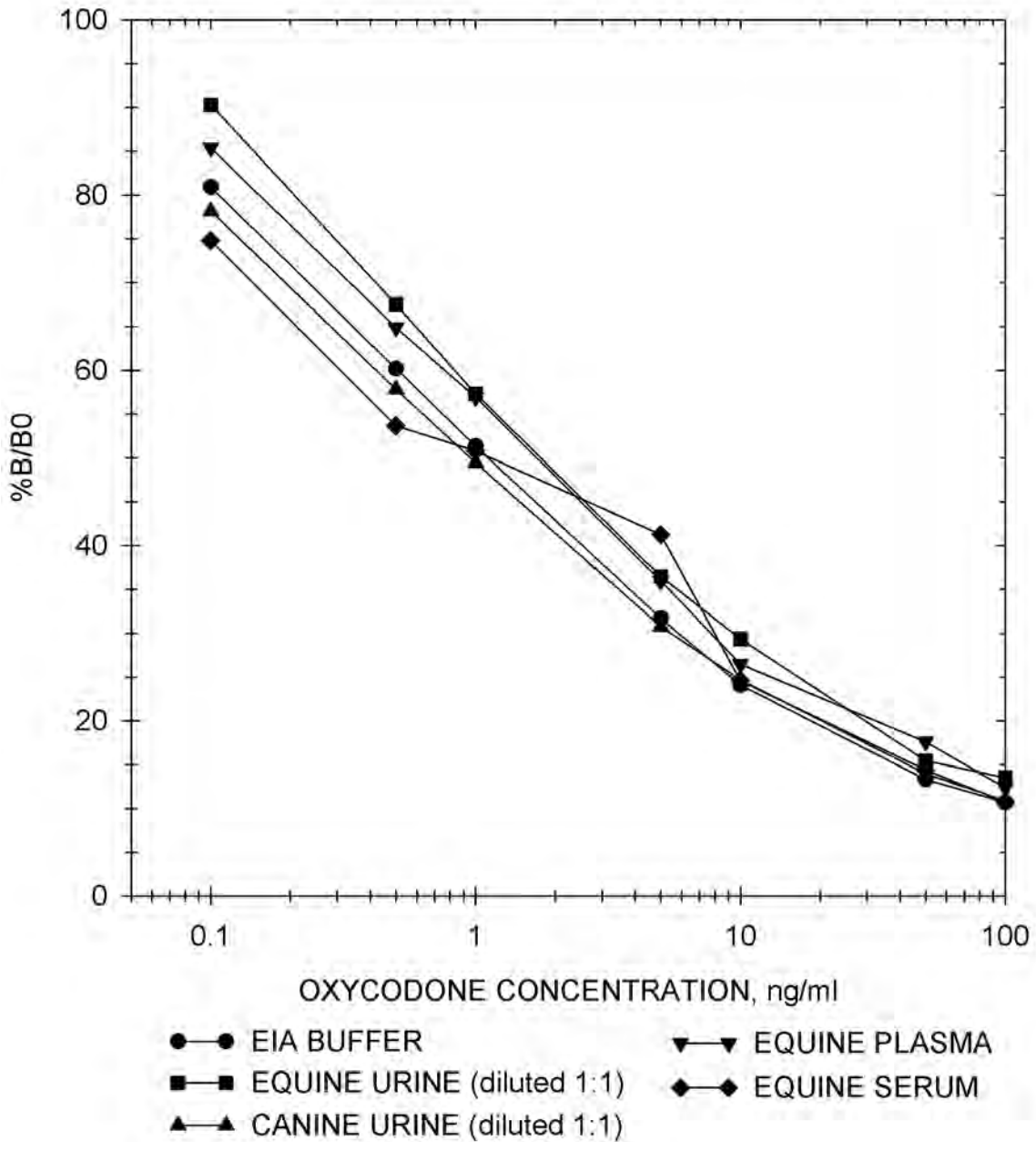




OPIATE GROUP STANDARD CURVES

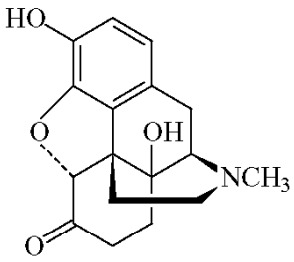
Oxycodone

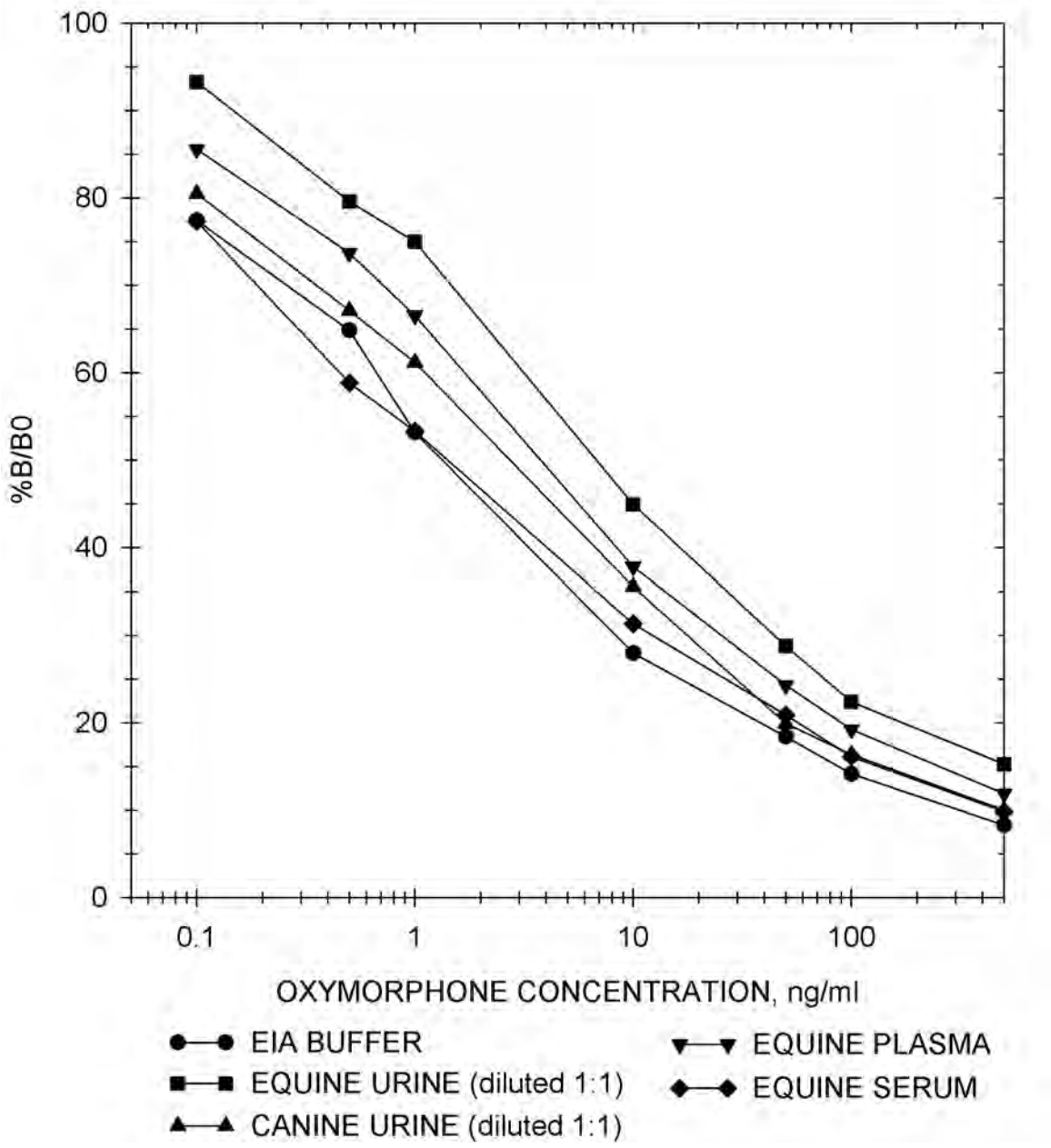




OPIATE GROUP STANDARD CURVES

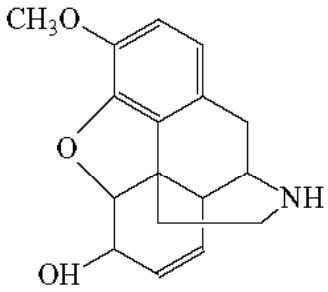
Oxymorphone

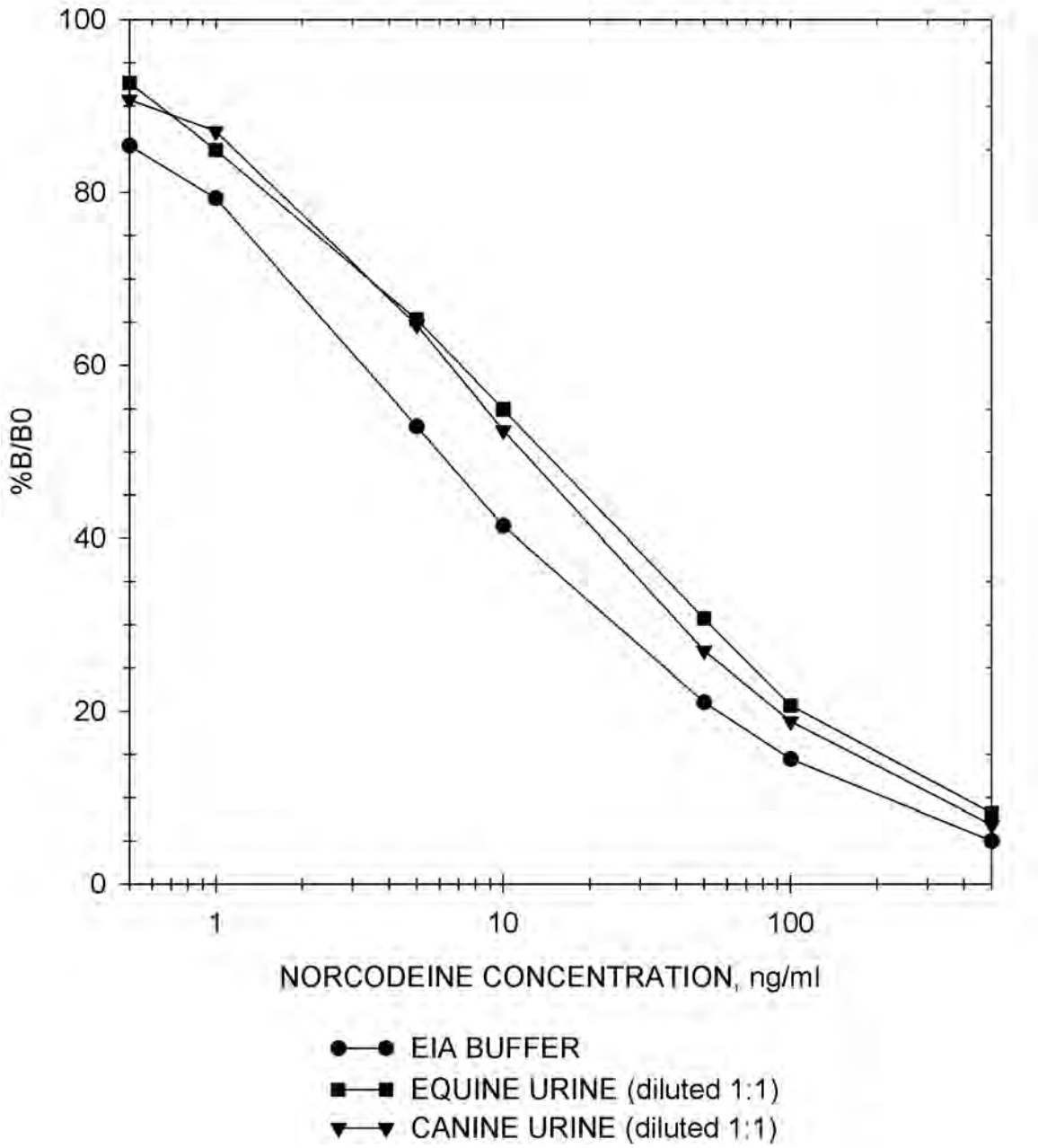




OPIATE GROUP STANDARD CURVES

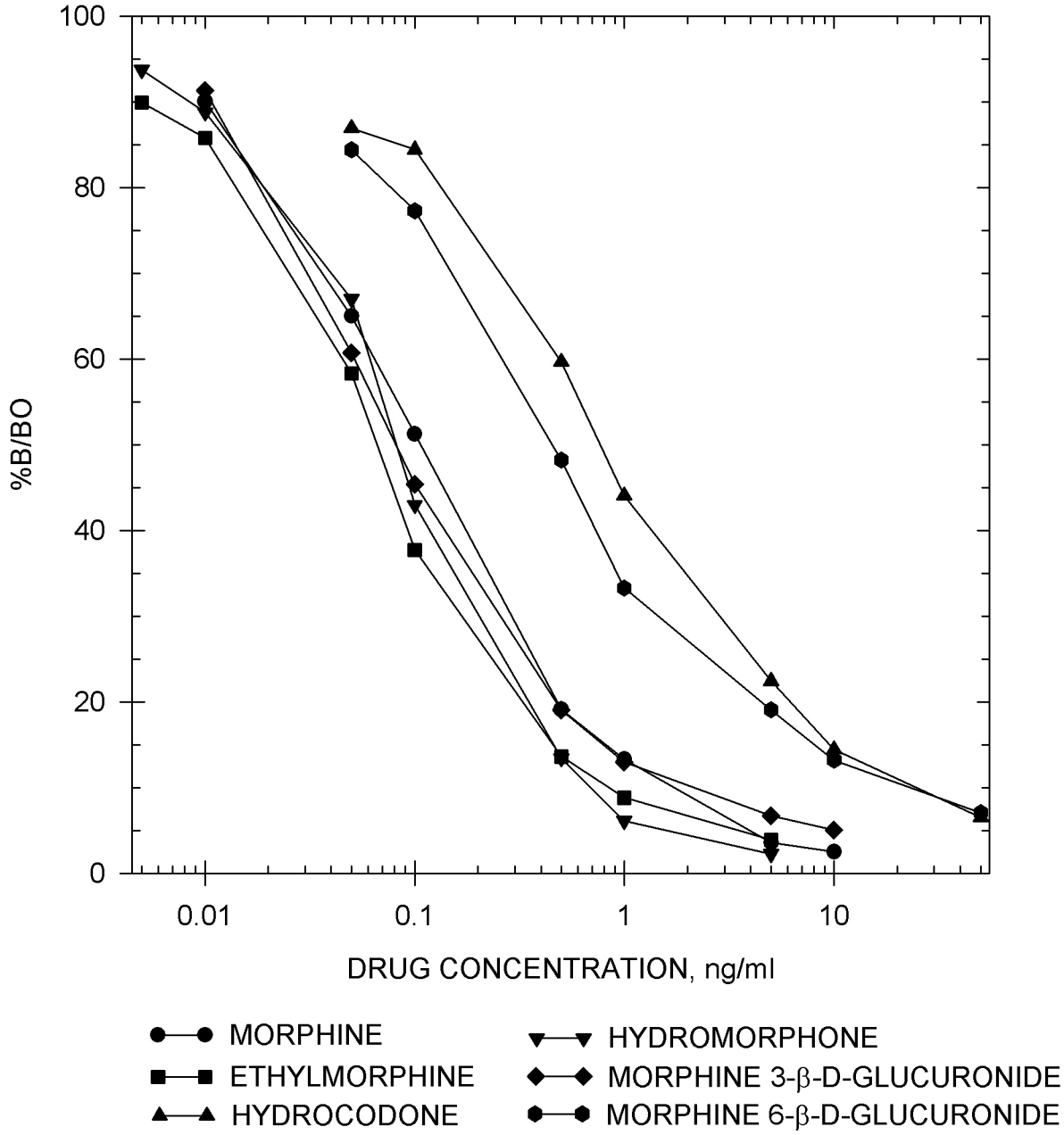
Norcodeine





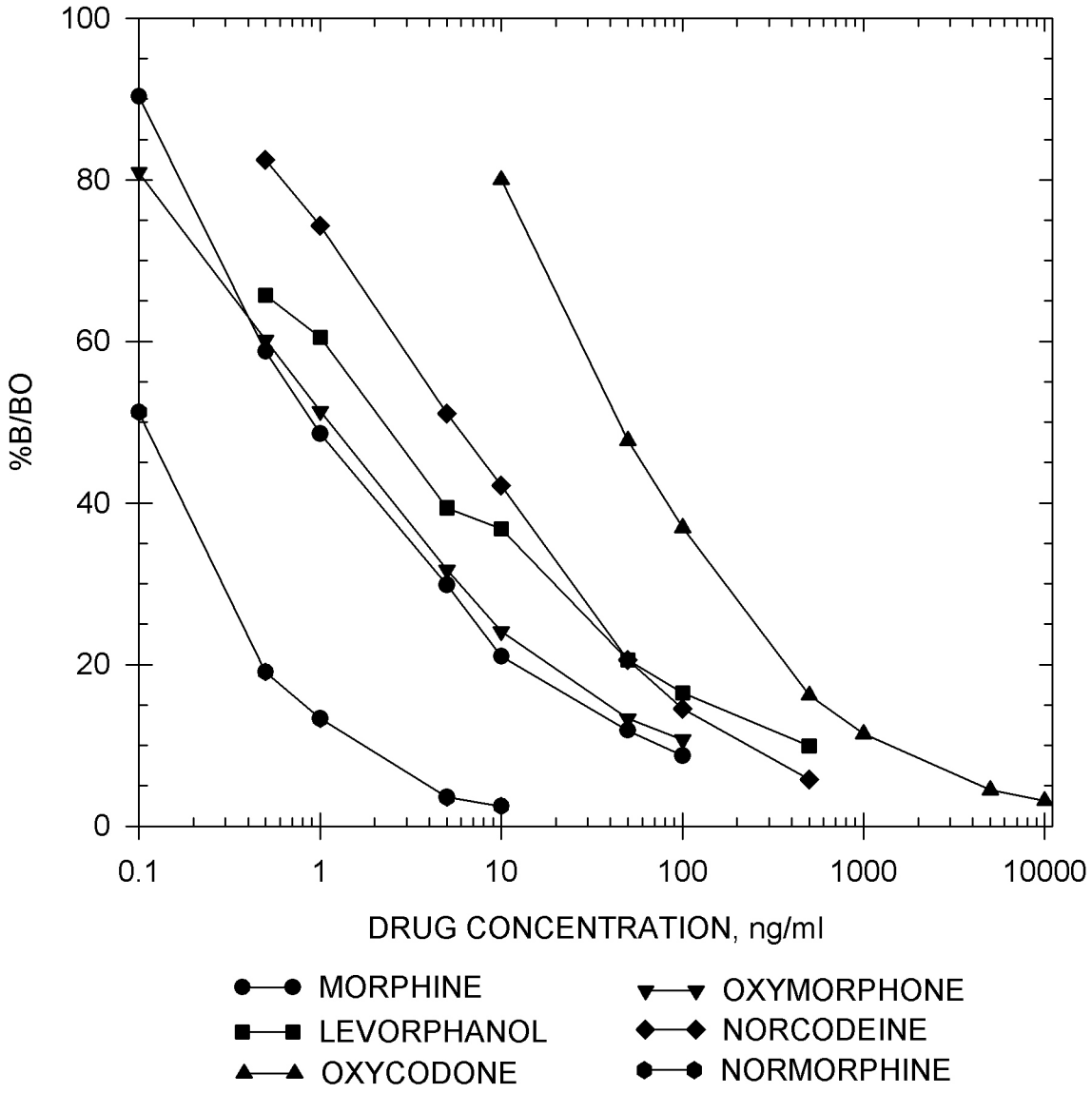
OPIATE GROUP STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



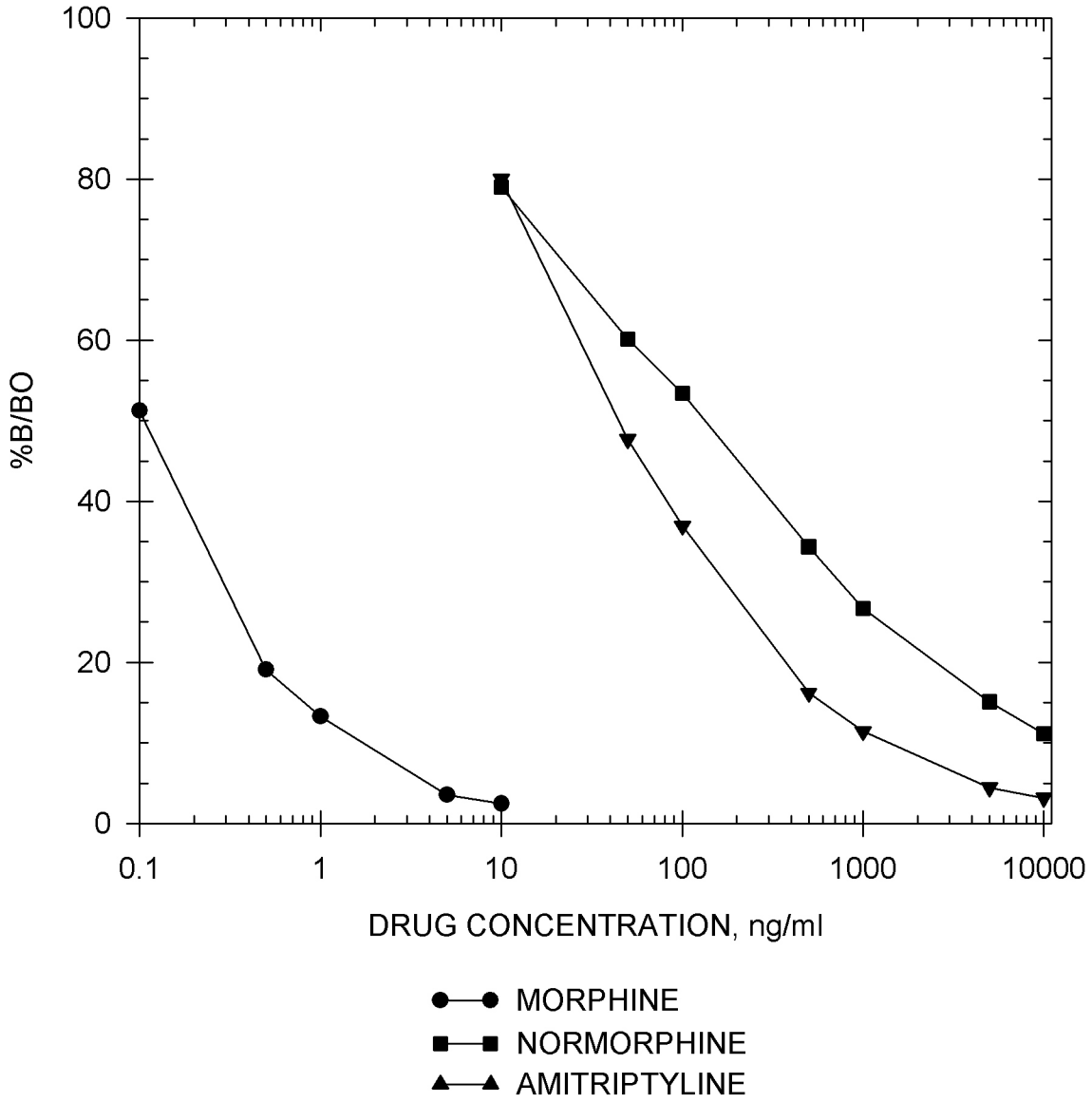
OPIATE GROUP STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



OPIATE GROUP STANDARD CURVES

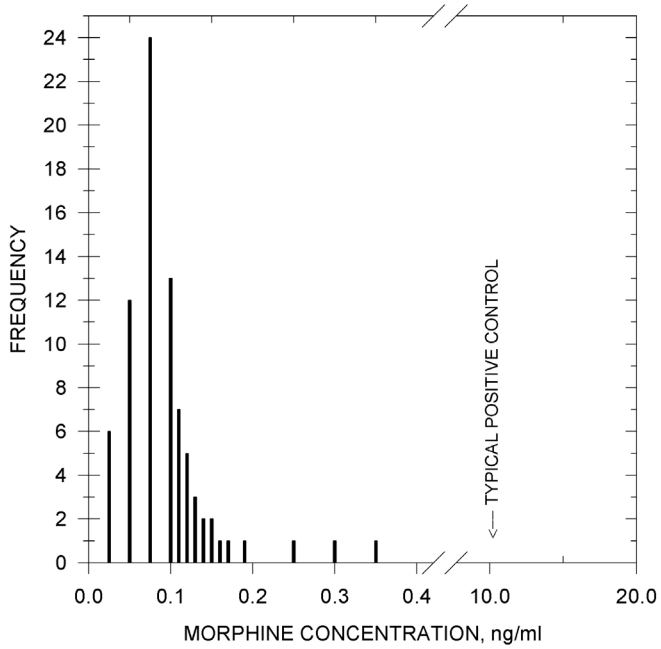
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:1, has shown no background levels above 0.32 ng/ml.

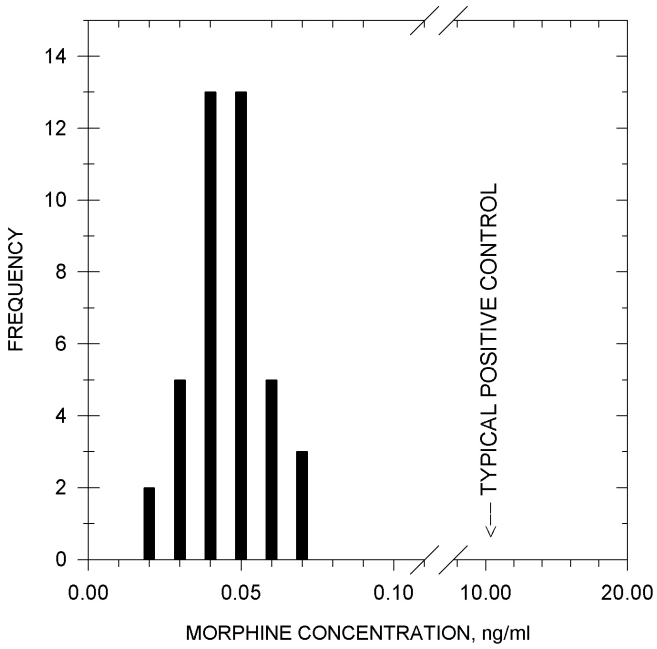
Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 41 post-race canine urine samples, diluted 1:1, has shown no background levels above 0.06 ng/ml.

Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) will reduce natural backgrounds.



ADDITIONAL BACKGROUND LEVELS

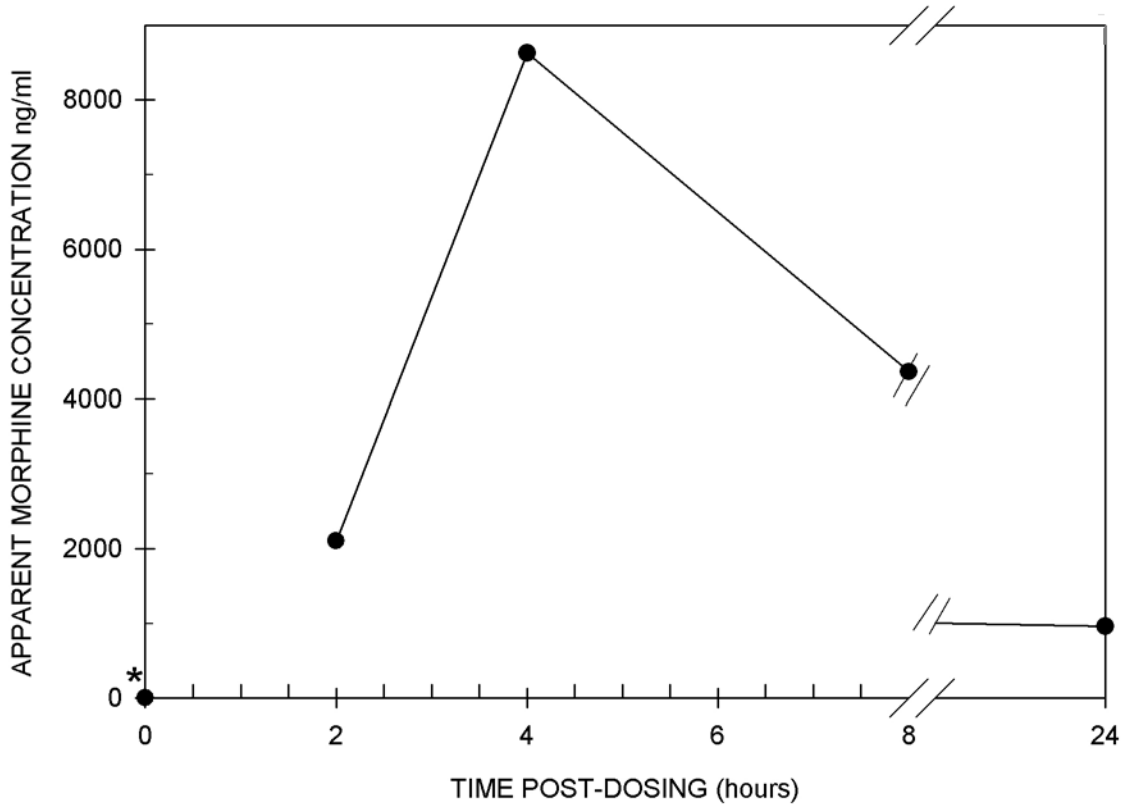
Equine Serum and Plasma: No sample dilution is necessary. In some cases, a dilution or an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 0.5 mg/kg of morphine orally to one dog, the presence of this drug was detected for at least 8 hours in canine urine.

Because the 2 through 24 hour post-dose time points exceeded the range of the assay, the samples were diluted 1:5000 with EIA buffer and back-calculated to the recommended 1:1 dilution.

Note: No zero timepoint was available for evaluation. A "typical" negative result based on data generated from canine background results is represented by an asterisk (*) near the zero timepoint on the graph. The apparent concentration of this typical zero is 0.06 ng/mL.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Codeine	157%
Hydrocodone	157%
Hydromorphone	155%
Ethylmorphine	138%
Morphine	100%
6-Acetylcodeine	79%
Heroin	58%
6-Acetylmorphine	50%
Thebaine	24%
Morphine-6-β-D-Glucuronide	20%
Morphine-3-β-D-Glucuronide	13%
Oxycodone	10%
Levorphanol	9%
Oxymorphone	5.5%
Norcodeine	2.3%
Normorphine	0.19%
Amitriptyline	0.08%
Promazine	0.08%
Acepromazine	0.04%
Chlorpromazine	0.03%
Doxepin	0.03%
Imipramine	0.03%
Levofloxacin	0.02%
Levallorphan	0.02%
Dextromethorphan	0.01%
Meperidine	0.01%
Nalorphine	0.01%

Acetaminophen	<0.01%	Glipizide	<0.01%	Penicillin G-Potassium	<0.01%
Acetylsalicylic Acid	<0.01%	L-Glutamic Acid	<0.01%	Penicillin G-Procaine	<0.01%
ε-Amino-n-caproic Acid	<0.01%	Glutethimide	<0.01%	Pentoxifylline	<0.01%
Ascorbic Acid	<0.01%	Glycopyrrolate	<0.01%	Phenothiazine	<0.01%
Benzoic Acid	<0.01%	Heparin	<0.01%	Phenylbutazone	<0.01%
Caffeine	<0.01%	Hippuric Acid	<0.01%	Polyethylene Glycol	<0.01%
Chlordiazepoxide	<0.01%	Hordenine	<0.01%	Prednisolone	<0.01%
Clenbuterol	<0.01%	Hydrocortisone	<0.01%	Primidone	<0.01%
Cotinine	<0.01%	Ibuprofen	<0.01%	Procainamide	<0.01%
Dexamethasone	<0.01%	Isoxsuprine	<0.01%	Procaine	<0.01%
Diclofenac	<0.01%	Lidocaine	<0.01%	Pseudoephedrine	<0.01%
Dimethyl Sulfoxide	<0.01%	Metaproterenol	<0.01%	Pyrantel	<0.01%
Dipyrone	<0.01%	Methadone	<0.01%	Pyrilamine	<0.01%
Ephedrine	<0.01%	Methaqualone	<0.01%	Pyrimethamine	<0.01%
Erythromycin	<0.01%	Methocarbamol	<0.01%	Quinidine	<0.01%
Ethyl p-aminobenzoate	<0.01%	Methylene Blue	<0.01%	Quinine	<0.01%
Fenprofen	<0.01%	Mitragynine	<0.01%	Rifampicin	<0.01%
Flunixin	<0.01%	Naproxen	<0.01%	Salbutamol	<0.01%
Folic Acid	<0.01%	Niacinamide	<0.01%	Salicylamide	<0.01%
Folinic Acid	<0.01%	Nicotine	<0.01%	Salicylic Acid	<0.01%
Furosemide	<0.01%	Nortriptyline	<0.01%	Theophylline	<0.01%
Gemfibrozil	<0.01%	Orphenadrine	<0.01%	Thiamine	<0.01%
Gentisic Acid	<0.01%	Oxyphenbutazone	<0.01%	Trimethoprim	<0.01%
				Trimipramine	<0.01%
				Uric Acid	<0.01%

ENHANCED KIT OXYMORPHONE/ OXYCODONE

Product# 102910 & 102915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Oxycodone	0.4 ng/ml
Oxymorphone	1.6 ng/ml
Hydrocodone	5.2 ng/ml
Hydromorphone	13 ng/ml
Codeine	30 ng/ml
Ethylmorphine	30 ng/ml

I-50 in Equine Urine

Oxycodone	0.6 ng/ml
Oxymorphone	1.9 ng/ml
Hydrocodone	9.0 ng/ml
Hydromorphone	41 ng/ml
Codeine	55 ng/ml
Ethylmorphine	53 ng/ml

I-50 in Canine Urine

Oxycodone	0.6 ng/ml
Oxymorphone	2.4 ng/ml
Hydrocodone	8.5 ng/ml
Hydromorphone	23 ng/ml
Codeine	55 ng/ml
Ethylmorphine	25 ng/ml

I-50 in Equine Plasma

Oxycodone	0.8 ng/ml
Oxymorphone	1.2 ng/ml
Hydrocodone	4.5 ng/ml
Hydromorphone	21 ng/ml
Codeine	25 ng/ml
Ethylmorphine	21 ng/ml

I-50 in Equine Serum

Oxycodone	1.0 ng/ml
Oxymorphone	1.0 ng/ml
Hydrocodone	2.5 ng/ml
Hydromorphone	29 ng/ml
Codeine	34 ng/ml
Ethylmorphine	27 ng/ml

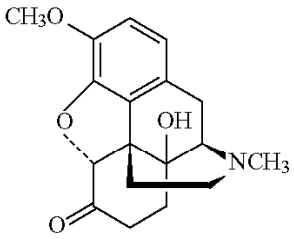
Precision:

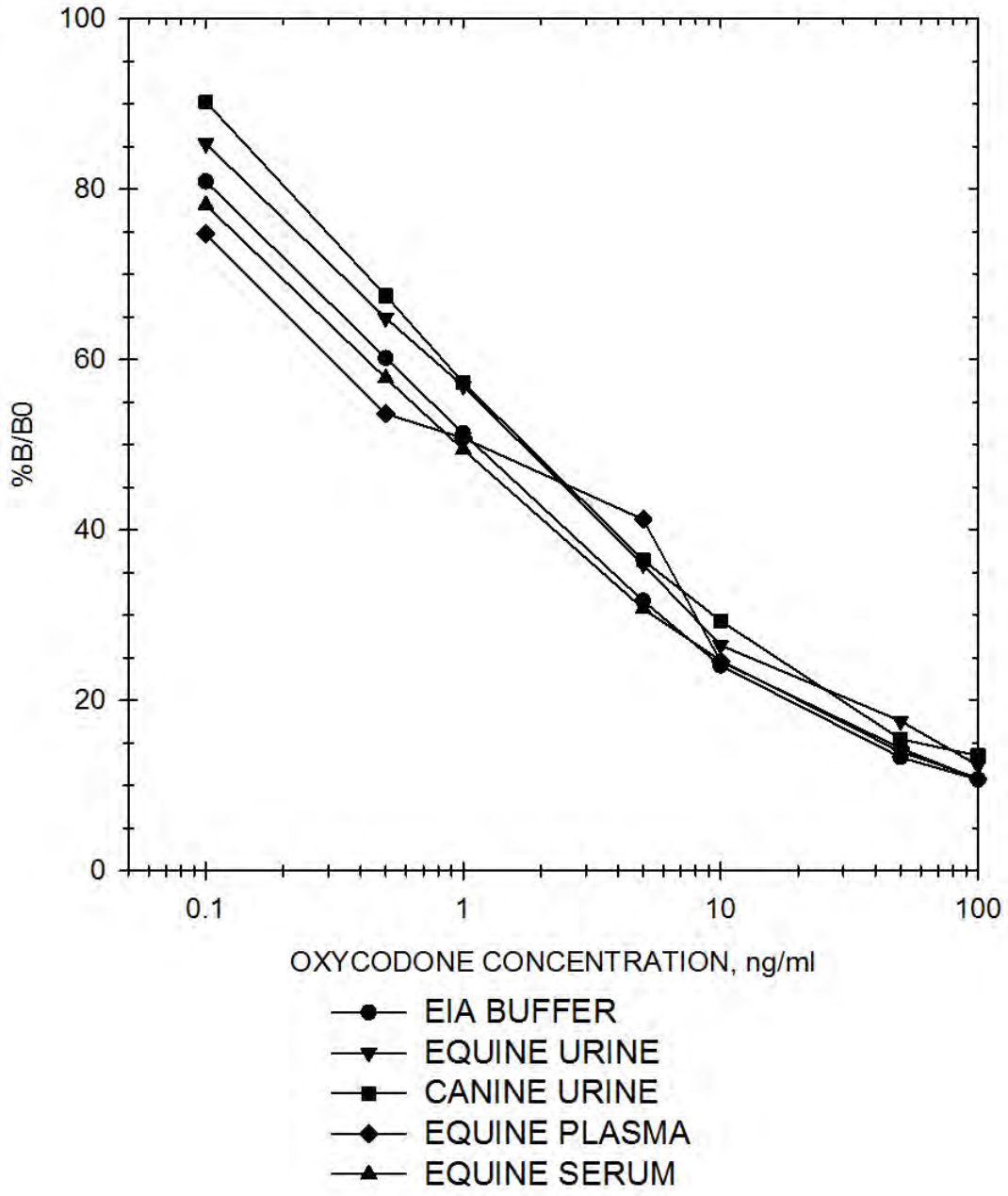
Intra-assay	2.83%
Inter-assay	7.61%

Note: Measuring wavelength was 650 nm**.**

OXYMORPHONE/OXYCODONE STANDARD CURVES

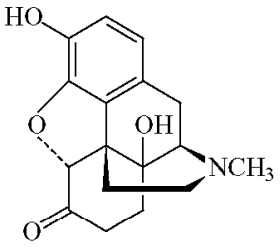
Oxycodone

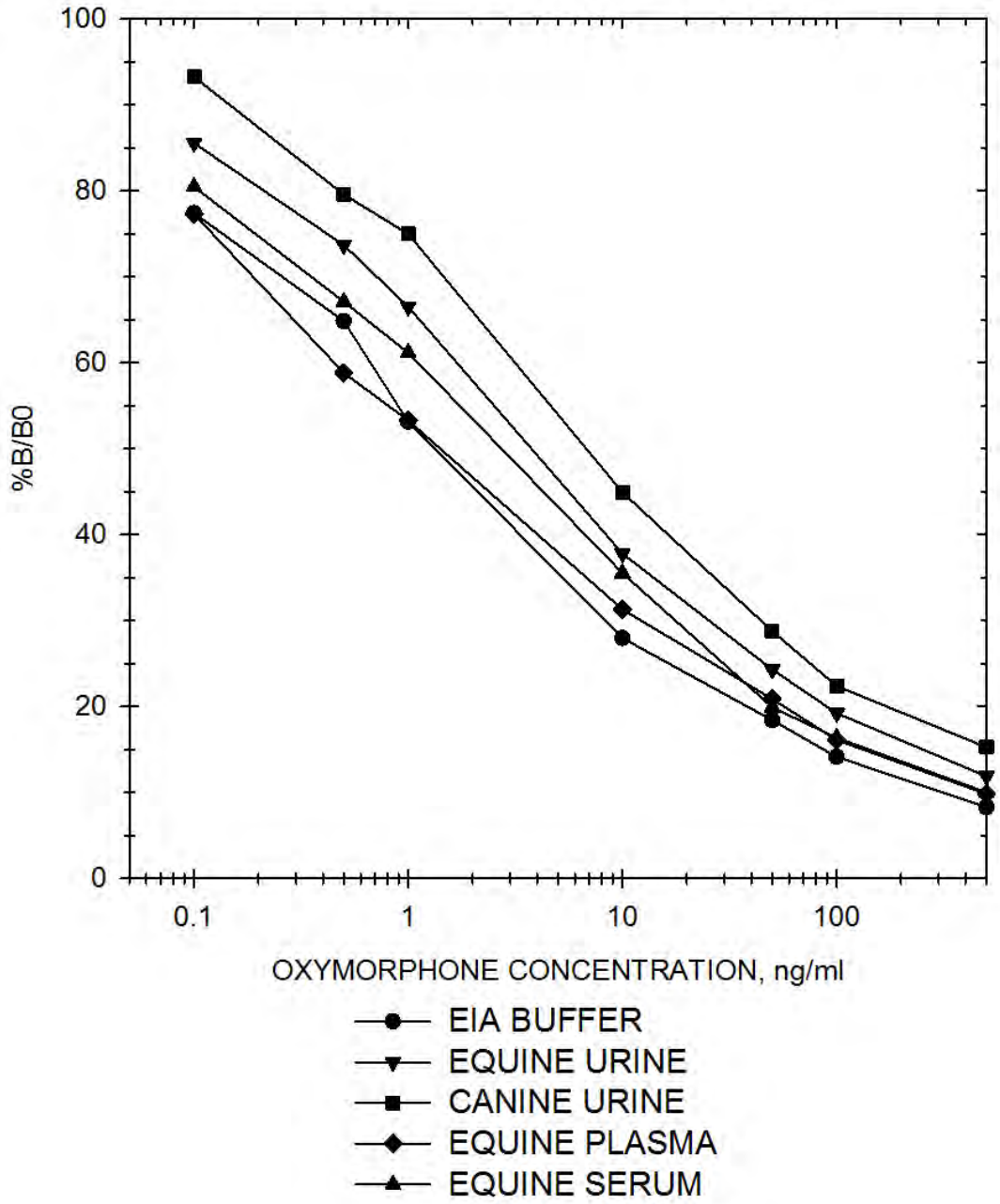




OXYMORPHONE/OXYCODONE STANDARD CURVES

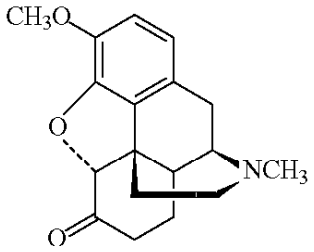
Oxymorphone

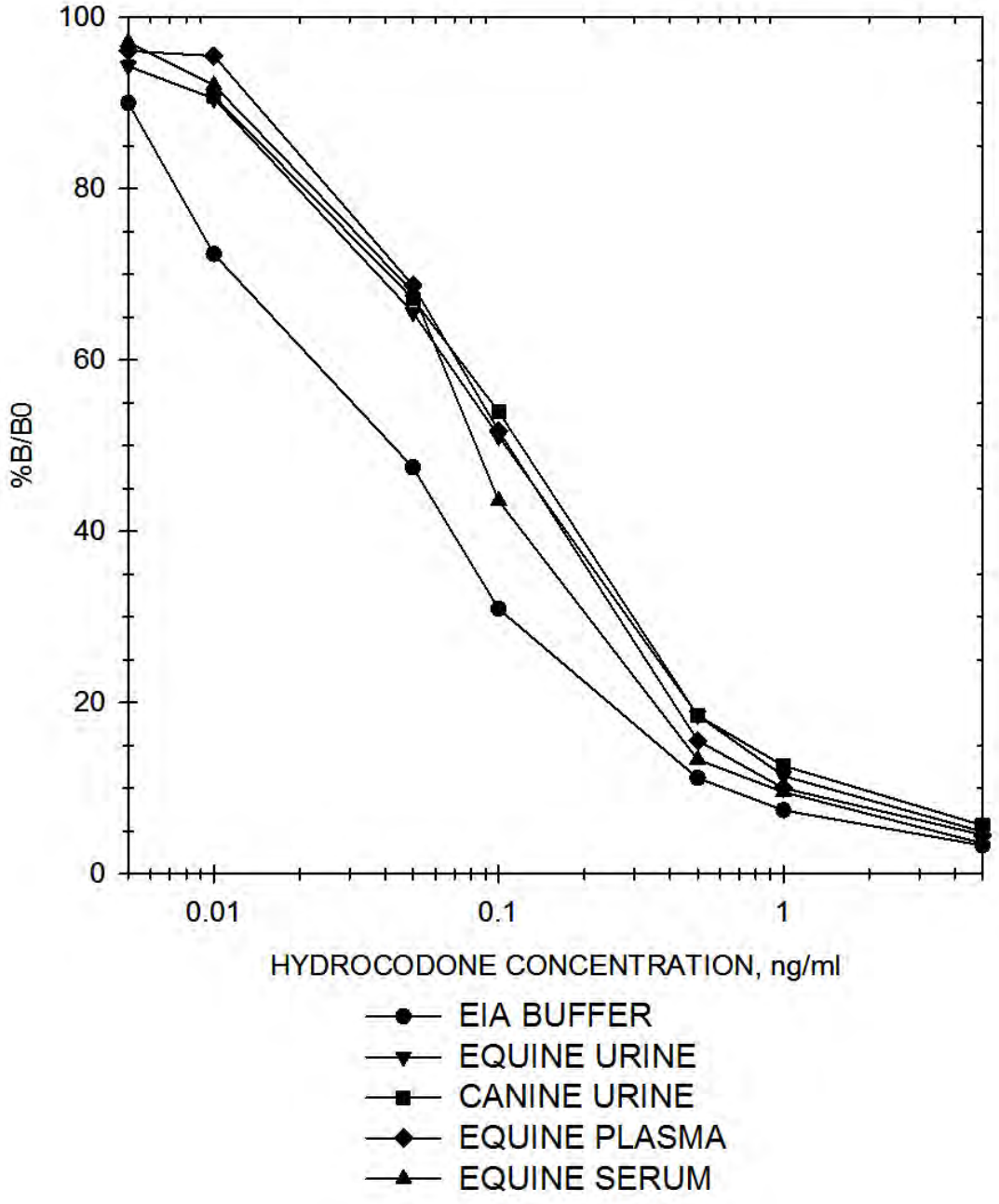




OXYMORPHONE/OXYCODONE STANDARD CURVES

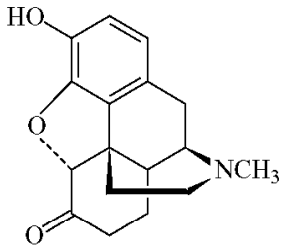
Hydrocodone

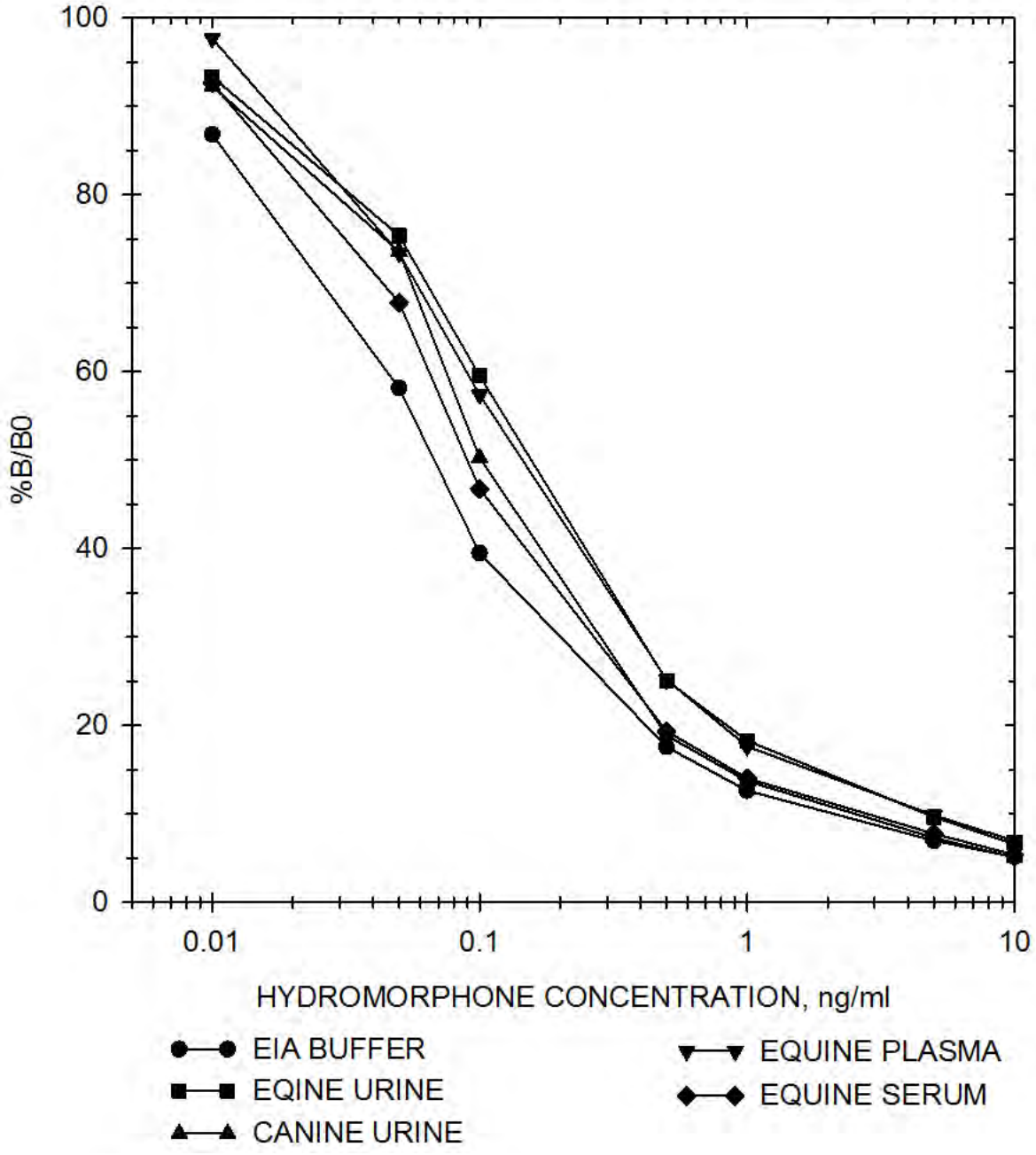




OXYMORPHONE/OXYCODONE STANDARD CURVES

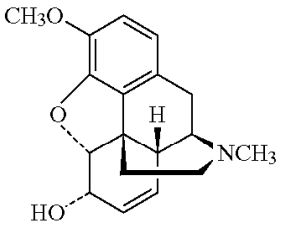
Hydromorphone

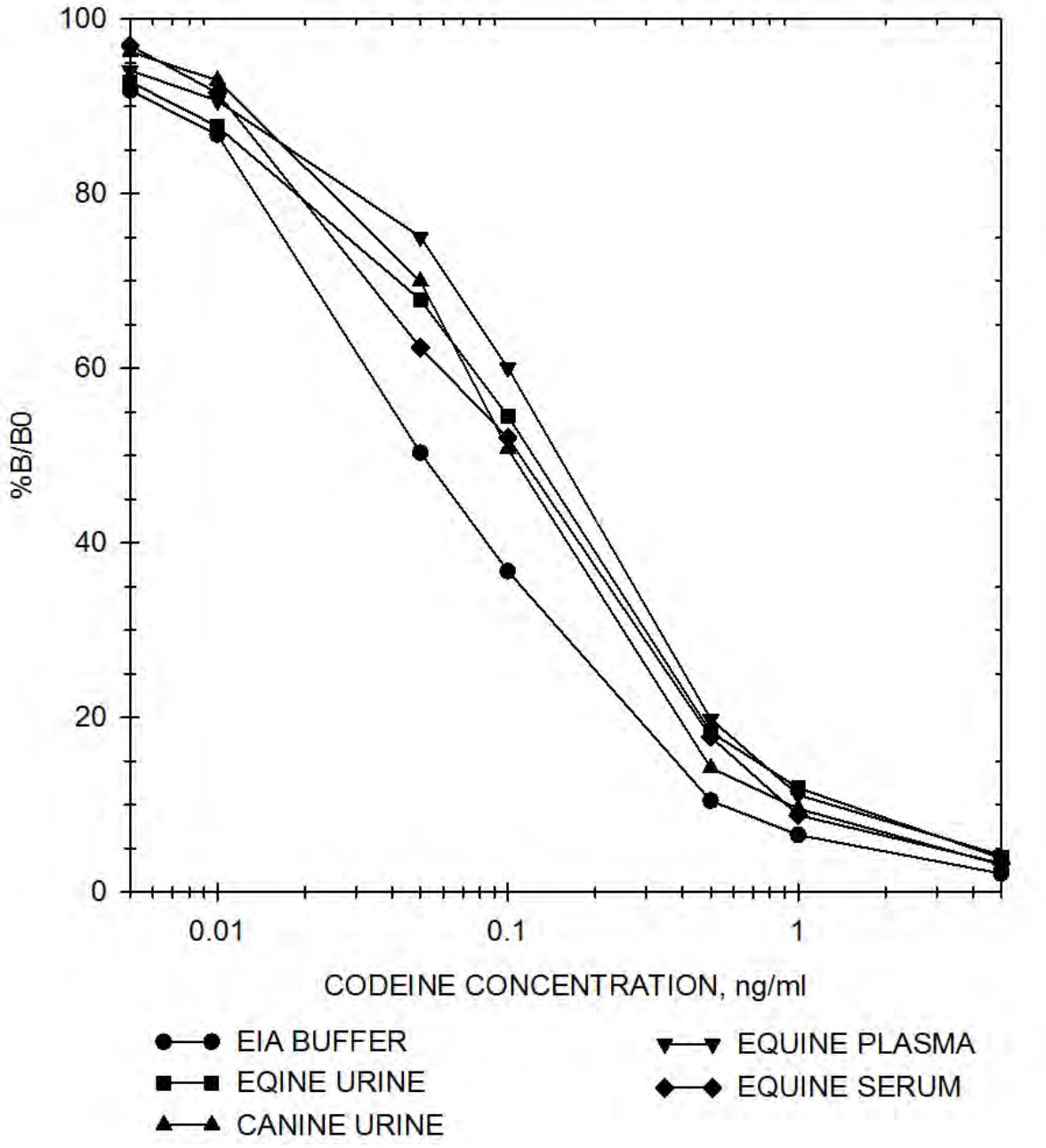




OXYMORPHONE/OXYCODONE STANDARD CURVES

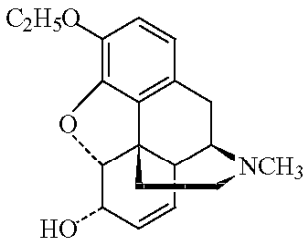
Codeine

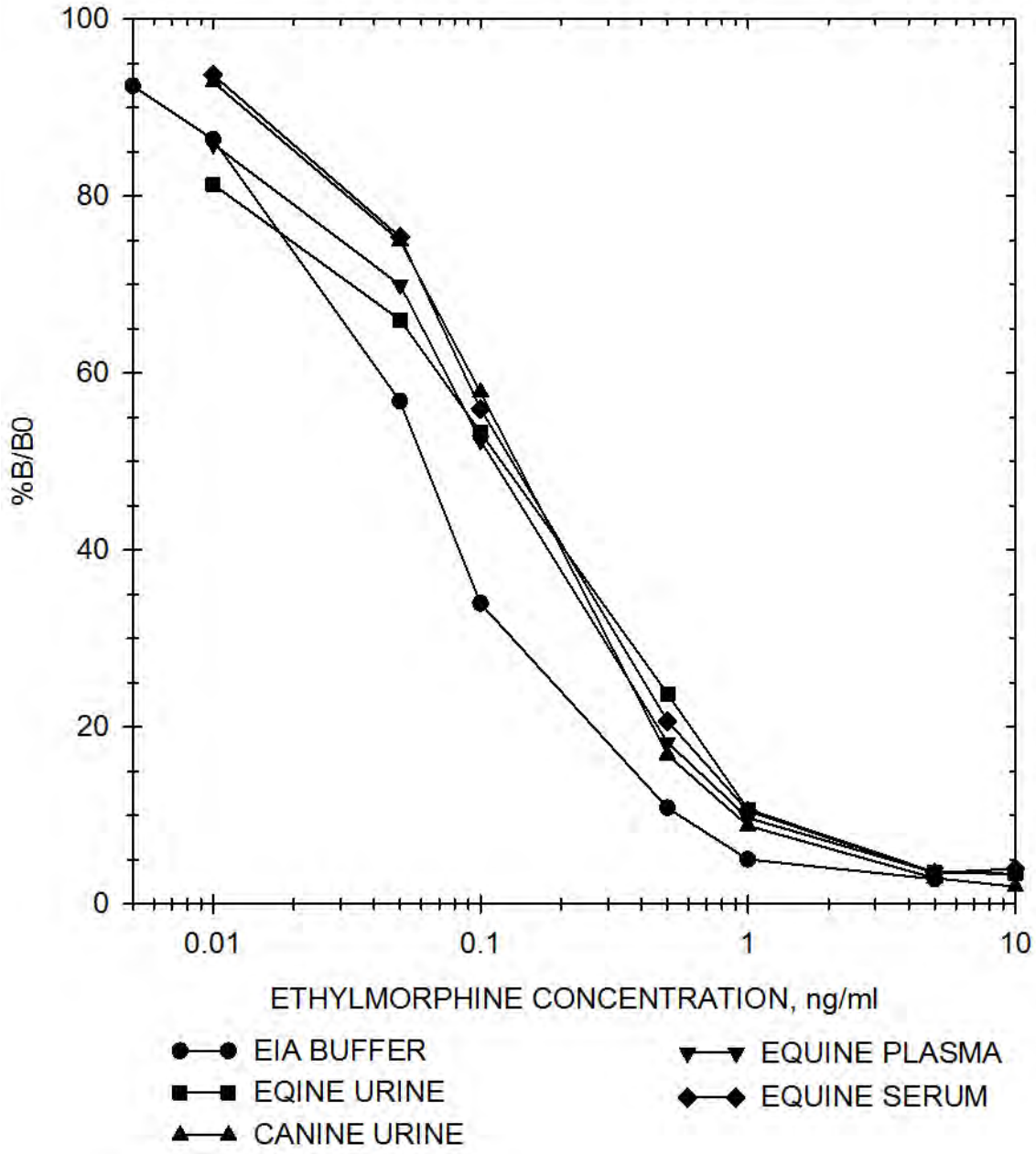




OXYMORPHONE/OXYCODONE STANDARD CURVES

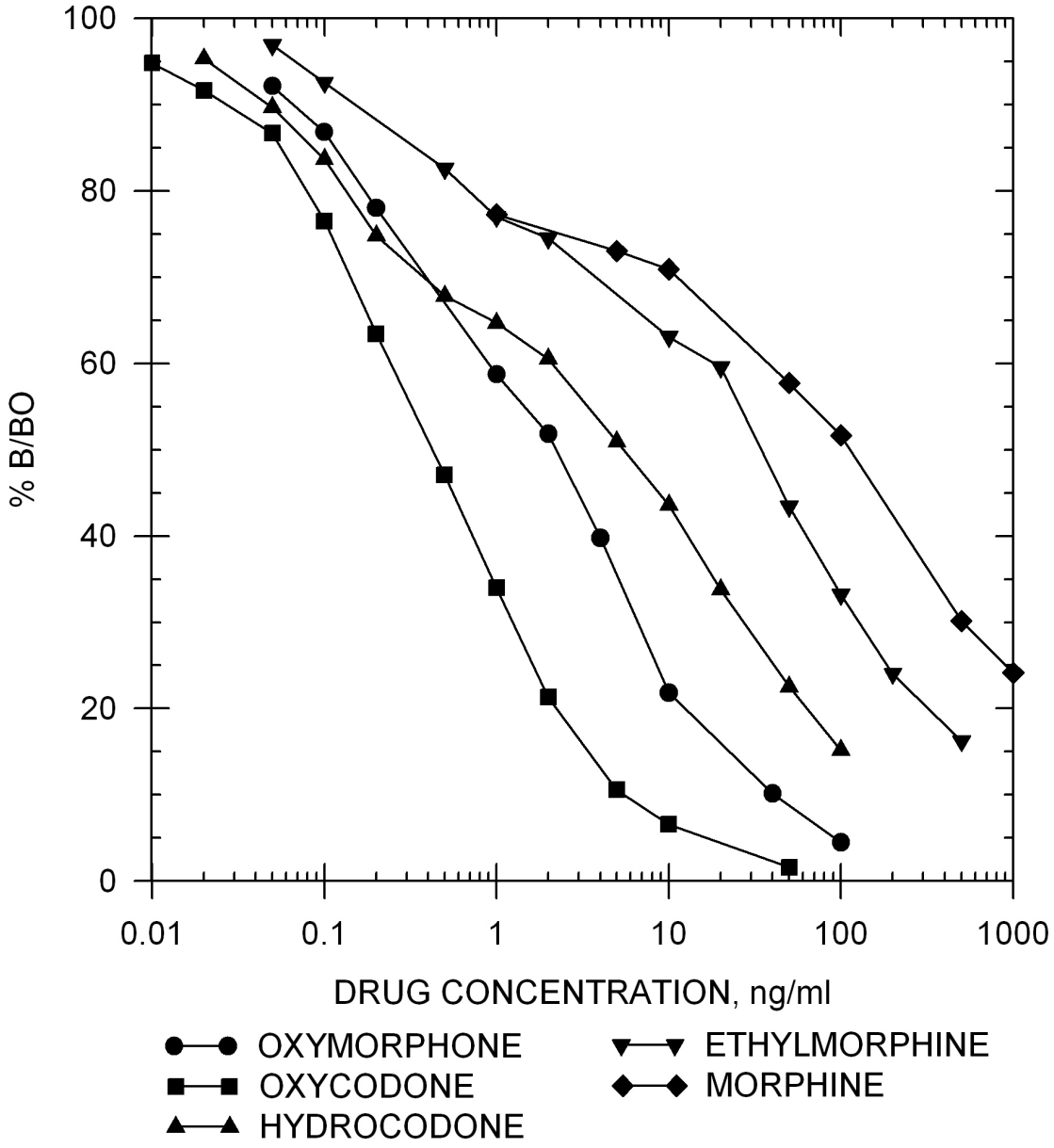
Ethylmorphine





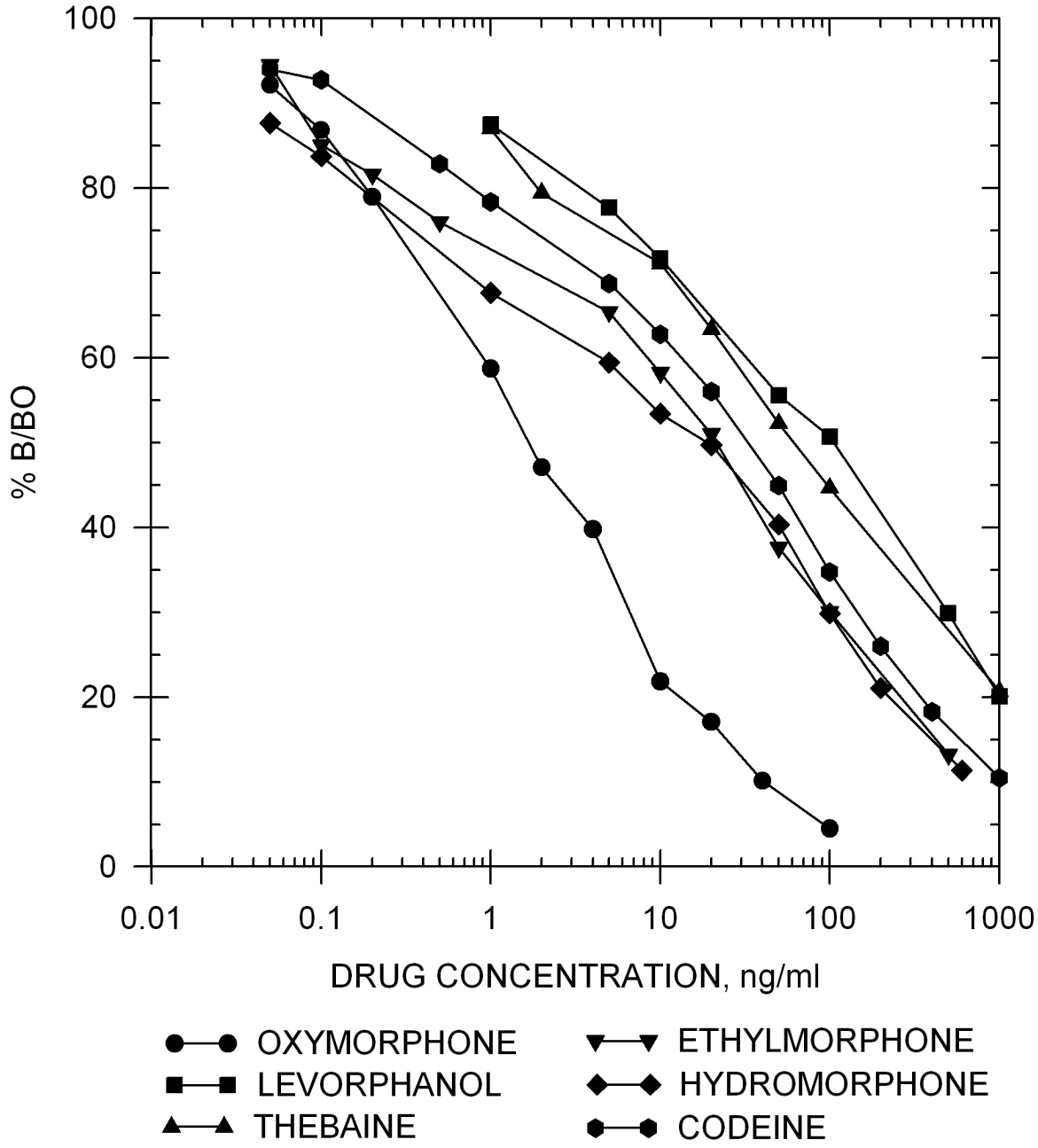
OXYMORPHONE/OXYCODONE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



OXYMORPHONE/OXYCODONE STANDARD CURVES

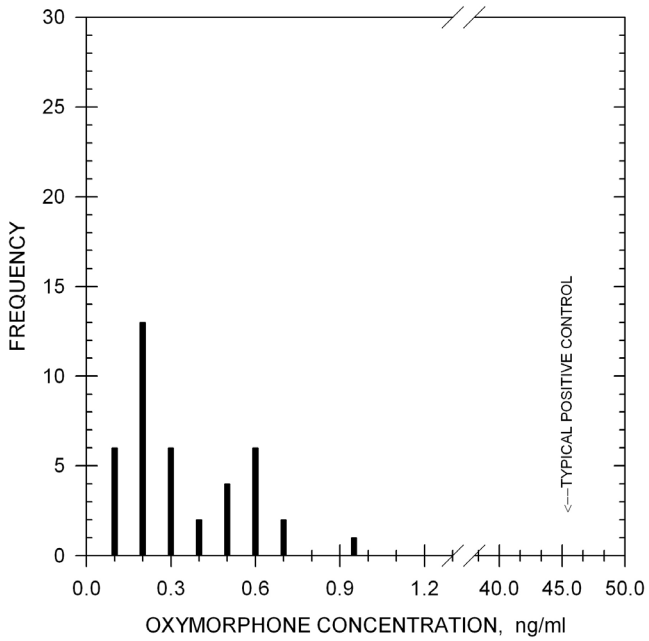
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.95 ng/ml.

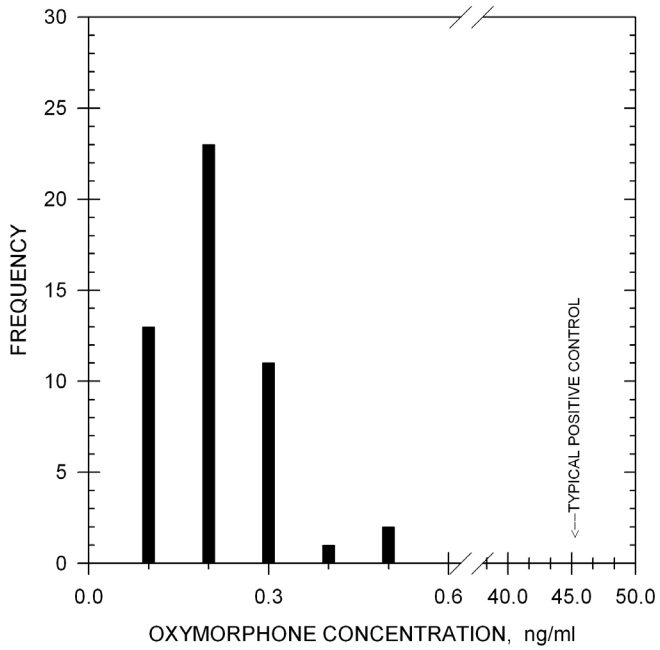
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race canine urine samples has shown no background levels above 0.5 ng/ml.

Sample Treatment: No sample dilution is necessary.

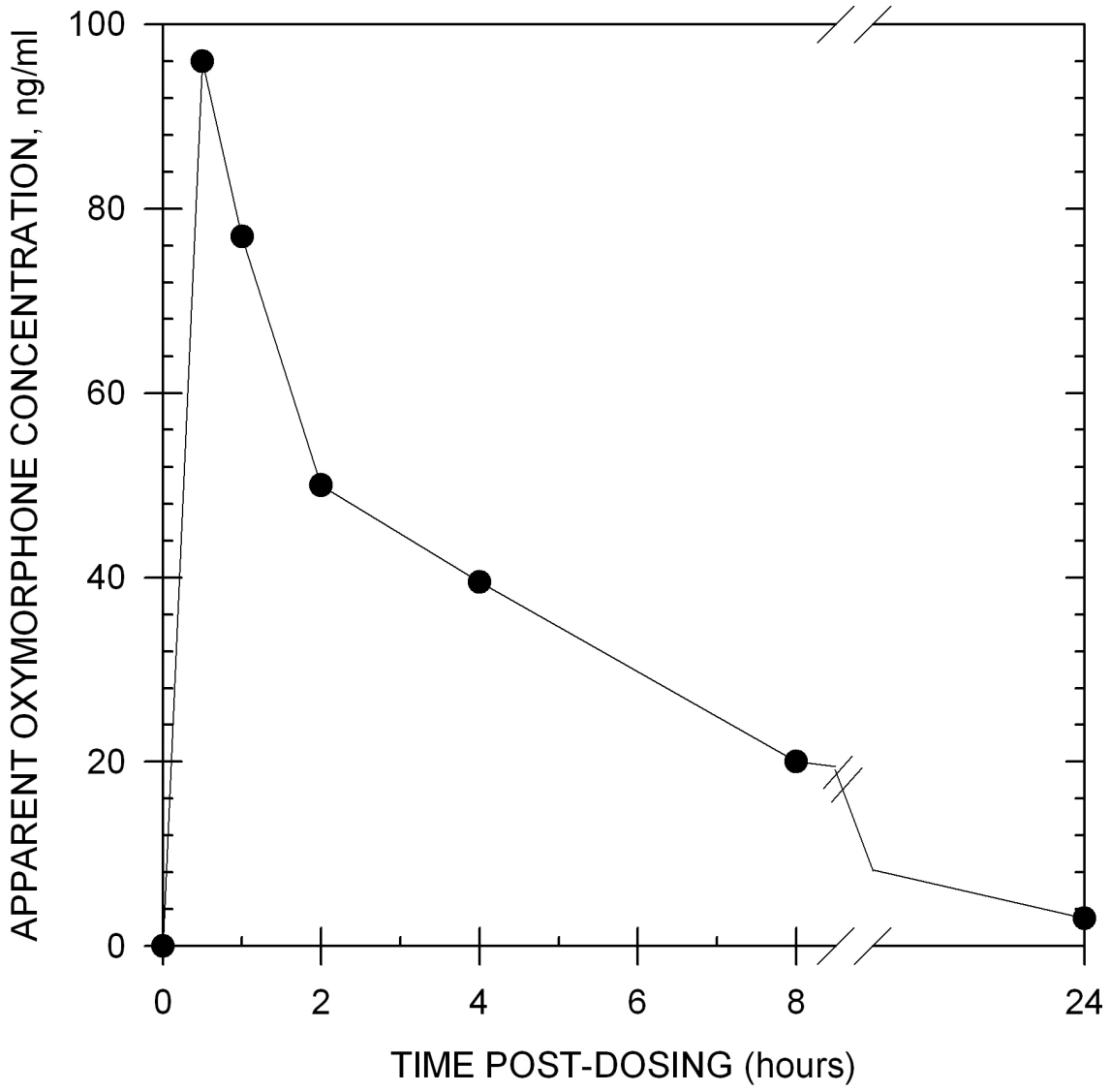


ADDITIONAL BACKGROUND LEVELS

Equine Serum and Plasma: A small dilution (1:1) may be necessary. In some cases, an extraction may be necessary.

TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 5 mg of oxymorphone by intravenous injection to one horse, the presence of this drug was detected for 24 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Oxycodone	400%
Oxymorphone	100%
Hydrocodone	31%
Hydromorphone	12%
Codeine	5.3%
Ethylmorphine	5.3%
Thebaine	3.4%
Morphine	1.7%
Levorphanol	1.4%
Noroxymorphone	0.53%
Naloxone	0.23%
Norcodeine	0.02%
Etorphine	<0.02%
Amitriptyline	0.01%

Acetaminophen	<0.01%	Flunixin	<0.01%	Orphenadrine	<0.01%
Alfentanil	<0.01%	Furosemide	<0.01%	Oxyphenbutazone	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Gemfibrozil	<0.01%	Penicillin G-Potassium	<0.01%
Anileridine	<0.01%	Gentisic Acid	<0.01%	Penicillin G-Procaine	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Glipizide	<0.01%	Pentazocine	<0.01%
Aspirin	<0.01%	Glutethimide	<0.01%	Pentoxifylline	<0.01%
Buprenorphine	<0.01%	Glycopyrrolate	<0.01%	Phenazocine	<0.01%
Butorphanol	<0.01%	Hordenine	<0.01%	Phencyclidine	<0.01%
Carfentanil	<0.01%	Hydrocortisone	<0.01%	Phenothiazine	<0.01%
Chlordiazepoxide	<0.01%	Ibuprofen	<0.01%	Phenylbutazone	<0.01%
Chlorpromazine	<0.01%	Imipramine	<0.01%	Polyethylene Glycol	<0.01%
Clenbuterol	<0.01%	Levallorphan	<0.01%	Prednisolone	<0.01%
Cotinine	<0.01%	Lidocaine	<0.01%	Primadone	<0.01%
Dextromethorphan	<0.01%	Lofentanil	<0.01%	Procaine	<0.01%
Dextromoramide	<0.01%	Meperidine	<0.01%	Procainamide	<0.01%
Dezocine	<0.01%	Metaproterenol	<0.01%	Pyrantel	<0.01%
Diclofenac	<0.01%	Methadone	<0.01%	Quinidine	<0.01%
Dihydrocodeine	<0.01%	Methaqualone	<0.01%	Quinine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methocarbamol	<0.01%	Salbutamol	<0.01%
Diprenorphine	<0.01%	Methylene Blue	<0.01%	Salicylamide	<0.01%
Dipyrone	<0.01%	6α-Methylprednisolone	<0.01%	Salicylic Acid	<0.01%
Doxepin	<0.01%	Nalbuphine	<0.01%	Sufentanil	<0.01%
Erythromycin	<0.01%	Nalorphine	<0.01%	Theophylline	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Naproxen	<0.01%	Thiamine	<0.01%
Fenoprofen	<0.01%	Niacinamide	<0.01%	Tramadol	<0.01%
Fentanyl	<0.01%	Normorphone	<0.01%	Trimipramine	<0.01%
		Nortriptyline	<0.01%		

ENHANCED KIT

PENTAZOCINE

Product #103110 & 103115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Pentazocine 0.6 ng/ml

I-50 in Equine Urine (Diluted 1:1)		I-50 in Canine Urine	
Pentazocine	0.8 ng/ml	Pentazocine	0.3 ng/ml
I-50 in Equine Plasma		**I-50 in Equine Serum**	
Pentazocine	0.6 ng/ml	Pentazocine	0.9 ng/ml

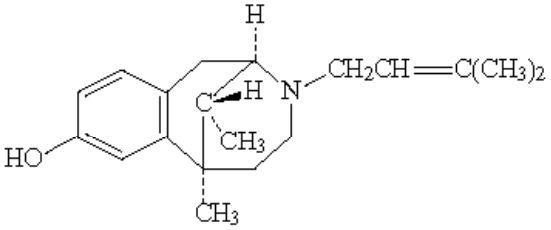
Precision:

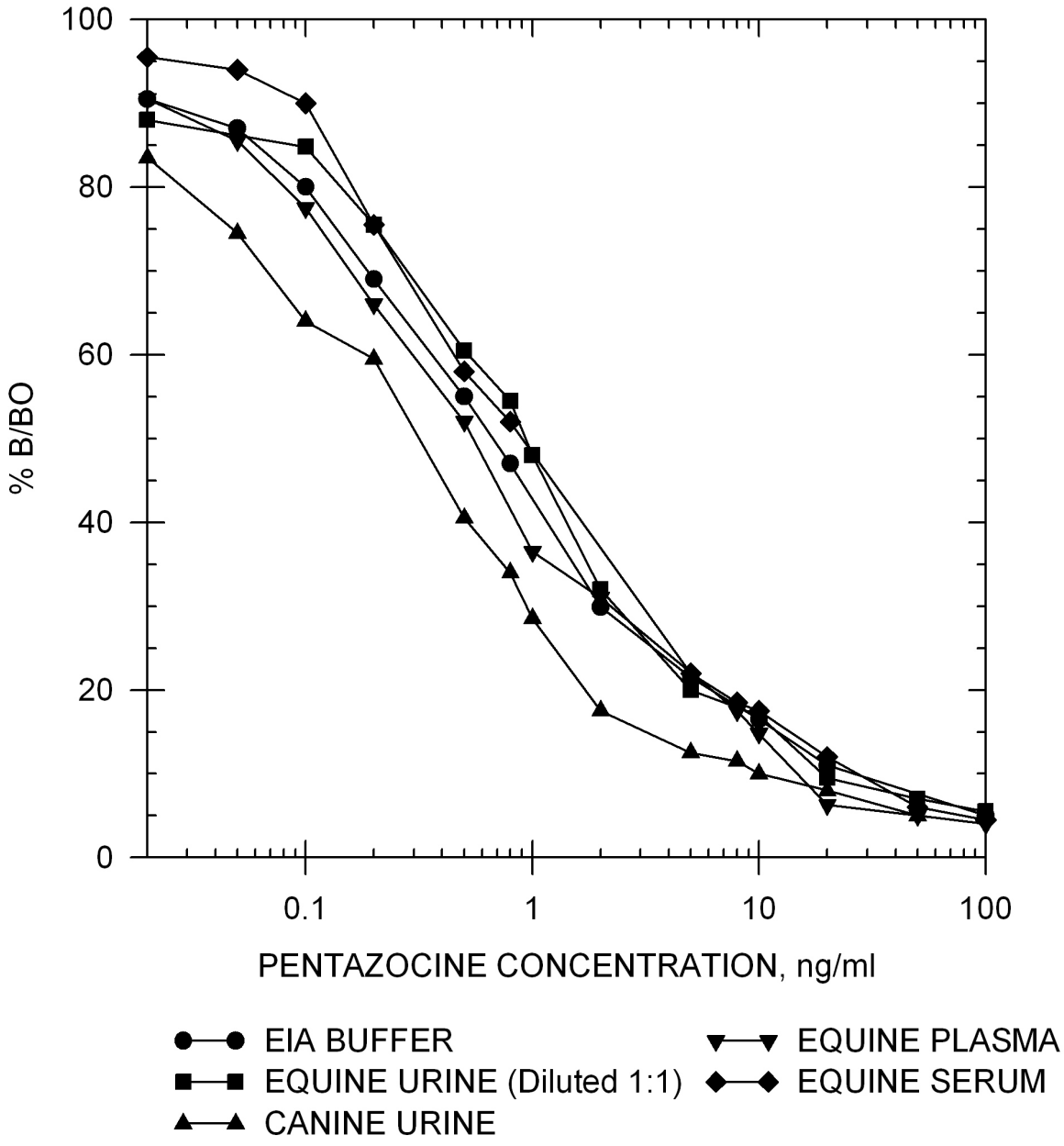
Intra-assay	4.31%
Inter-assay	7.72%

Note: Measuring wavelength was 650 nm.

PENTAZOCINE STANDARD CURVES

Pentazocine

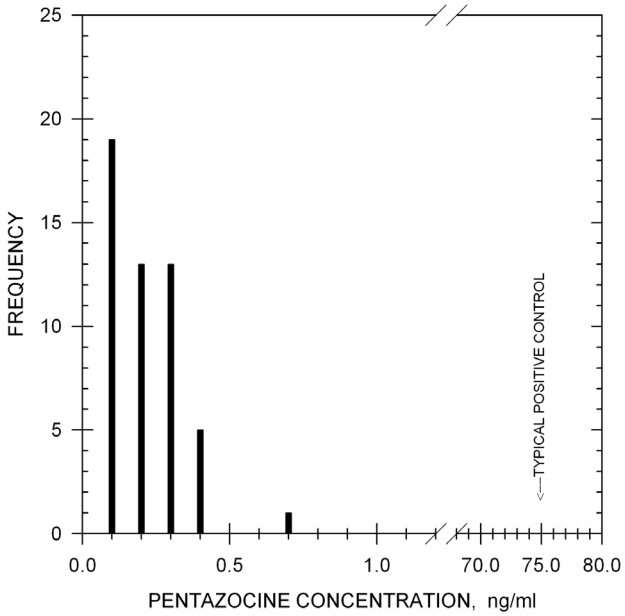




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 50 post-race equine urine samples diluted 1:1 has shown no background levels above 0.6 ng/ml.

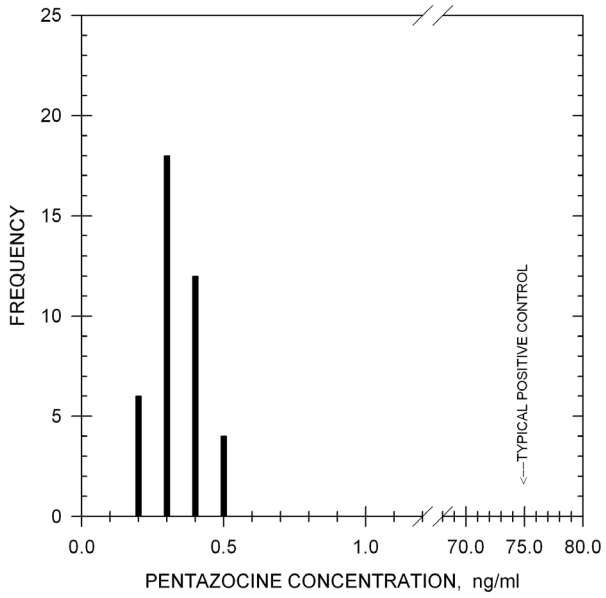
Sample Treatment: No sample treatment, or a 1:1 dilution (i.e. 1 part sample to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.5 ng/ml.

Sample Treatment: No sample dilution is necessary.

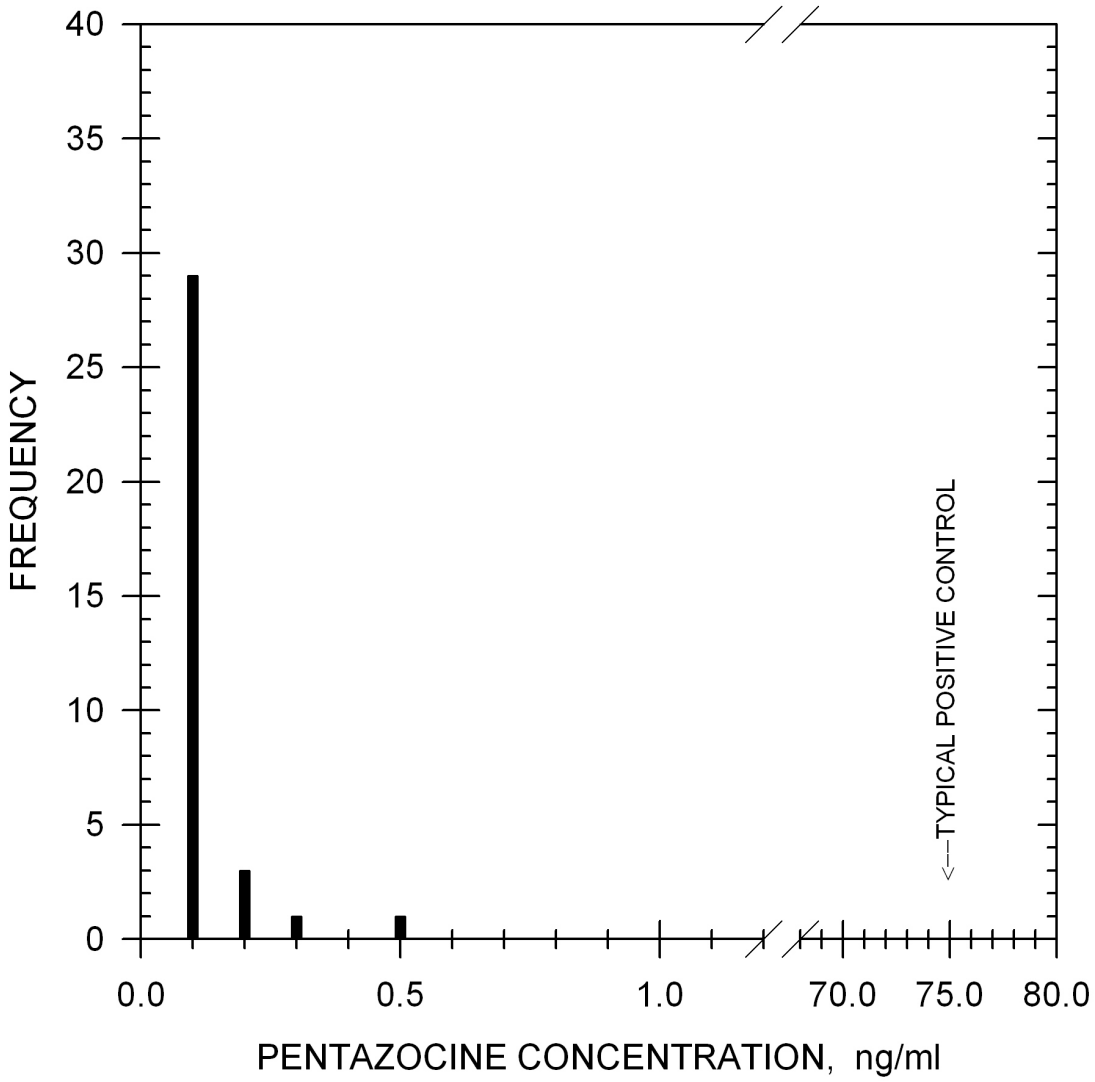


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 34 post-race equine plasma samples has shown no background levels above 0.4 ng/ml.

Sample Treatment: No sample dilution is necessary.

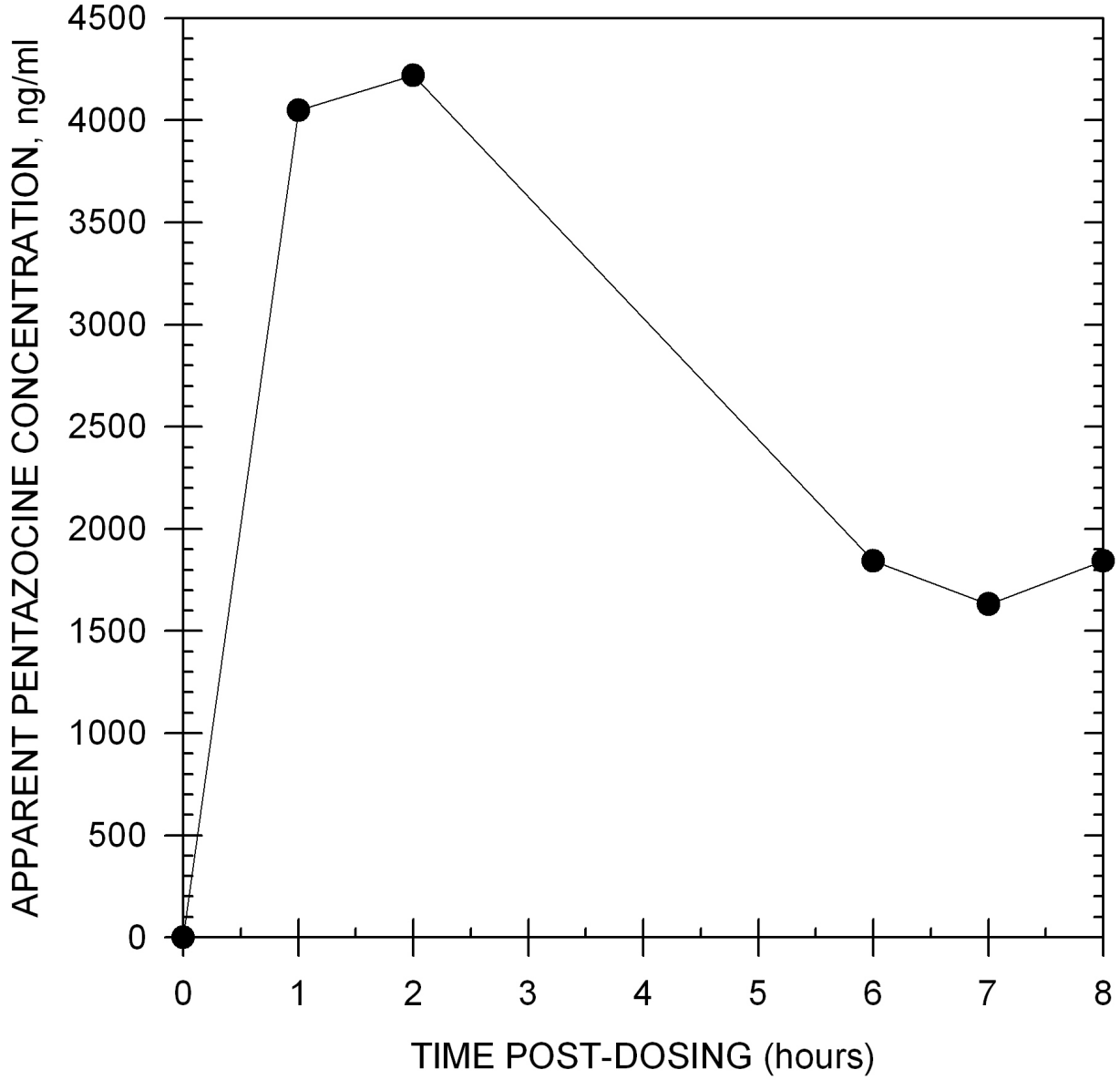
Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 50 mg of pentazocine by intramuscular injection to one horse, the presence of this drug was detected for 8 hours in equine urine. Because all post-dose samples exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Pentazocine	100%
Carfentanil	0.01%

Acepromazine	<0.01%	Isoxsuprine	<0.01%
Acetaminophen	<0.01%	Levallorphan	<0.01%
Acetylsalicylic Acid	<0.01%	Levorphanol	<0.01%
Alfentanil	<0.01%	Lidocaine	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Lofentanil	<0.01%
Amitriptyline	<0.01%	Loperamide	<0.01%
Anileridine	<0.01%	Meperidine	<0.01%
Ascorbic Acid	<0.01%	Metaproterenol	<0.01%
Benzoic Acid	<0.01%	Methadone	<0.01%
Buprenorphine	<0.01%	Methaqualone	<0.01%
Butorphanol	<0.01%	Methocarbamol	<0.01%
Caffeine	<0.01%	Methylene Blue	<0.01%
Chlordiazepoxide	<0.01%	6-αMethylprednisolone	<0.01%
Chlorpromazine	<0.01%	Morphine	<0.01%
Clenbuterol	<0.01%	Nalbuphine	<0.01%
Codeine	<0.01%	Nalorphine	<0.01%
Cotinine	<0.01%	Naloxone	<0.01%
Dexamethasone	<0.01%	Naproxen	<0.01%
Dextromethorphan	<0.01%	Niacinamide	<0.01%
Dextromoramide	<0.01%	Nicotine	<0.01%
Dezocine	<0.01%	Nortriptyline	<0.01%
Diclofenac	<0.01%	Orphenadrine	<0.01%
Dimethyl Sulfoxide	<0.01%	Oxyphenbutazone	<0.01%
Diprenorphine	<0.01%	PCP	<0.01%
Dipyrone	<0.01%	Pencillin G- Potassium	<0.01%
Doxepin	<0.01%	Pencillin G- Procaine	<0.01%
Ephedrine	<0.01%	Pentoxifylline	<0.01%
Erythromycin	<0.01%	Phenazine	<0.01%
Ethyl p-Amino-Benzoate	<0.01%	Phenothiazine	<0.01%
Ethylmorphine	<0.01%	Phenylbutazone	<0.01%
Etorphine	<0.01%	Polyethylene Glycol	<0.01%
Fenoprofen	<0.01%	Prednisolone	<0.01%
Fentanyl	<0.01%	Primadone	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Folic Acid	<0.01%	Procaineamide	<0.01%
Folinic Acid	<0.01%	Promazine	<0.01%
Furosemide	<0.01%	Pseudoephedrine	<0.01%
Gemfibrozil	<0.01%	Pyrantel	<0.01%
Gentisic Acid	<0.01%	Pyrilamine	<0.01%
Glipizide	<0.01%	Pyrimethamine	<0.01%
L-Glutamic Acid	<0.01%	Quinidine	<0.01%
Glutethimide	<0.01%	Quinine	<0.01%
Glycopyrrolate	<0.01%	Salbutamol (albuterol)	<0.01%
Heparin	<0.01%	Salicylamide	<0.01%
Heroin	<0.01%	Salicylic Acid	<0.01%
Hippuric Acid	<0.01%	Sufentanil	<0.01%
Hordenine	<0.01%	Theophylline	<0.01%
Hydrocodone	<0.01%	Thiamine	<0.01%
Hydrocortisone	<0.01%	Trimethoprim	<0.01%
Hydromorphone	<0.01%	Trimipramine	<0.01%
Ibuprofen	<0.01%	Uric Acid	<0.01%
Imipramine	<0.01%		

ENHANCED KIT
PHENYLBUTAZONE

Product #104710-1 &
104715-1 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Phenylbutazone	139 ng/ml
Oxyphenbutazone	439 ng/ml

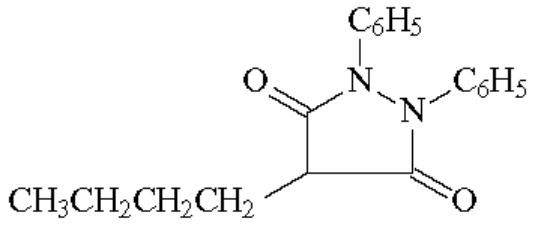
I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (1:9)**	
Phenylbutazone	370 ng/ml	Phenylbutazone	245 ng/ml
I-50 in Equine Plasma (Diluted 1:4)		**I-50 in Equine Serum**	
Phenylbutazone	1175 ng/ml	Phenylbutazone	2040 ng/ml

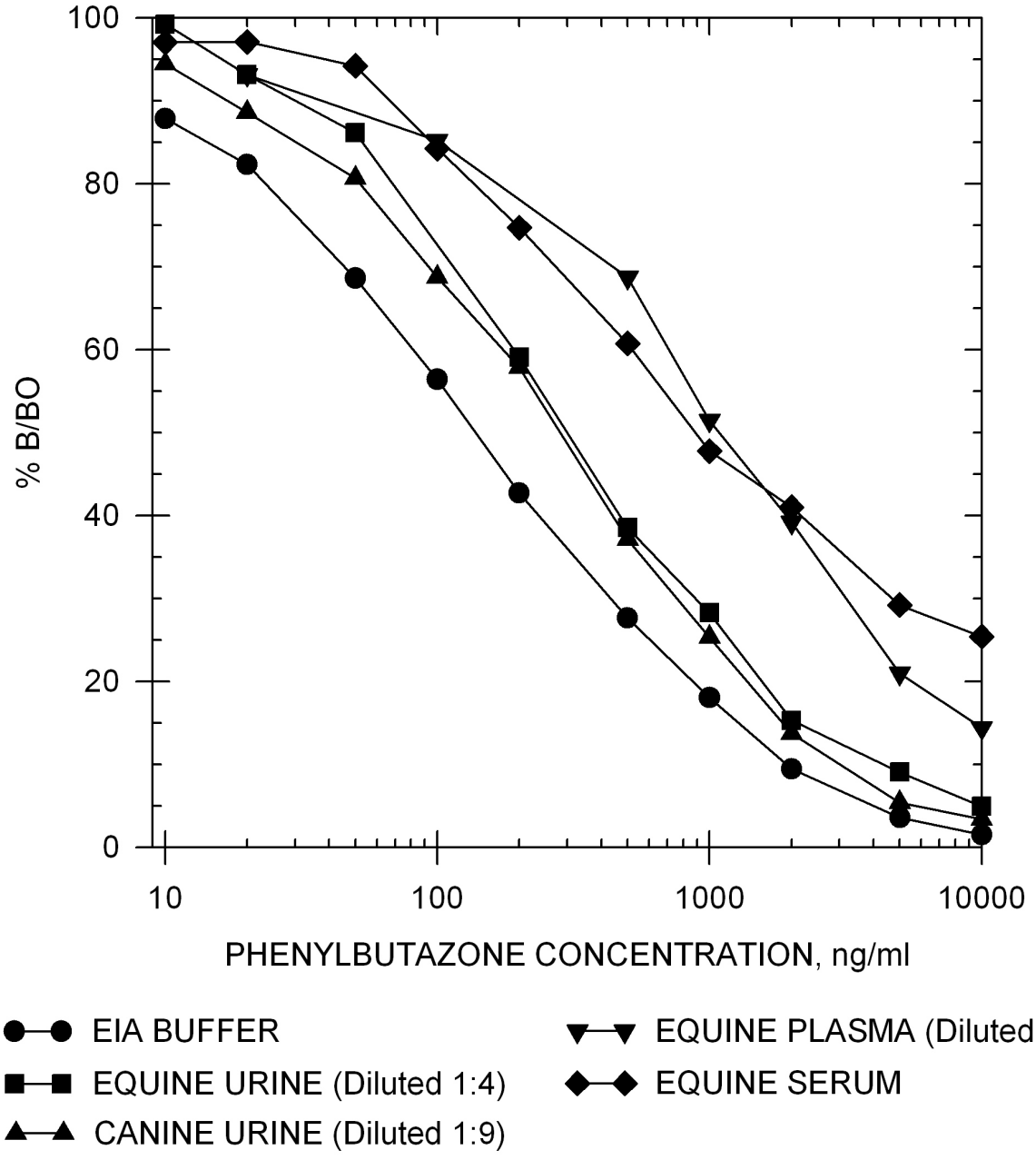
Precision:	Intra-assay	7.51 %
	Inter-assay	7.23 %

Note: Measuring wavelength was 650 nm**.**

PHENYLBUTAZONE STANDARD CURVES

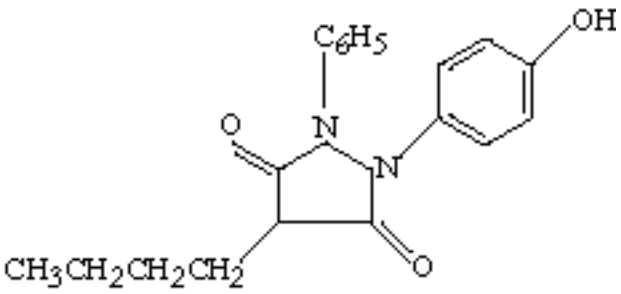
Phenylbutazone



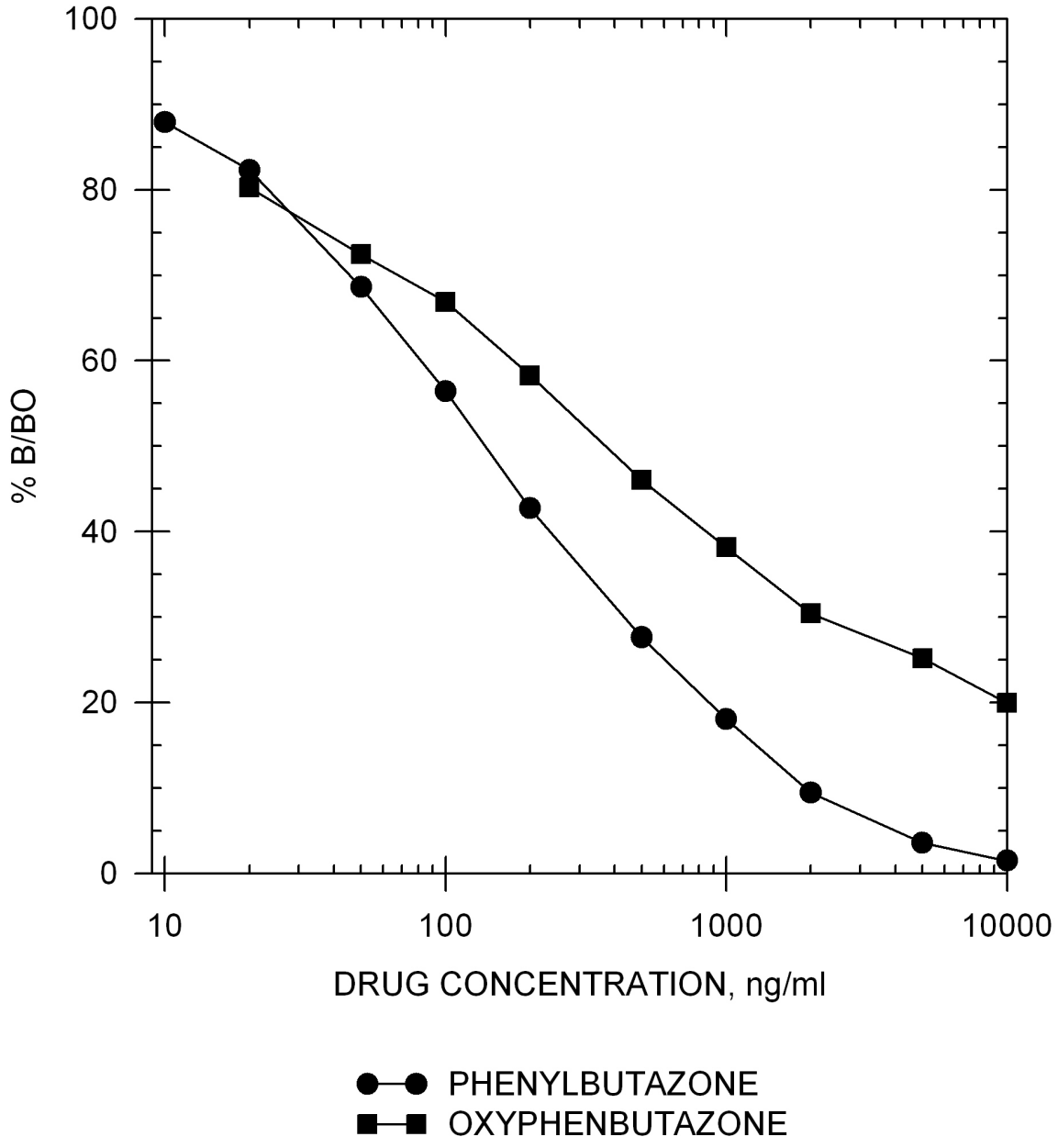


PHENYLBUTAZONE STANDARD CURVES

Oxyphenbutazone



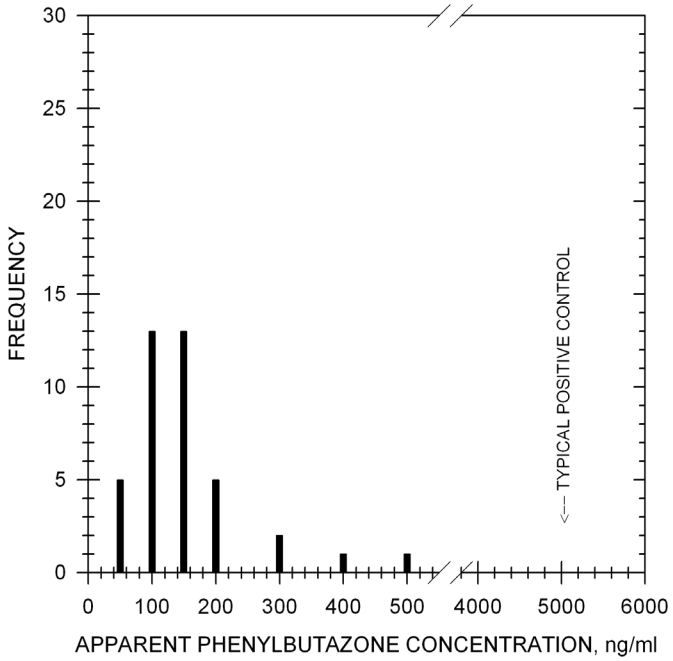
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 equine urine samples diluted 1:4 has shown no background levels above 455 ng/ml.

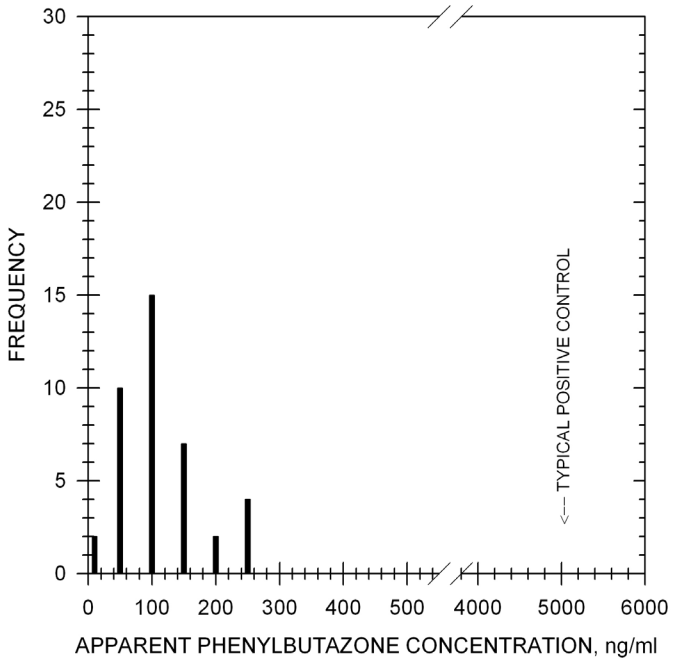
Sample Treatment: A 1:4 dilution (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples diluted 1:9 has shown no background levels above 250 ng/ml.

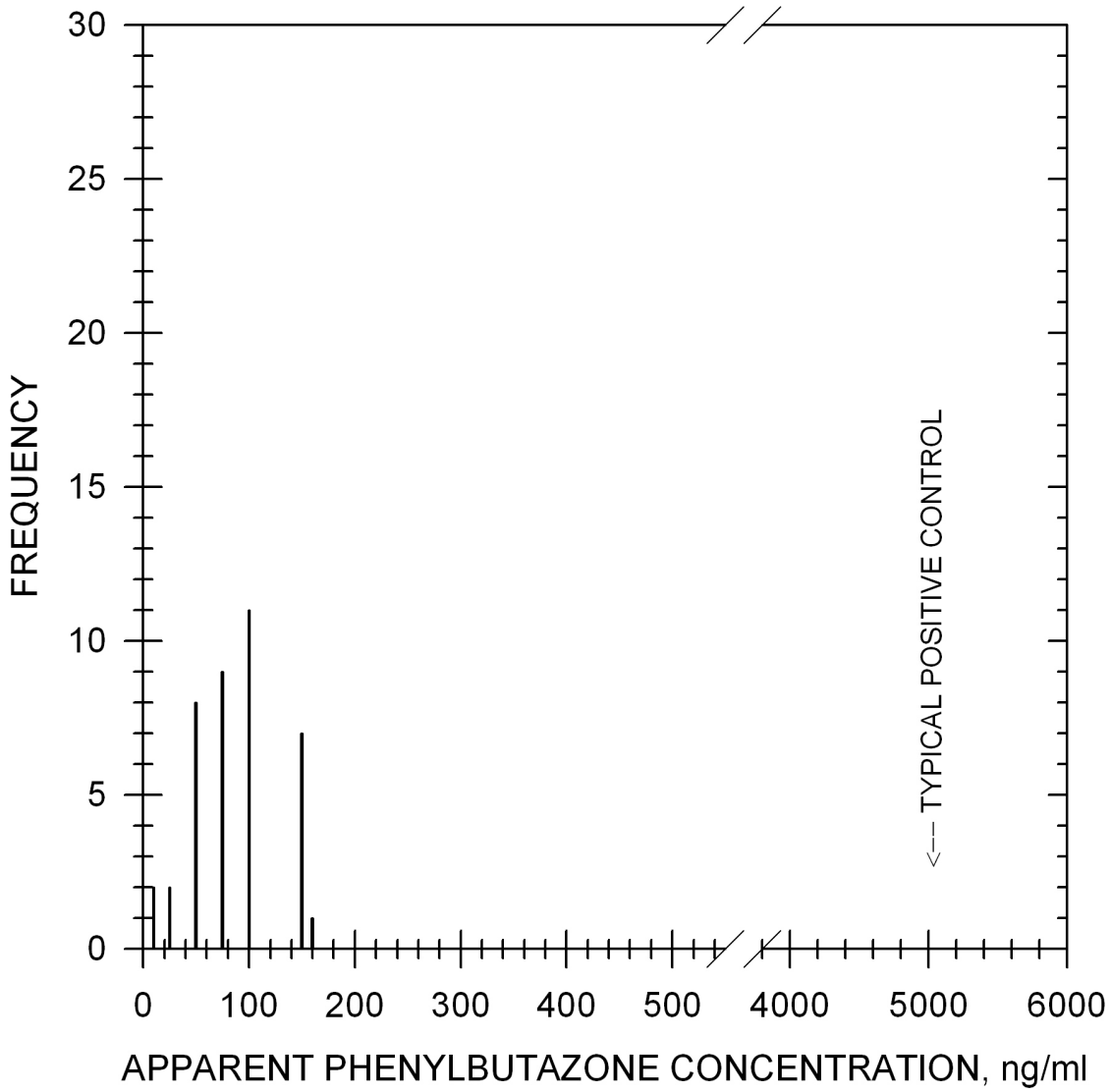
Sample Treatment: A 1:9 dilution (i.e. 1 part sample to 9 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL EQUINE PLASMA BACKGROUND LEVELS

Backgrounds: Analysis of 40 equine plasma samples diluted 1:4 has shown no background levels above 160 ng/ml.

Sample Treatment: A 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.

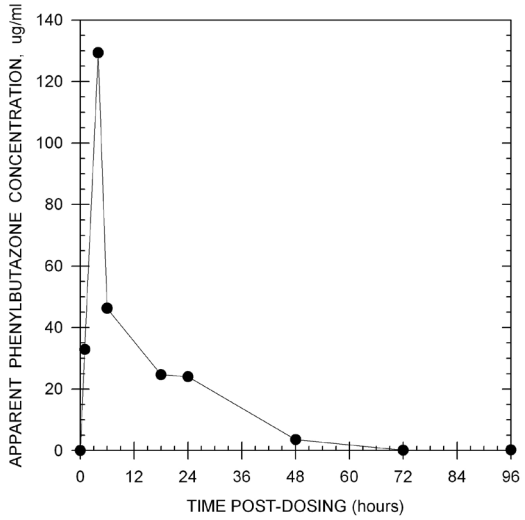


TYPICAL EQUINE URINE DURATION OF DETECTION

Duration of Detection:

After administration of 2 g of Phenylbutazone by intraveneous injection to one horse, the presence of this drug was detected for at least 48 hours in equine urine. Time points were diluted 1:4 according to the recommended sample treatment.

Because post-dose time points 1 to 24 hour exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated to the recommended 1:4 dilution.

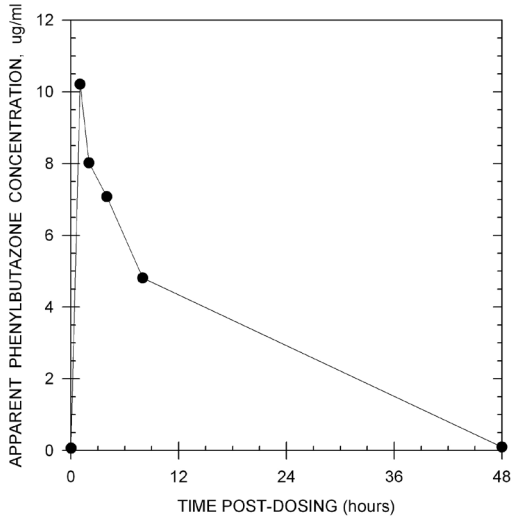


TYPICAL EQUINE PLASMA DURATION OF DETECTION

Duration of Detection:

After administration of 2 g of Phenylbutazone by intraveneous injection to one horse, the presence of this drug was detected for at least 8 hours in equine plasma. Time points were diluted 1:4 according to the recommended sample treatment.

Because post-dose time points 1 to 8 hour exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated to the recommended 1:4 dilution.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Phenylbutazone	100%
Oxyphenbutazone	23%
Orphenadrine	2.7%
Methylene Blue	2.4%
Carbamazepine	0.94%
Promazine	0.83%
Reserpine	0.52%
Clobetasone Butyrate	0.23%
Acepromazine	0.14%
Glycopyrrolate	<0.10%

Acetaminophen	<0.01%	Etodolac	<0.01%	Nandrolone	<0.01%
Amcinonide	<0.01%	Fenbufen	<0.01%	Naproxen	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Fenoprofen	<0.01%	Nefopam	<0.01%
Aminophylline	<0.01%	Flufenamic Acid	<0.01%	Niacinamide	<0.01%
Amiprilose	<0.01%	Flumethasone	<0.01%	Niflumic Acid	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Flunisolide	<0.01%	Pentazocine	<0.01%
Aspirin	<0.01%	Flunixin	<0.01%	Pentoxifylline	<0.01%
Atropine	<0.01%	Fluphenazine	<0.01%	Phencyclidine	<0.01%
Benzydamine	<0.01%	Flurazepam	<0.01%	Phenothiazine	<0.01%
Betamethasone	<0.01%	Flurbiprofen	<0.01%	Piroxicam	<0.01%
Boldenone	<0.01%	Furosemide	<0.01%	Polyethylene Glycol	<0.01%
Budesonide	<0.01%	Guaifenesin	<0.01%	Prednisolone	<0.01%
Bumetanide	<0.01%	Haloperidol	<0.01%	Prednisone	<0.01%
Buprenorphine	<0.01%	Hordenine	<0.01%	Procaine	<0.01%
Butorphanol	<0.01%	Hydrochlorthiazide	<0.01%	Propoxyphene	<0.01%
Carprofen	<0.01%	Hydrocortisone	<0.01%	Pyrantel	<0.01%
Chlorzoxazone	<0.01%	Ibuprofen	<0.01%	Pyrilamine	<0.01%
Clenbuterol	<0.01%	Indomethacin	<0.01%	Salbutamol	<0.01%
Clobetasol Propionate	<0.01%	Indoprofen	<0.01%	Salicylamide	<0.01%
Cromolyn	<0.01%	Isoxicam	<0.01%	Salicylic Acid	<0.01%
Dantrolene	<0.01%	Isoxsuprine	<0.01%	Sanguinarine	<0.01%
Desoximetasone	<0.01%	Ketoprofen	<0.01%	Stanozolol	<0.01%
Detomidine	<0.01%	Ketorolac	<0.01%	Sufentanil	<0.01%
Dexamethasone	<0.01%	Lidocaine	<0.01%	Sulindac	<0.01%
Dezocine	<0.01%	Meclofenamic Acid	<0.01%	Suprofen	<0.01%
Diazepam	<0.01%	Mefenamic Acid	<0.01%	Terbutaline	<0.01%
Diclofenac	<0.01%	Meperidine	<0.01%	Thiamine	<0.01%
Diflunisal	<0.01%	Mepivacaine	<0.01%	Thiosalicylic Acid	<0.01%
Dimethyl Sulfoxide	<0.01%	Metaproterenol	<0.01%	Tolmetin	<0.01%
Dipyrone	<0.01%	Methacarbamol	<0.01%	Trichlormethiazide	<0.01%
Droperidol	<0.01%	Methotrimeprazine	<0.01%	Triamcinolone	<0.01%
Ethacrynic Acid	<0.01%	6α-Methylprednisolone	<0.01%	Xylazine	<0.01%
Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Nabumetone	<0.01%	Zomepirac	<0.01%
		Nalbuphine	<0.01%		

PROCAINE

Product #103210 & 103215 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

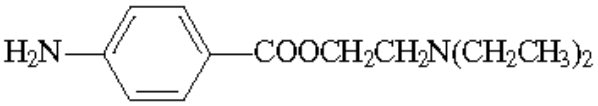
Procaine	0.15 ng/ml
Benoxinate	0.66 ng/ml
Penicillin G-Procaine	1.4 ng/ml
Chloroprocaine	1.7 ng/ml
Tetracaine	8 ng/ml
Propoxycaine	20 ng/ml

Precision:	Intra-assay	3.18 %
	Inter-assay	4.06 %

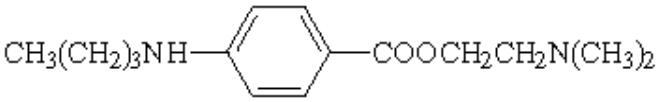
Note: Measuring wavelength was 650 nm**.**

PROCAINE STANDARD CURVES

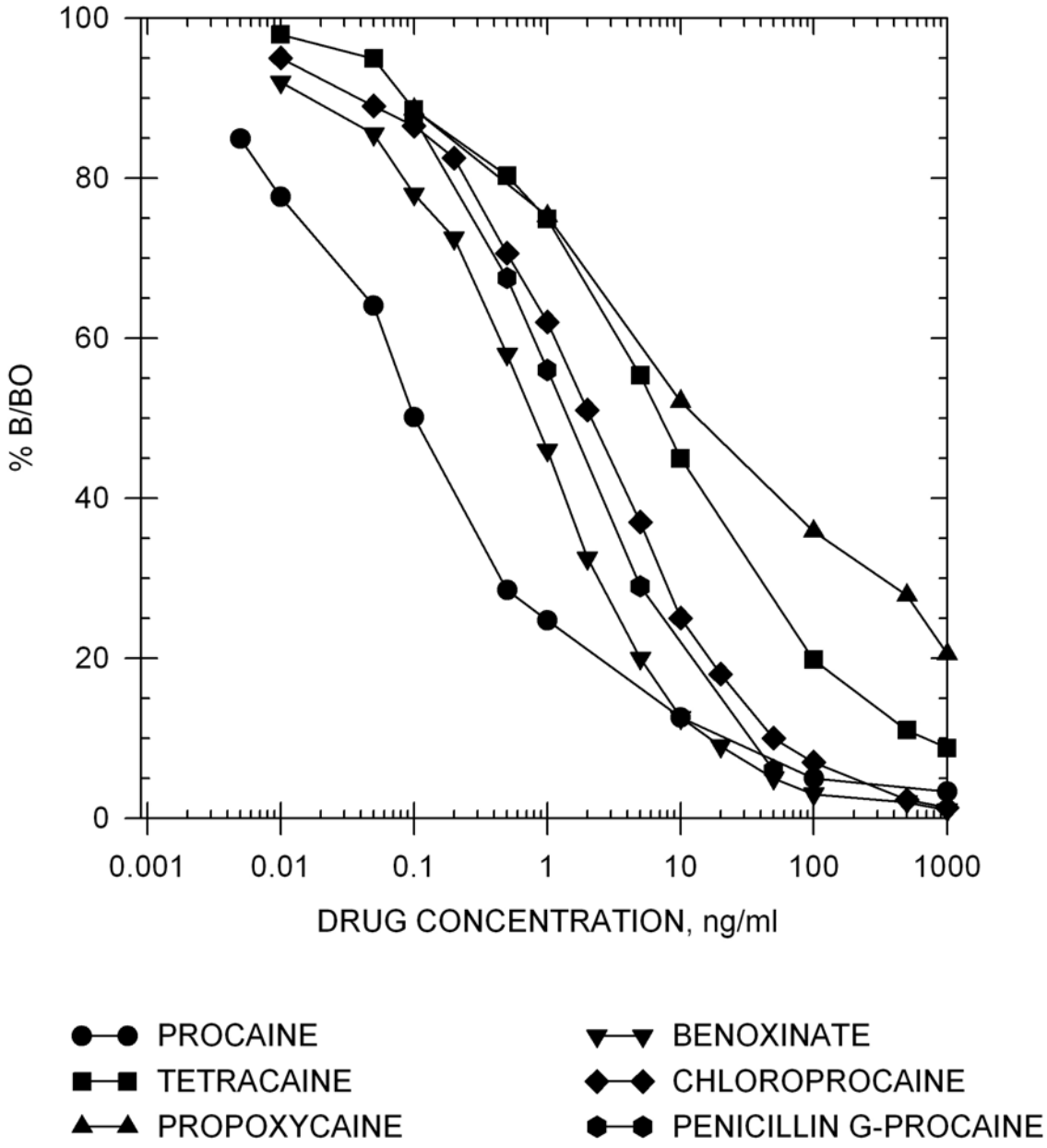
Procaine



Tetracaine



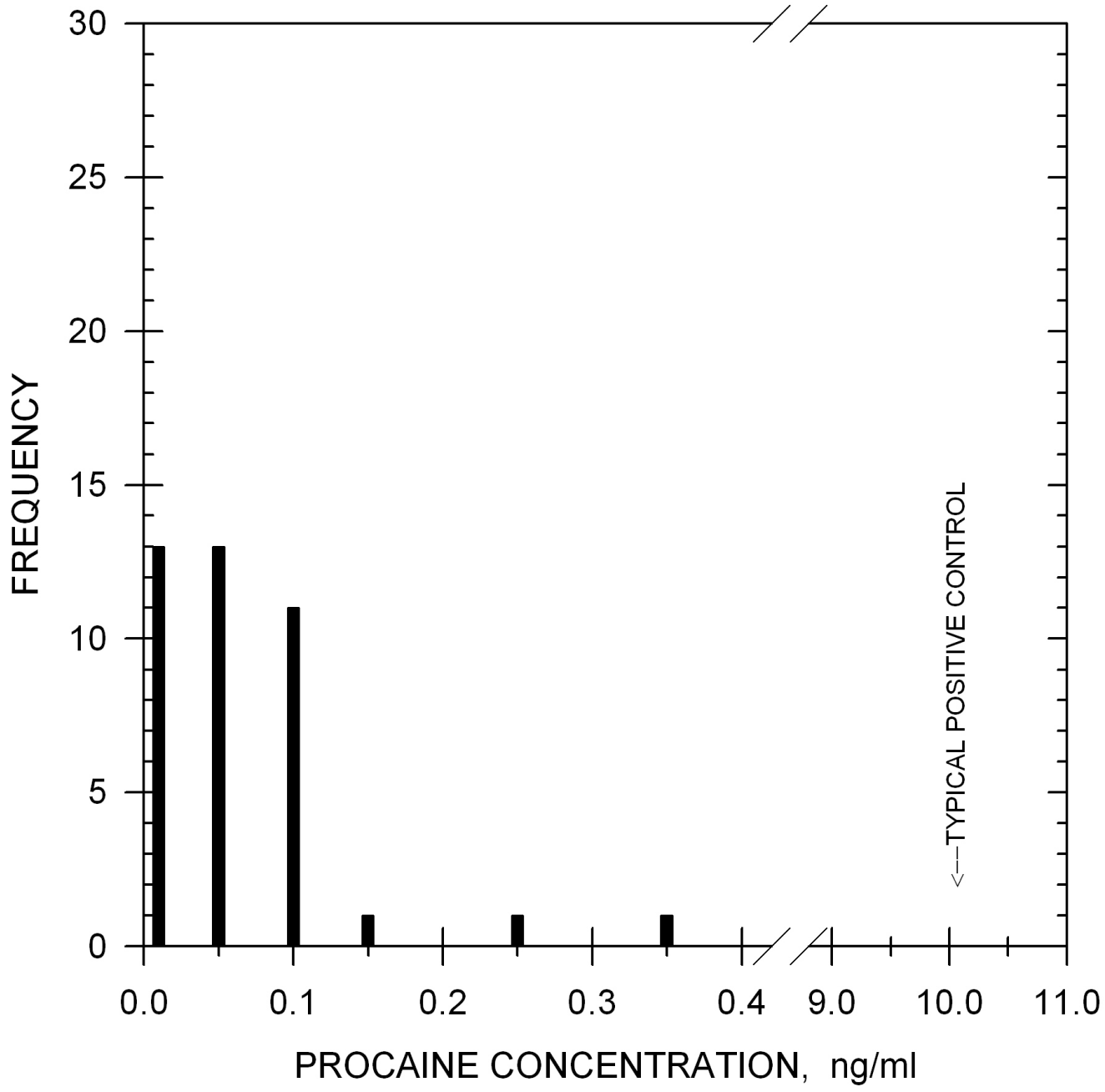
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples diluted 1:1 has shown no background levels above 0.35 ng/ml.

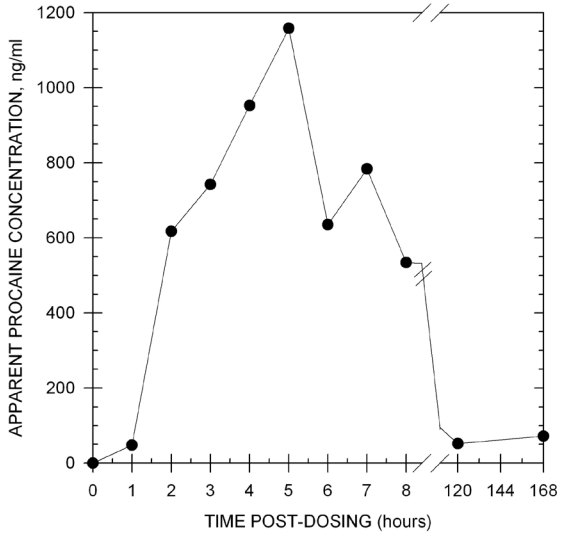
Sample Treatment: A dilution of 1:1 (i.e. 1 part urine to 1 part EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection:

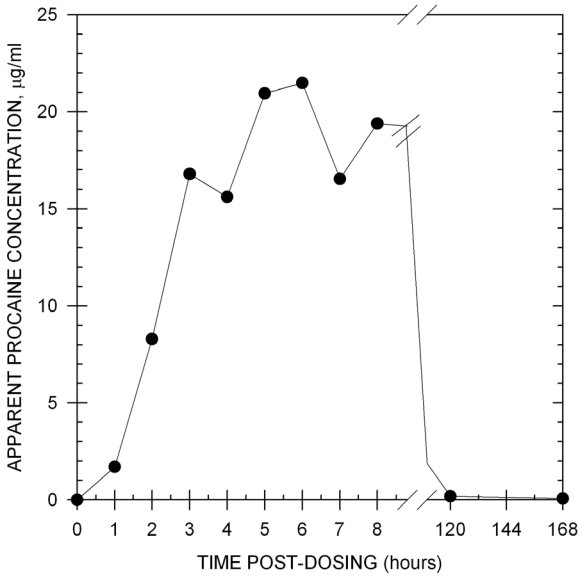
After administration of 100 mg of procaine by subcutaneous injection to one horse, the presence of this drug was detected for 8 hours in equine urine. Because the 1 to 8 hour post-dose time points exceeded the range of the assay, the samples were diluted 1:100 with EIA buffer and backcalculated to the recommended 1:1 dilution.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of $6x10^6$ procaine-penicillin by intramuscular injection to one horse, the presence of this drug was detected for 168 hours in equine plasma. Because the post-dose time points exceeded the range of the assay (except the 168 hour post-dose), the samples were diluted 1:500 with EIA buffer and backcalculated to the recommended 1:1 dilution.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Procaine	100%
Benoxinate	54.5%
Penicillin G-Procaine	24.5%
Chloroprocaine	20.6%
Tetracaine	1.9%
Propoxycaine	0.8%
Procainamide	0.4%
Butacaine	0.1%
Dyclonine	0.08%
Methylene Blue	0.03%
Bupivacaine	<0.05%
Dibucaine	<0.05%
Lidocaine	<0.05%
Promazine	0.01%
Acepromazine	0.01%
Pyrimethamine	0.01%
Hordenine	0.01%

Acetaminophen	< 0.01%
Acetylsalicylic Acid	< 0.01%
E-amino-n-caproic Acid	< 0.01%
Amitriptyline	< 0.01%
Ascorbic Acid	< 0.01%
Benzoic Acid	< 0.01%
Benzoylecgonine	< 0.01%
Butamben	< 0.01%
Chlordiazepoxide	< 0.01%
Chlorpromazine	< 0.01%
Clenbuterol	< 0.01%
Cocaine	< 0.01%
Codeine	< 0.01%
Cortisol	< 0.01%
Cotinine	< 0.01%
Dexamethasone	< 0.01%
Dextromethorphan	< 0.01%
Diclofenac	< 0.01%
Dimethyl Sulfoxide	< 0.01%
Diperodone	< 0.01%
Dipyrone	< 0.01%
Doxepin	< 0.01%
Ecgonine	< 0.01%
Ecgonine methylester	< 0.01%
Ephedrine	< 0.01%
Erythromycin	< 0.01%
Ethyl p-amino Benzoate	< 0.01%
Fenoprofen	< 0.01%
Flunixin	< 0.01%
Folic Acid	< 0.01%
Folinic Acid	< 0.01%
Furosemide	< 0.01%
Gemfibrozil	< 0.01%
Gentisic Acid	< 0.01%
Glipizide	< 0.01%
L-Glutamic Acid	< 0.01%
Glutethimide	< 0.01%
Glycopyrrolate	< 0.01%
Heparin	< 0.01%
Hippuric Acid	< 0.01%
Hydrocortisone	< 0.01%
Ibuprofen	< 0.01%
Imipramine	< 0.01%
Isoxsuprine	< 0.01%
Ketamine	< 0.01%
Meperidine	< 0.01%
Mepivacaine	< 0.01%
Metaproterenol	< 0.01%
Methadone	< 0.01%
Methaqualone	< 0.01%
Methocarbamol	< 0.01%
Methylprednisolone	< 0.01%
Nalorphine	< 0.01%
Naproxen	< 0.01%
Niacinamide	< 0.01%
Nicotine	< 0.01%
Nortriptyline	< 0.01%
Orphenadrine	< 0.01%
Oxphenbutazone	< 0.01%
PCP	< 0.01%
Penicillin G-Potassium	< 0.01%
Pentoxifylline	< 0.01%
Phenol	< 0.01%
Phenothiazine	< 0.01%
Phenylbutazone	< 0.01%
Polyethylene Glycol	< 0.01%
Prednisolone	< 0.01%
Prilocaine	< 0.01%
Primadone	< 0.01%
Pseudoephedrine	< 0.01%
Pyrantel	< 0.01%
Pyrilamine	< 0.01%
Quinidine	< 0.01%
Quinine	< 0.01%
Salbutamol	< 0.01%
Salicylamide	< 0.01%
Salicylic Acid	< 0.01%
Theophylline	< 0.01%
Thiamine	< 0.01%
Trimethoprim	< 0.01%
Trimipramine	< 0.01%
Uric Acid	< 0.01%

ENHANCED KIT
PROMAZINE GROUP

Product #100710 &
100715 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Triflupromazine	0.04 ng/ml	3-Hydroxypromazine	2.4 ng/ml
Chlorpromazine	0.05 ng/ml	Amitriptyline	3.5 ng/ml
Promazine	0.05 ng/ml	Cyclobenzaprine	3.5 ng/ml
Acepromazine	0.10 ng/ml	Mesoridazine	5.2 ng/ml
Imipramine	0.10 ng/ml	Thioridazine	10 ng/ml
Propionylpromazine	0.14 ng/ml	Doxepin	12 ng/ml
Clomipramine	0.30 ng/ml	Nortriptyline	12 ng/ml
2-(1-Hydroxyethyl) Promazine		Desipramine	15 ng/ml
Sulfoxide (HEPS)	0.44 ng/ml	Trimipramine	20 ng/ml
Promazine Sulfoxide	0.89 ng/ml	Propiomazine	25 ng/ml
Chlorprothixene	1.2 ng/ml	Protriptyline	60 ng/ml
7-Hydroxychlorpromazine	1.6 ng/ml		

I-50 in Equine Urine

Triflupromazine	0.04 ng/ml
Chlorpromazine	0.03 ng/ml
Promazine	0.06 ng/ml
Acepromazine	0.15 ng/ml
Imipramine	0.10 ng/ml
Propionylpromazine	0.12 ng/ml
2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)	1.4 ng/ml
Chlorprothixene	3.3 ng/ml
Cyclobenzaprine	3.5 ng/ml
Mesoridazine	12 ng/ml
Thioridazine	18 ng/ml

I-50 in Canine Urine

Triflupromazine	0.05 ng/ml
Chlorpromazine	0.04 ng/ml
Promazine	0.05 ng/ml
Acepromazine	0.11 ng/ml
Imipramine	0.10 ng/ml
Propionylpromazine	0.82 ng/ml
2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)	1.5 ng/ml
Chlorprothixene	2.9 ng/ml
Cyclobenzaprine	3.5 ng/ml
Mesoridazine	6 ng/ml
Thioridazine	11 ng/ml

I-50 in Equine Plasma

Triflupromazine	0.86 ng/ml
Chlorpromazine	0.33 ng/ml
Promazine	0.16 ng/ml
Acepromazine	0.25 ng/ml
Imipramine	0.10 ng/ml
Propionylpromazine	0.15 ng/ml
2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)	2.0 ng/ml
Chlorprothixene	5.2 ng/ml
Cyclobenzaprine	8 ng/ml
Mesoridazine	26 ng/ml
Thioridazine	85 ng/ml

I-50 in Equine Serum

Triflupromazine	1.2 ng/ml
Chlorpromazine	0.28 ng/ml
Promazine	0.06 ng/ml
Acepromazine	0.35 ng/ml
Imipramine	0.25 ng/ml
Propionylpromazine	0.85 ng/ml
2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)	1.5 ng/ml
Cyclobenzaprine	8 ng/ml
Chlorprothixene	8.8 ng/ml
Mesoridazine	45 ng/ml
Thioridazine	150 ng/ml

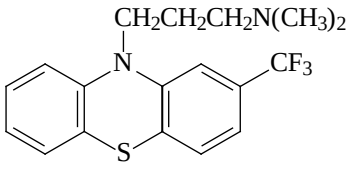
Precision:

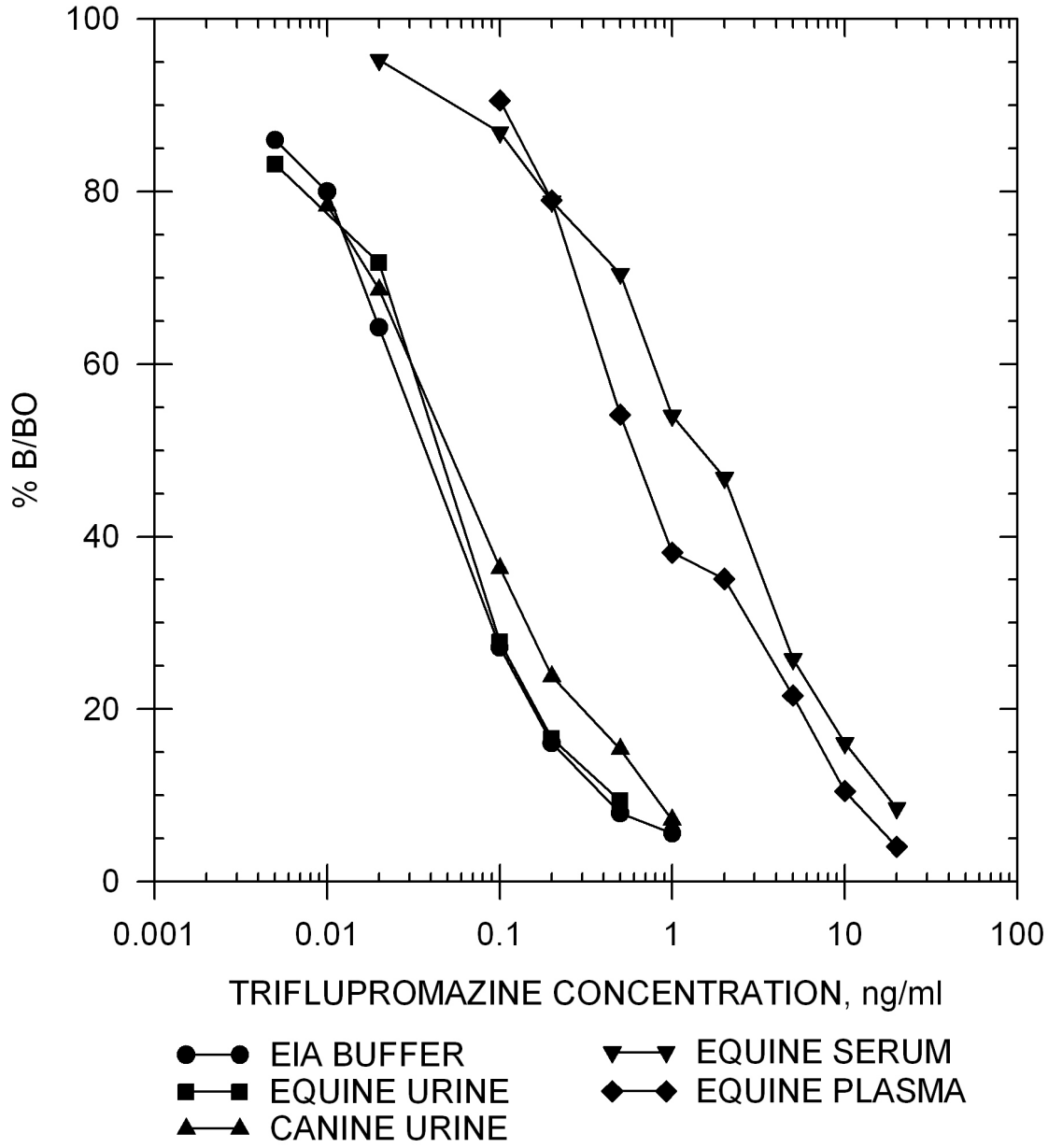
Intra-assay	8.50%
Inter-assay	4.19%

Note: Measuring wavelength was 650 nm**.**

PROMAZINE STANDARD CURVES

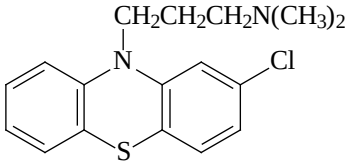
Trifluprom azine

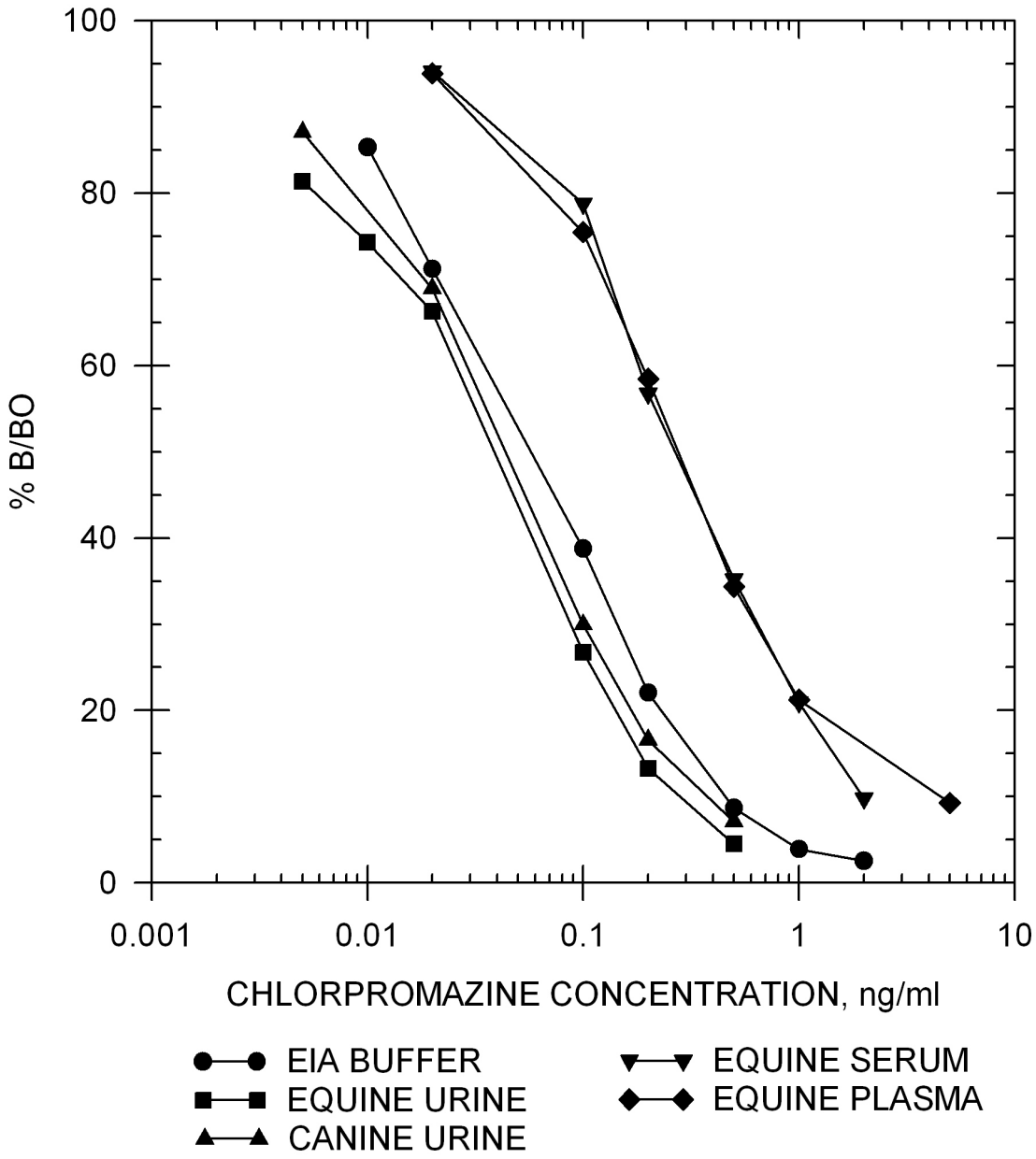




PROMAZINE STANDARD CURVES

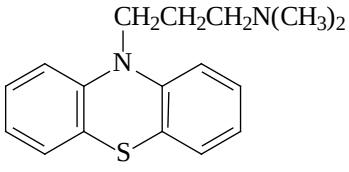
Chlorpromazine

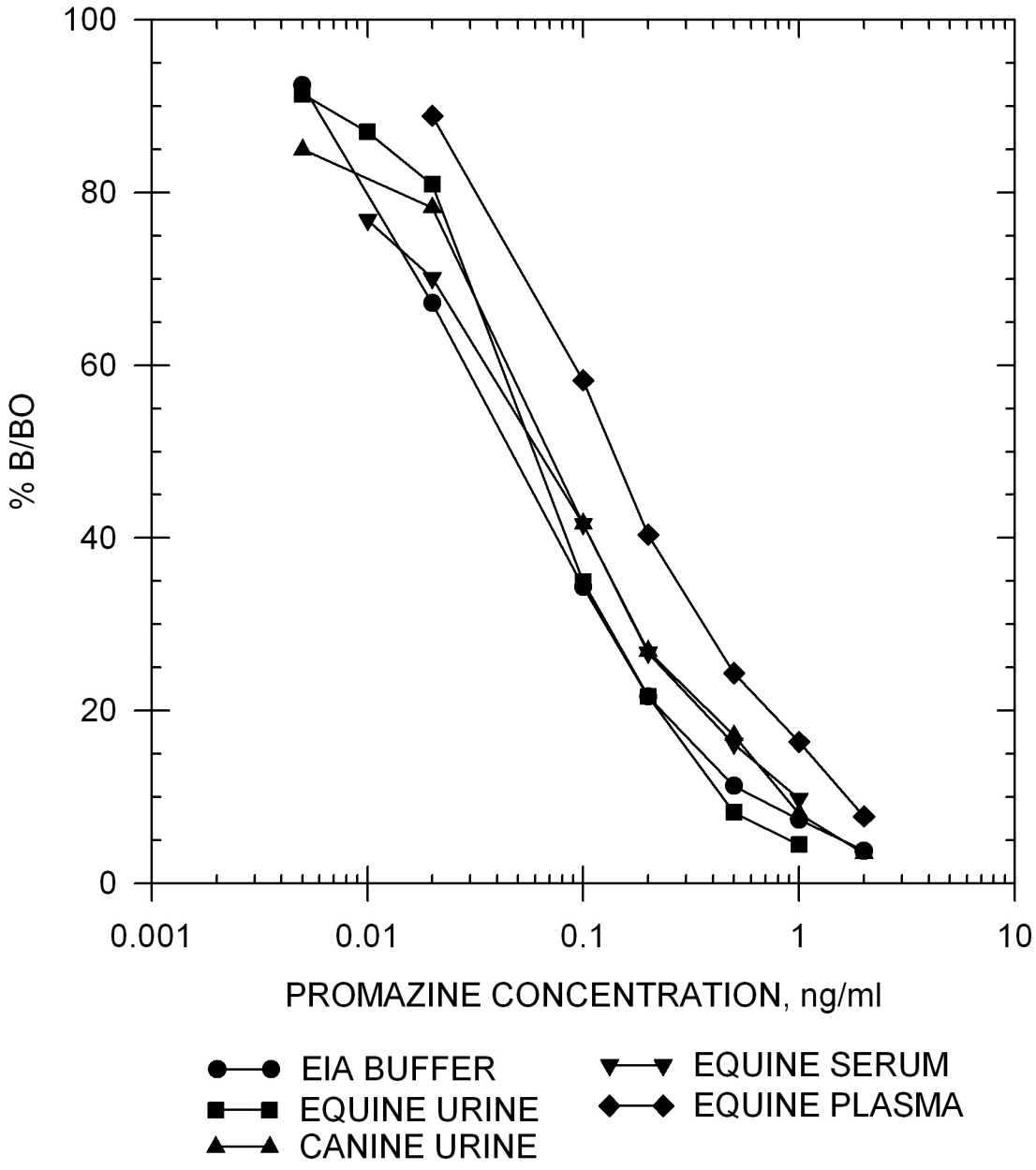




PROMAZINE STANDARD CURVES

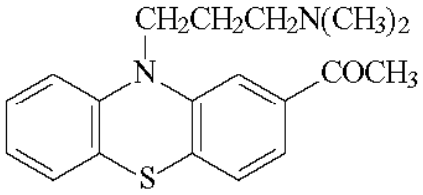
Promazine

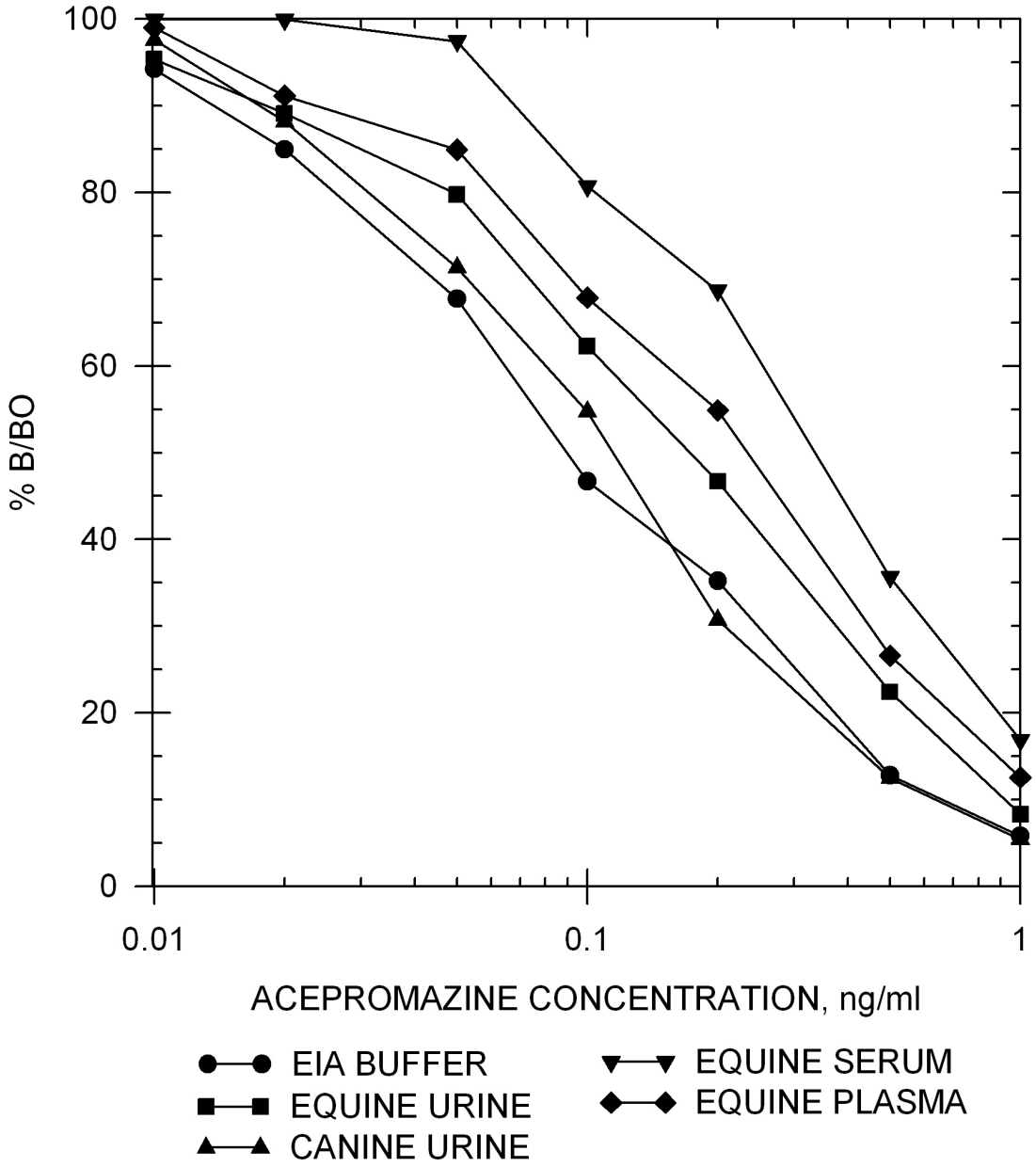




PROMAZINE STANDARD CURVES

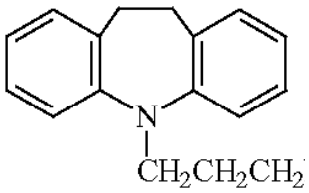
Acepromazine

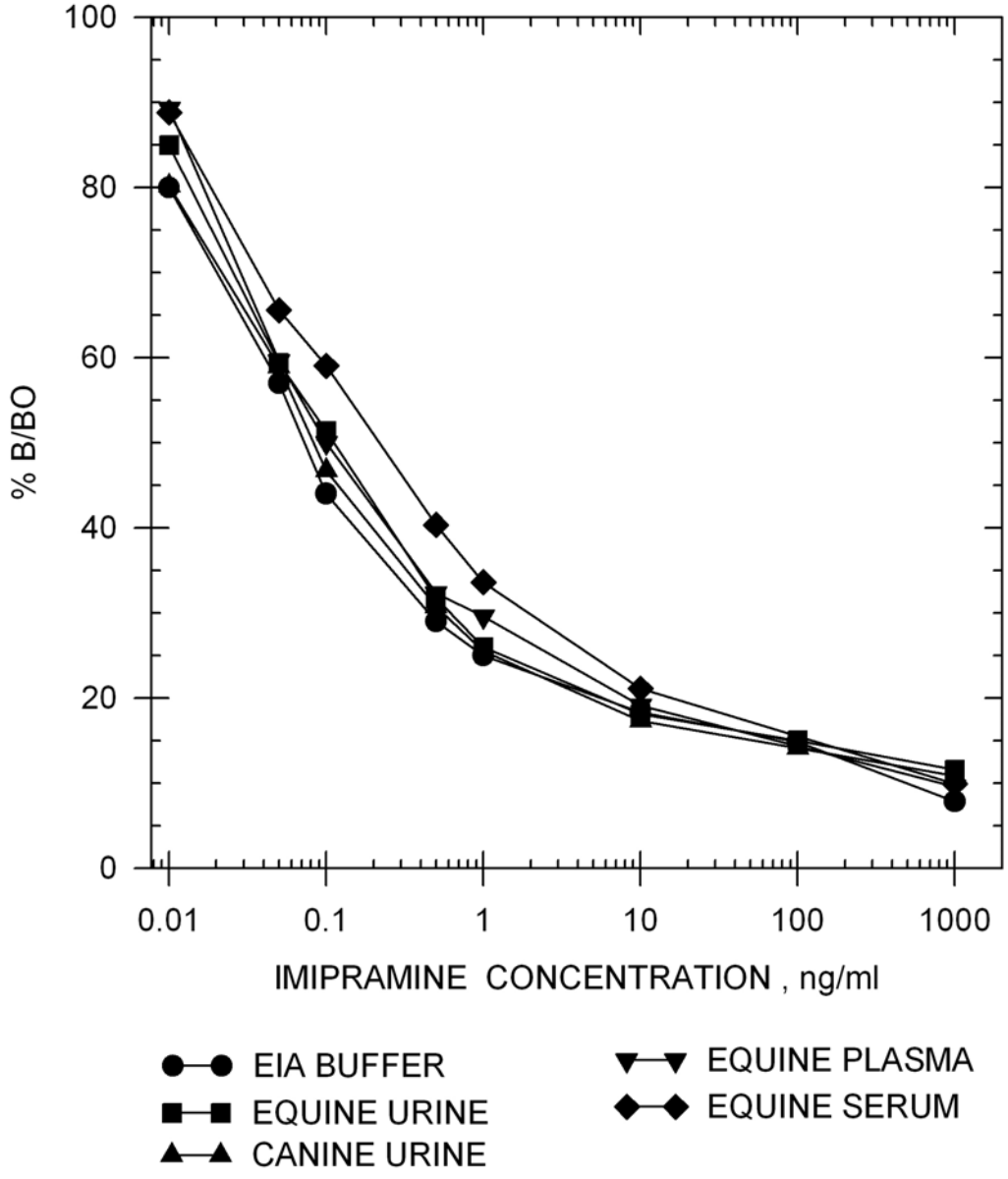




PROMAZINE STANDARD CURVES

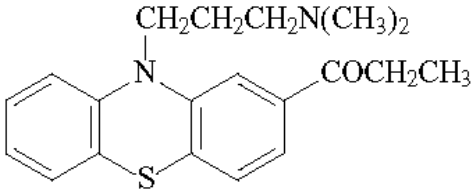
Imipramine

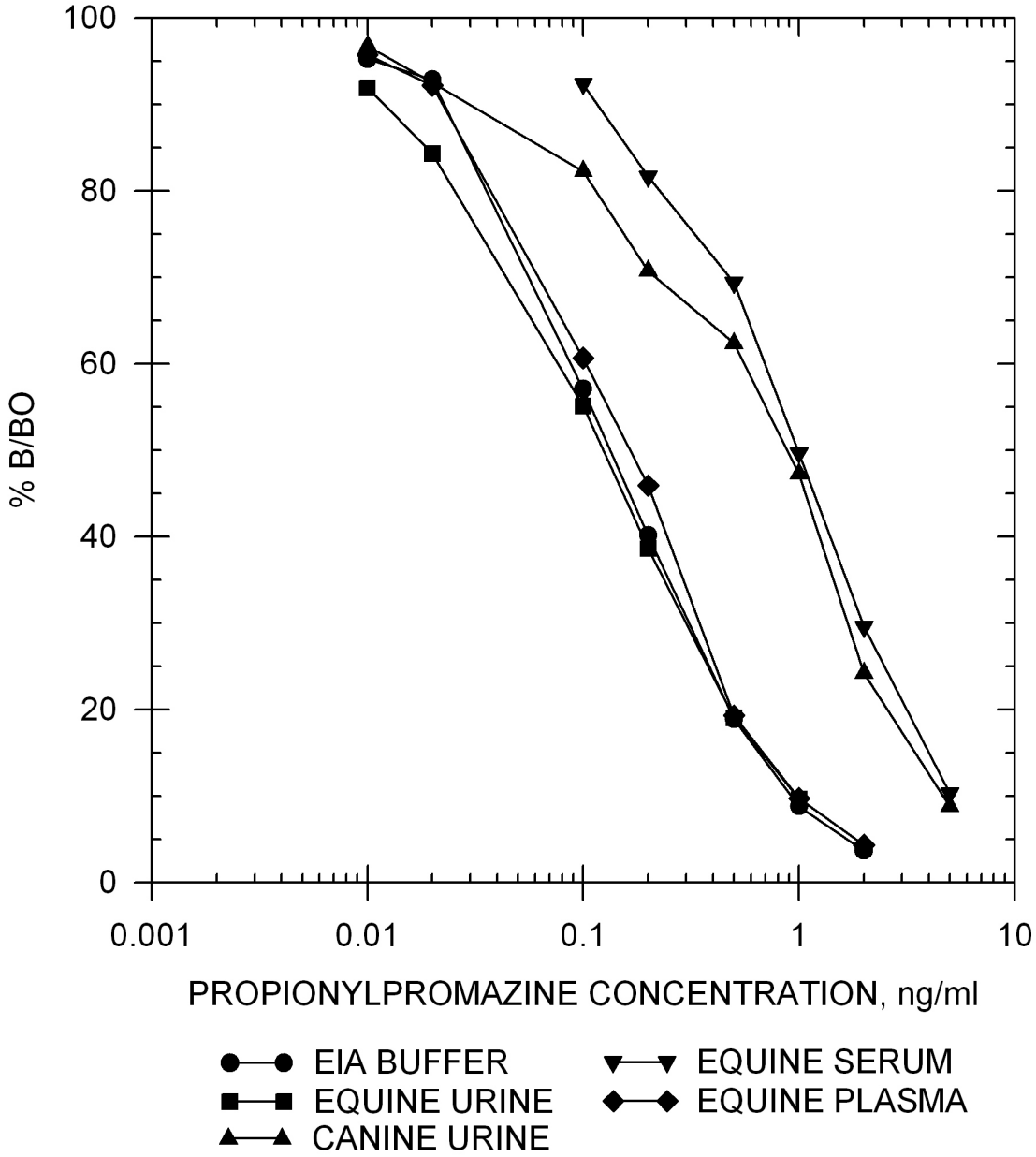




PROMAZINE STANDARD CURVES

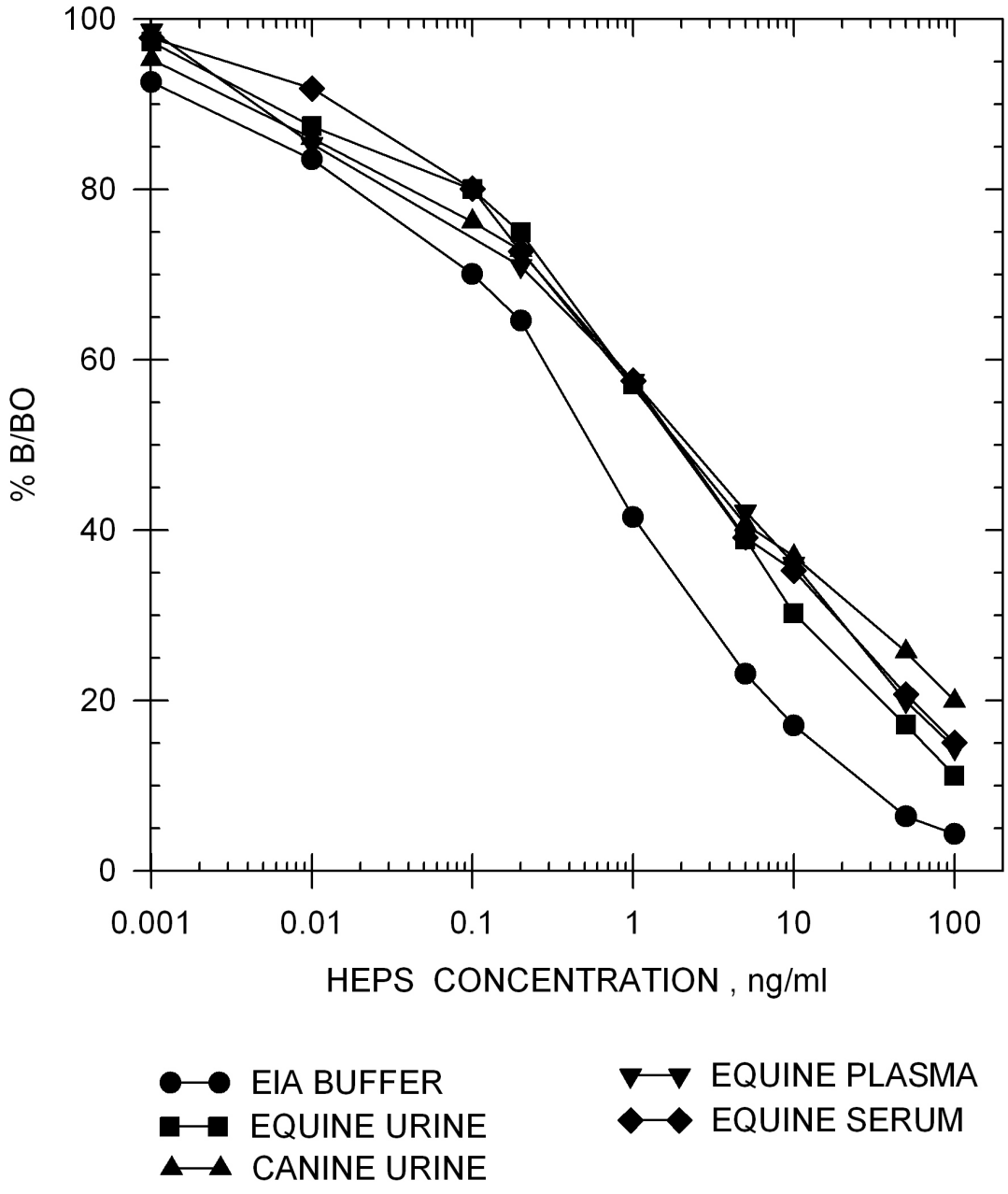
Propionylpromazine





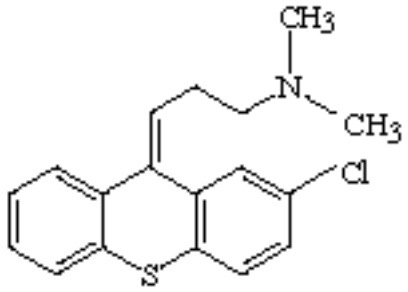
PROMAZINE STANDARD CURVES

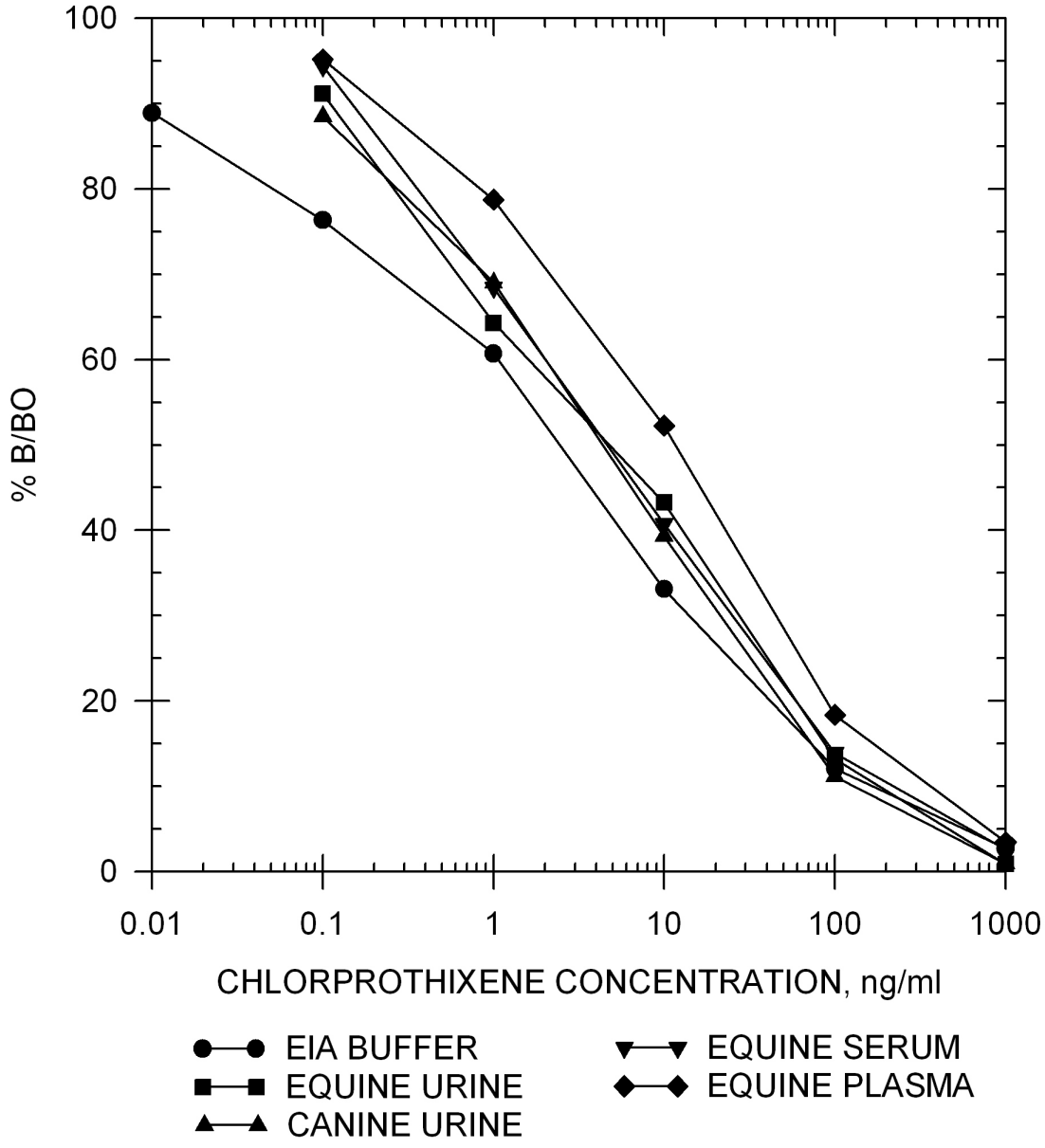
2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)



PROMAZINE STANDARD CURVES

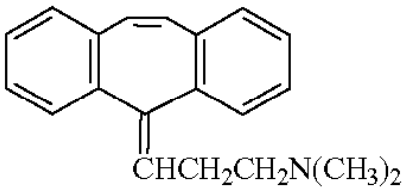
Chlorprothixene

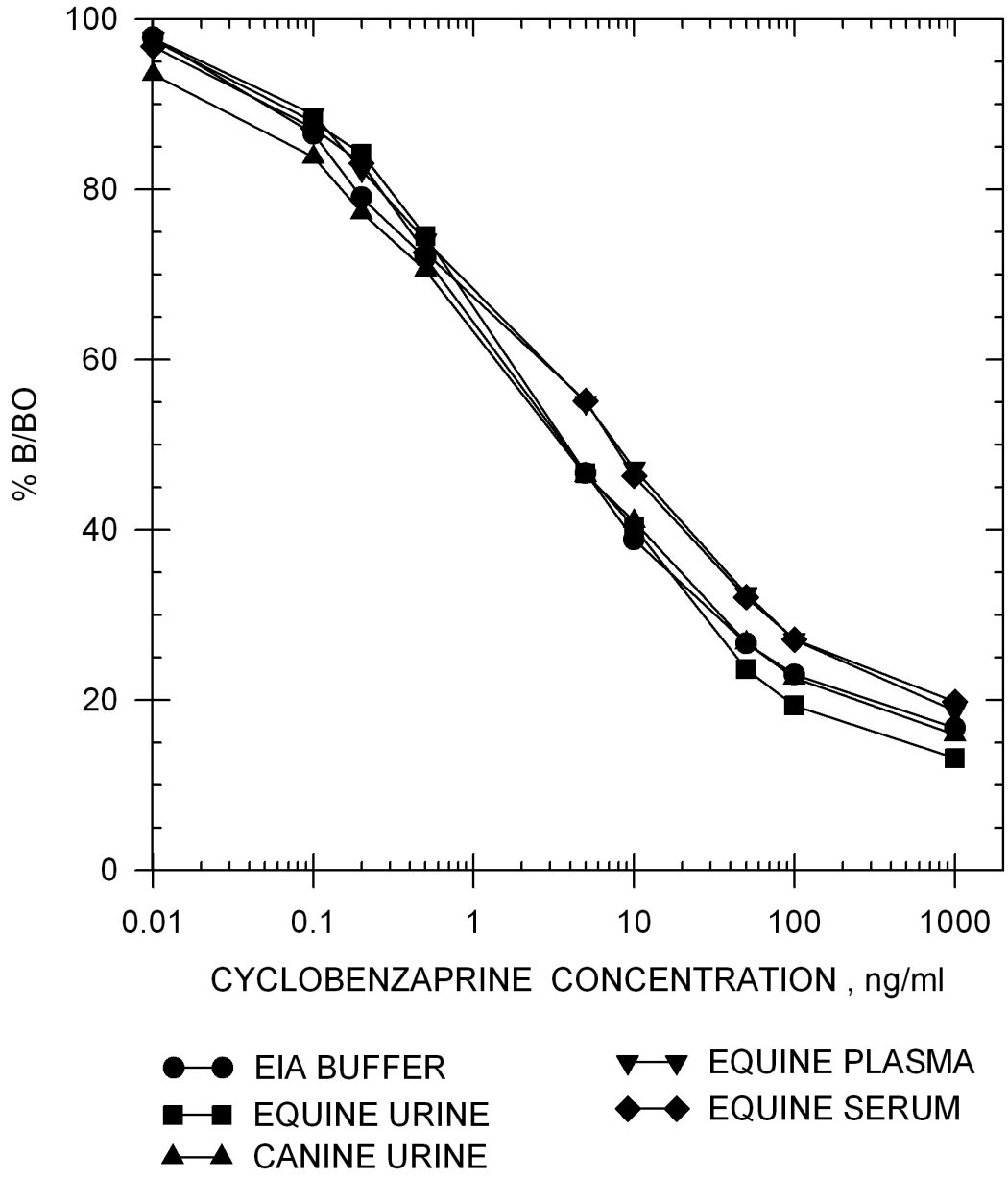




PROMAZINE STANDARD CURVES

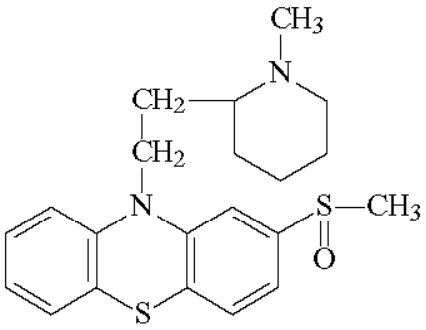
Cyclobenzaprine

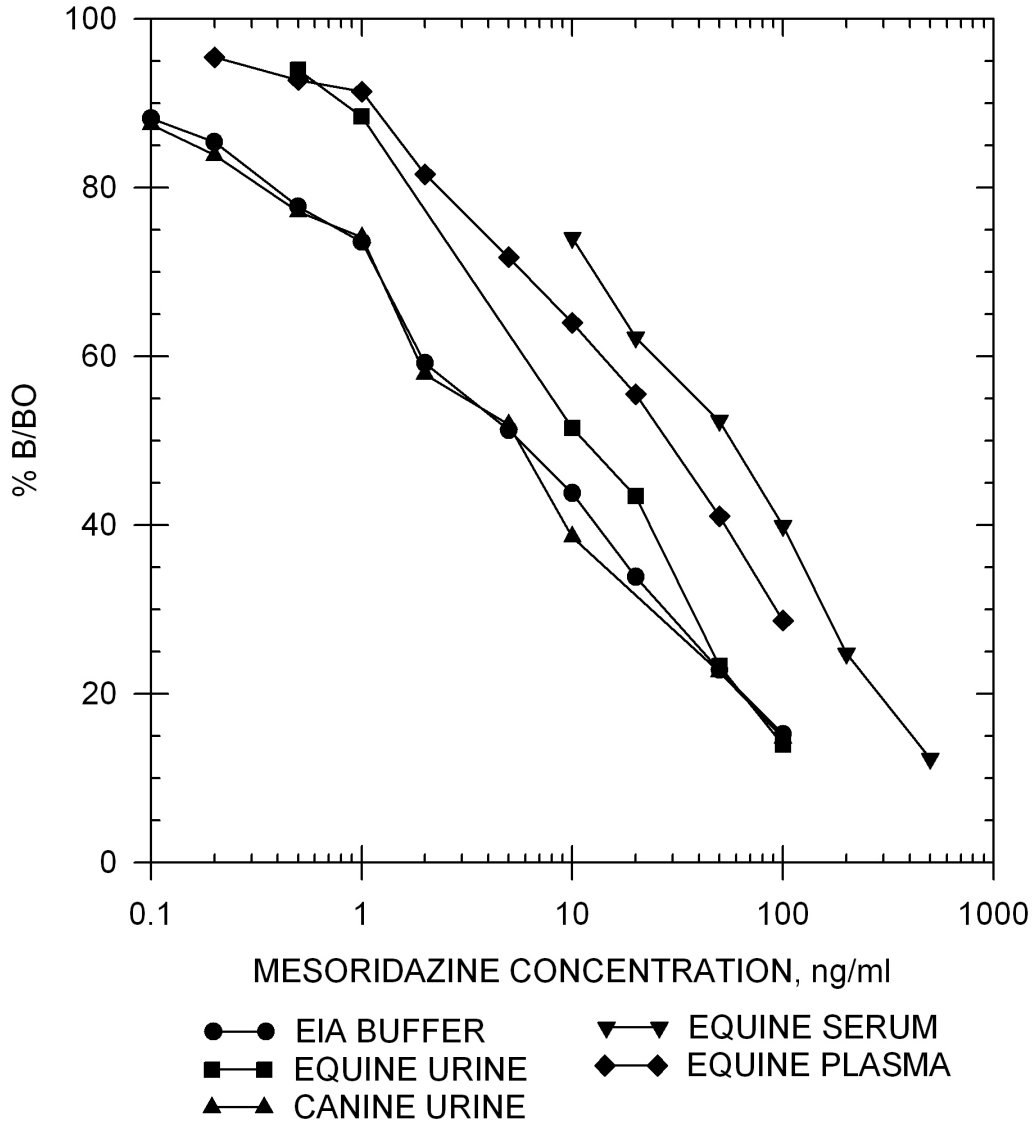




PROMAZINE STANDARD CURVES

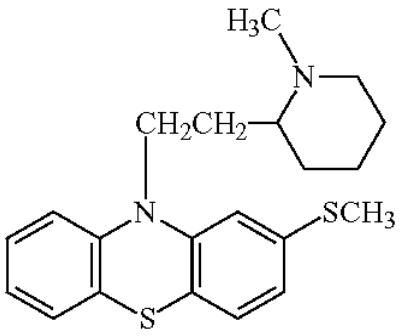
Mesoridazine

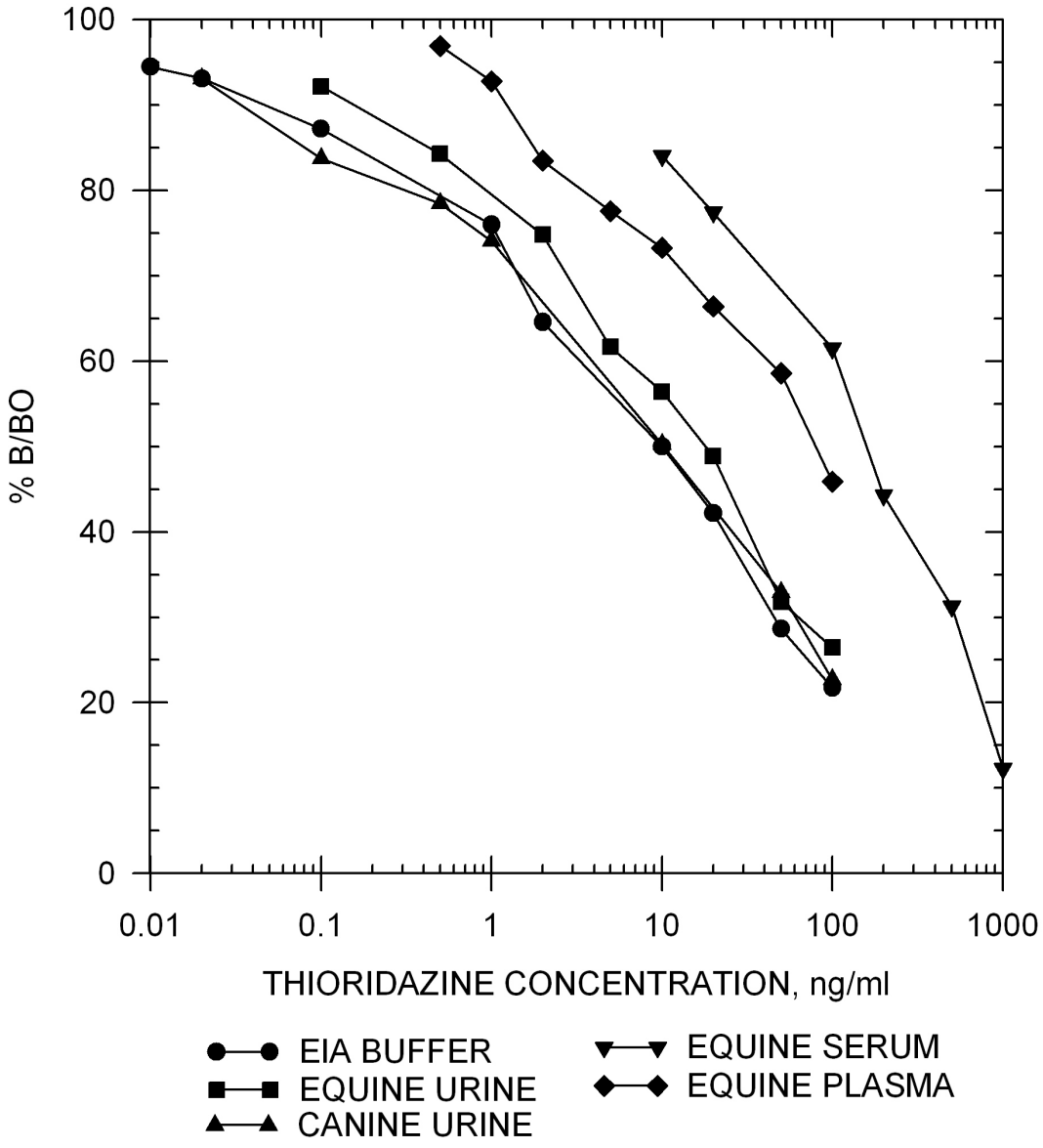




PROMAZINE STANDARD CURVES

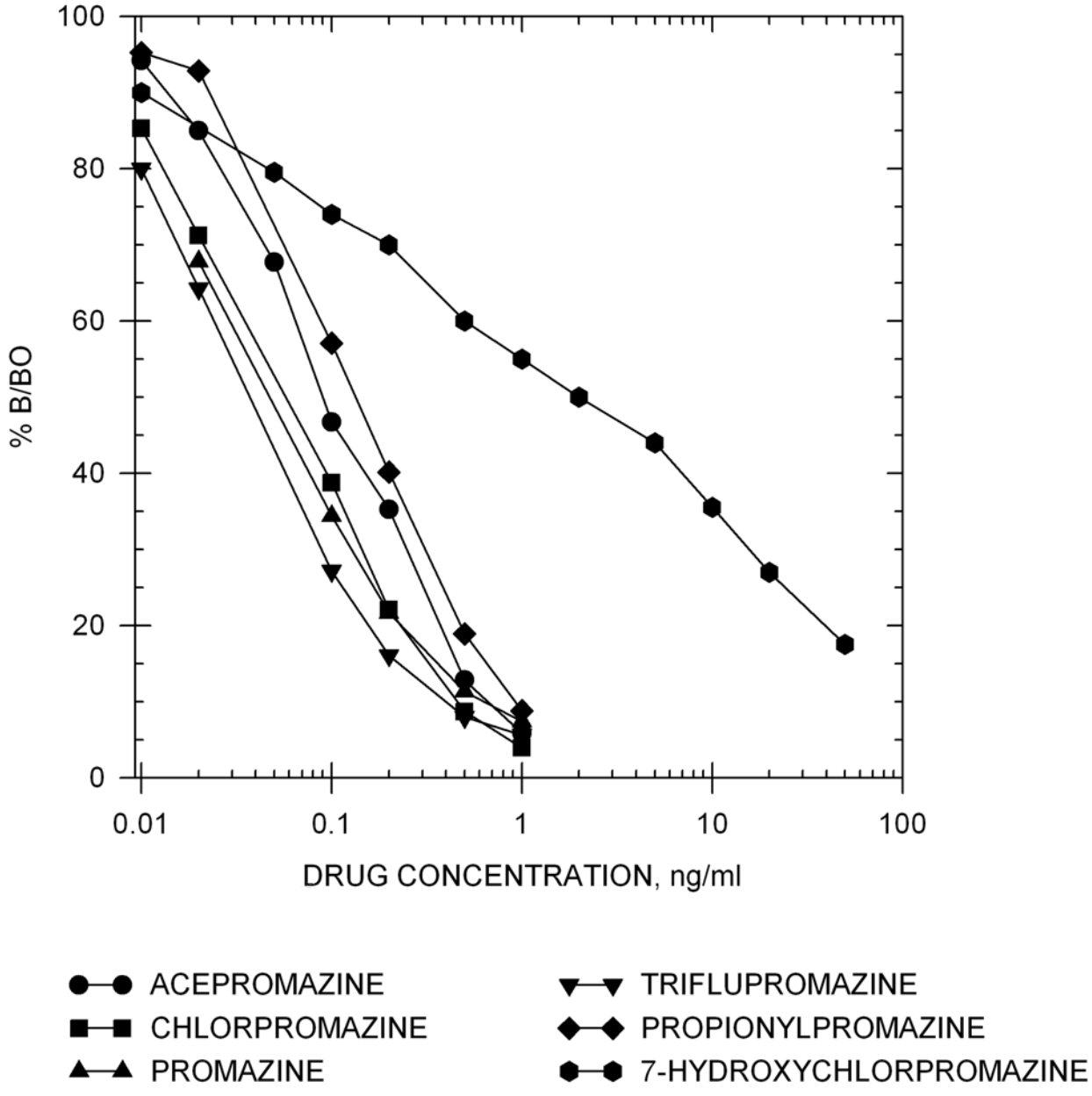
Thioridazine





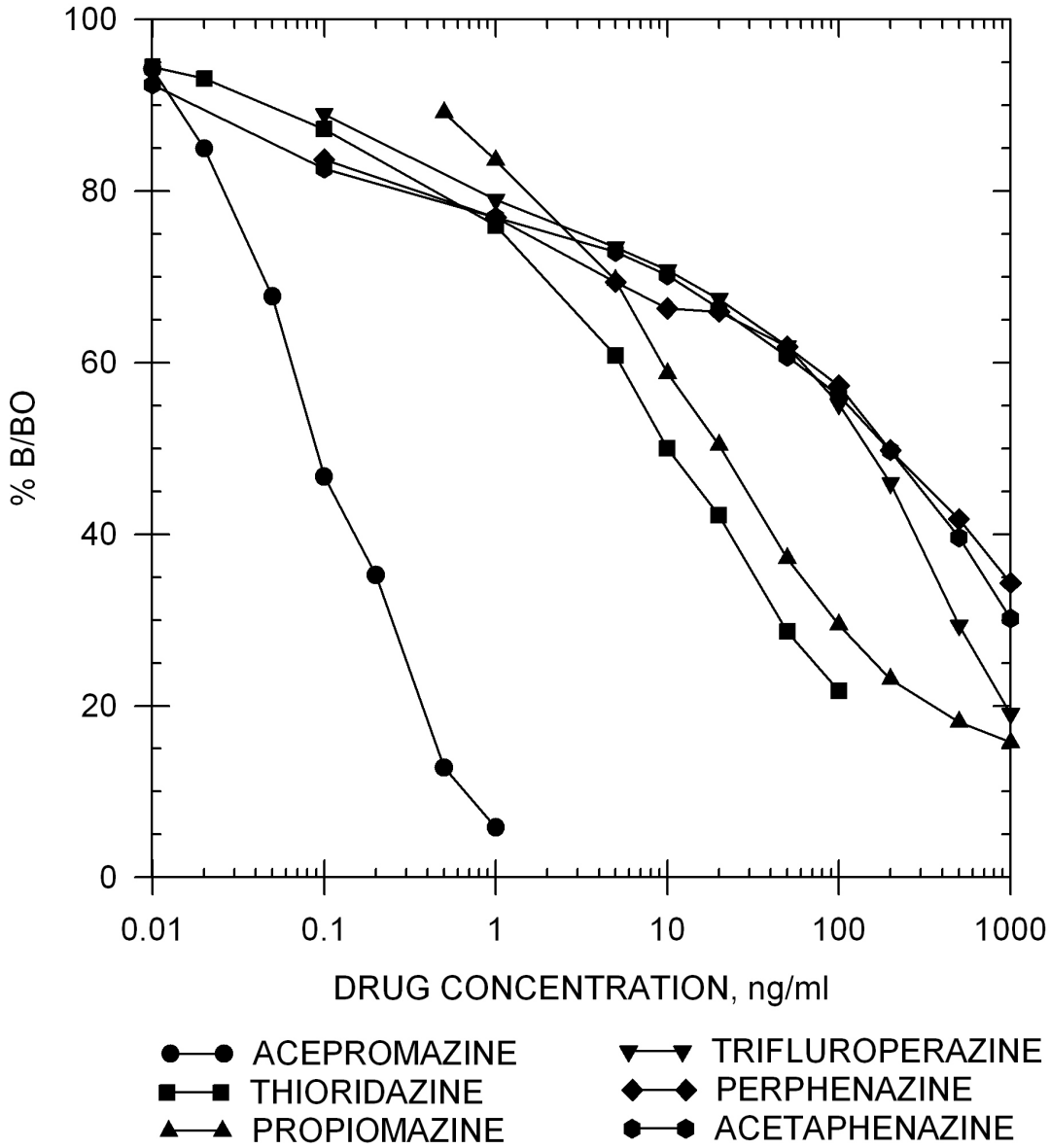
PROMAZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



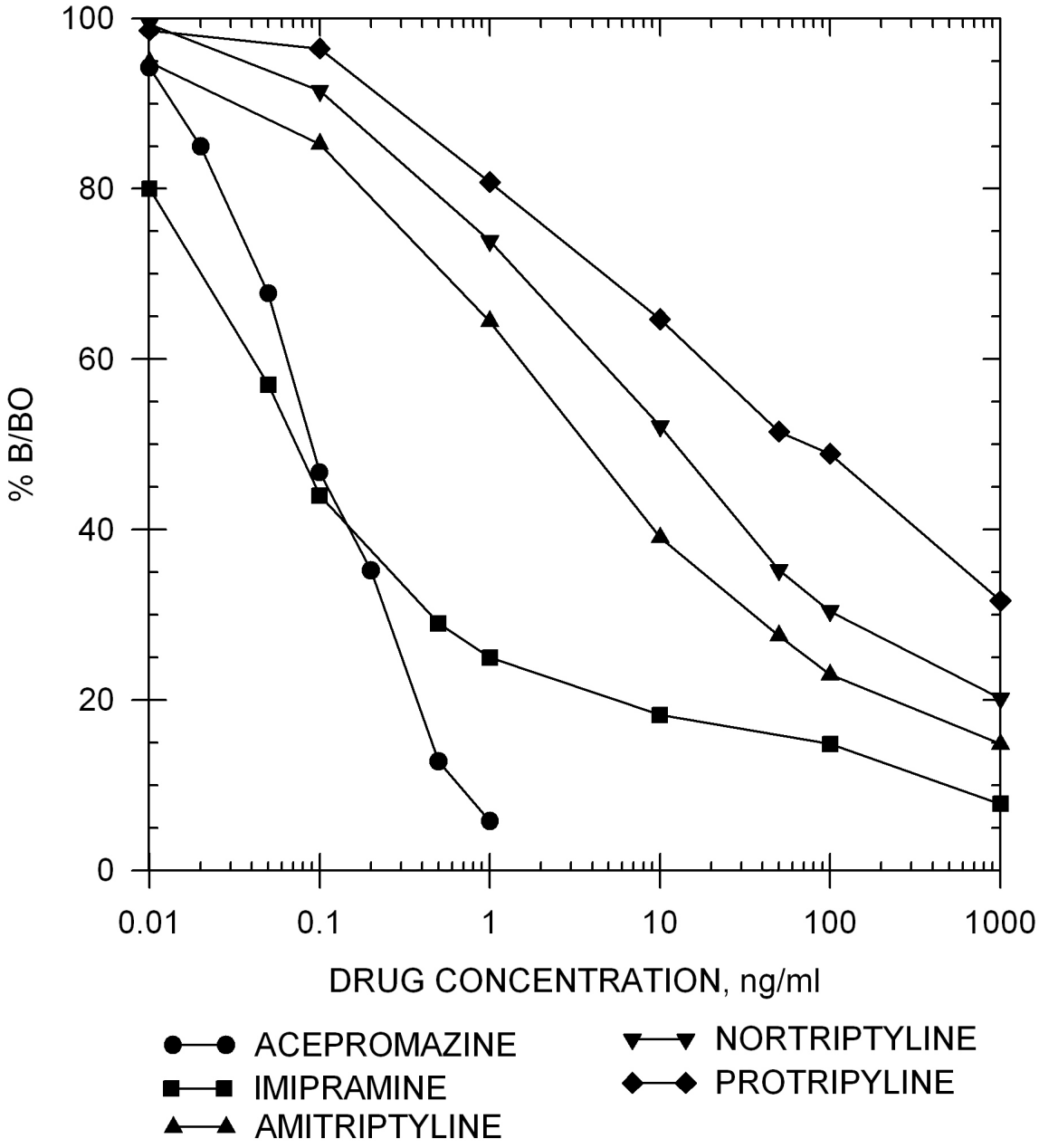
PROMAZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



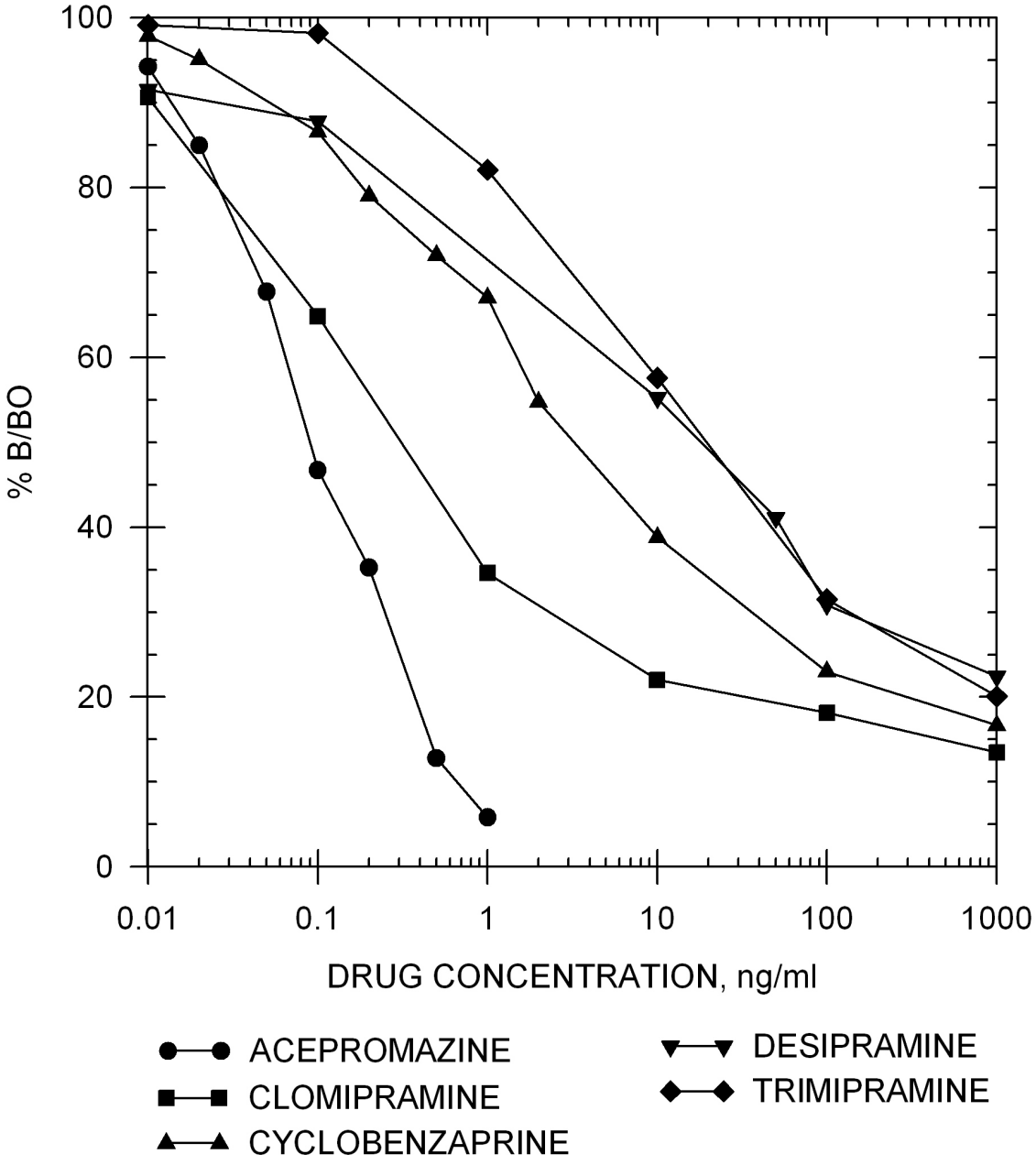
PROMAZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



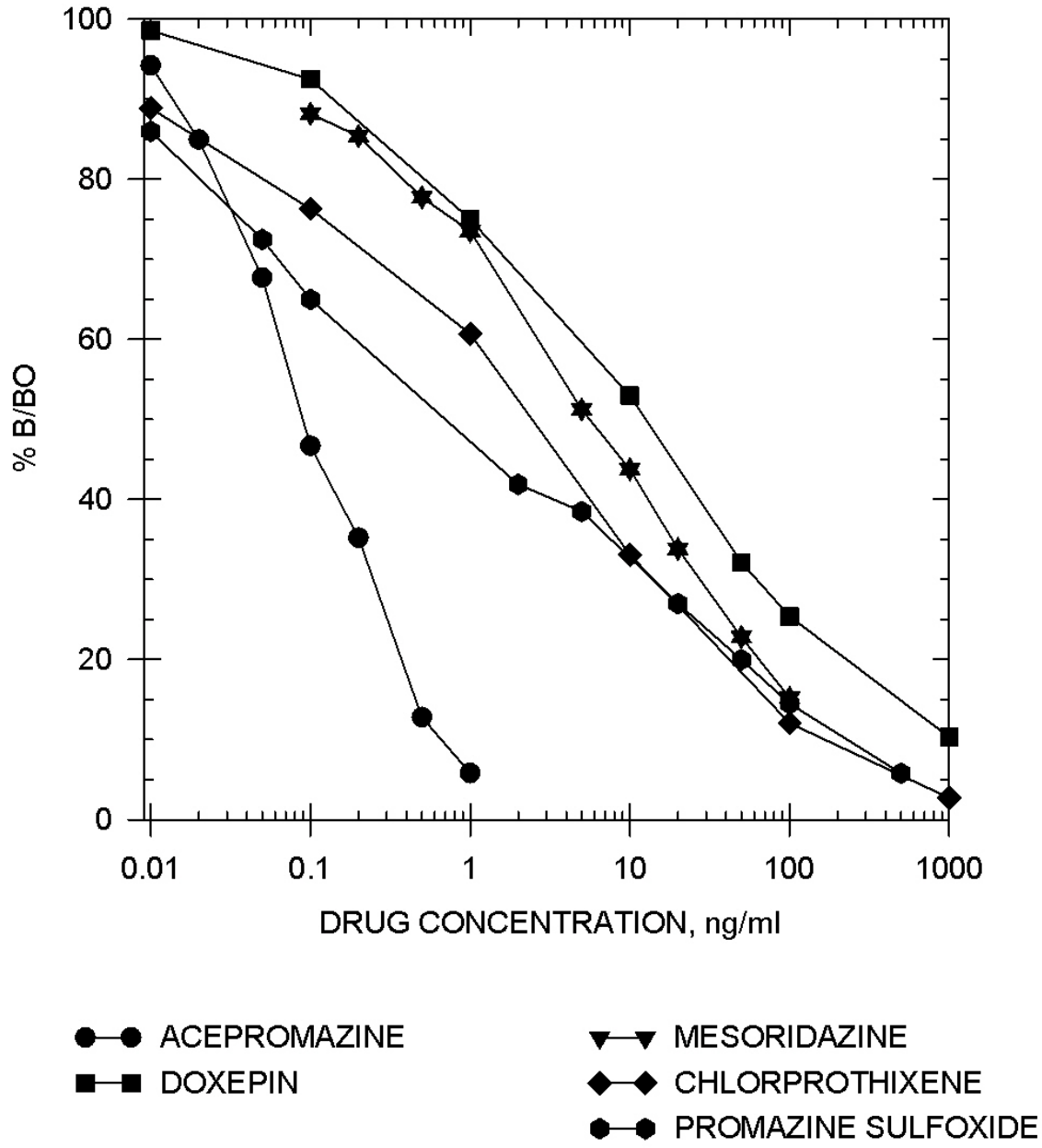
PROMAZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



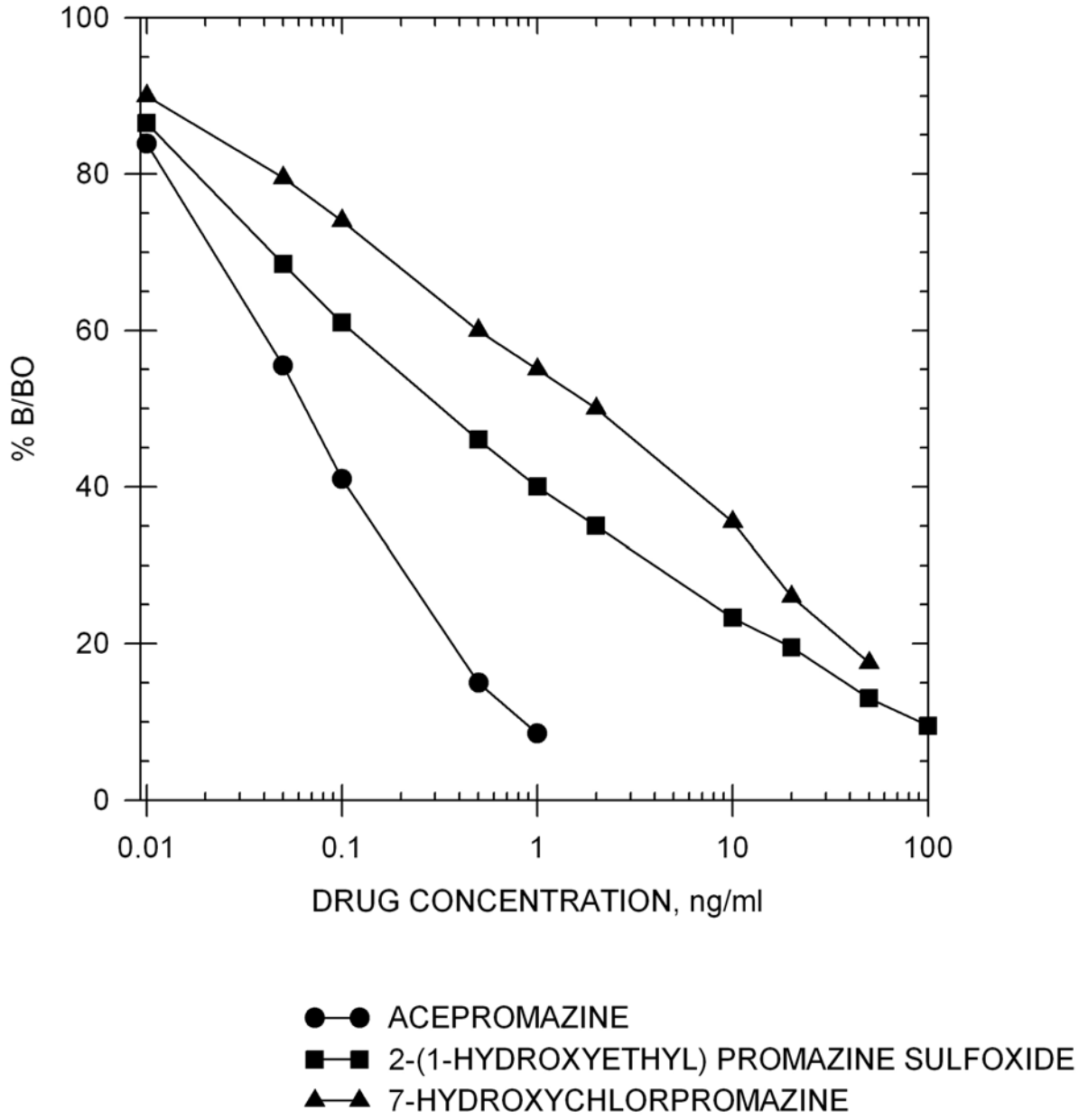
PROMAZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



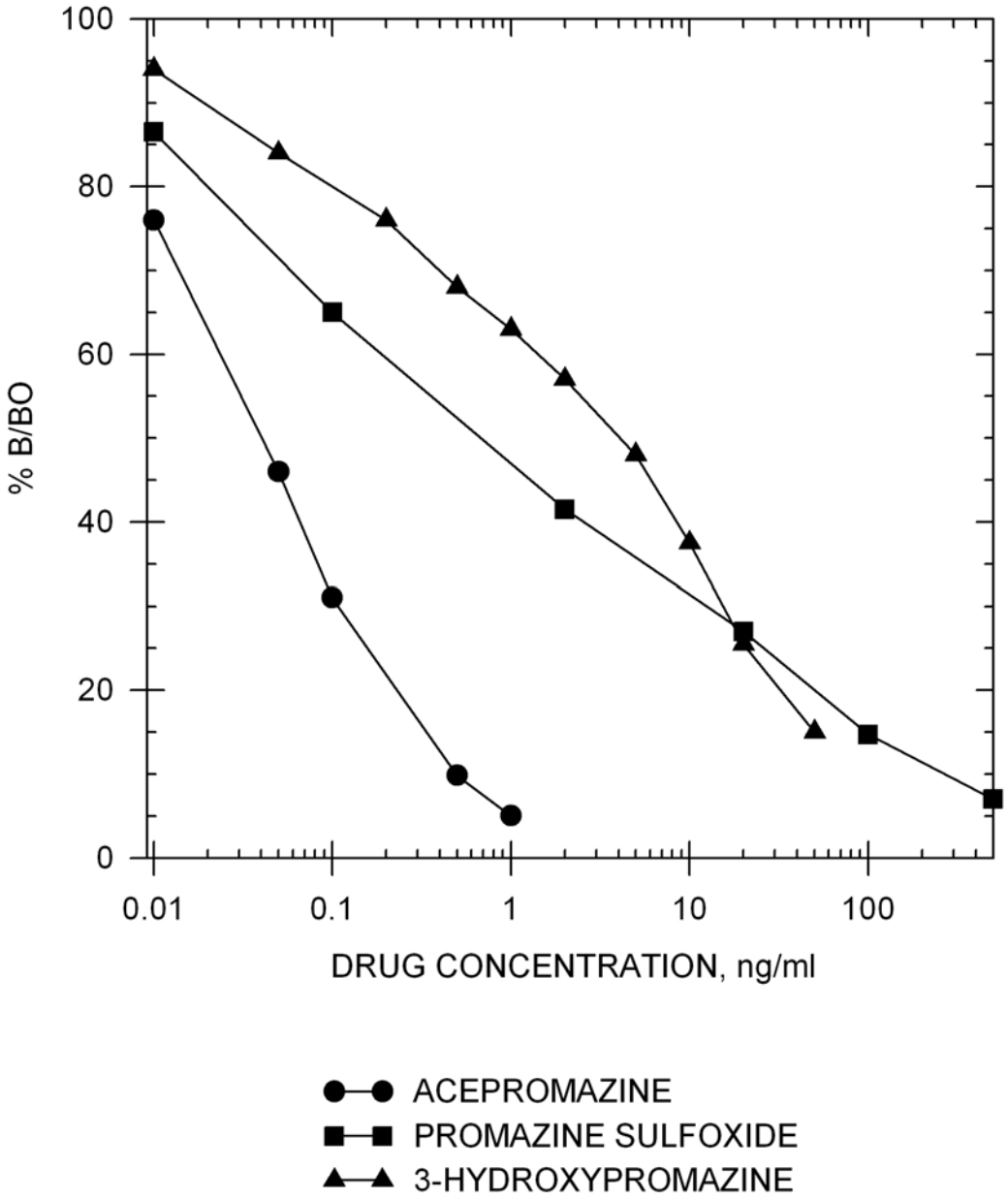
PROMAZINE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



PROMAZINE STANDARD CURVES

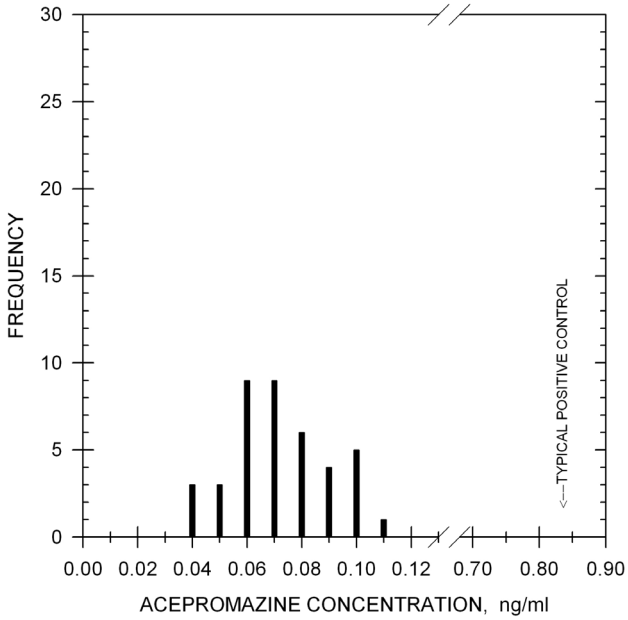
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.11 ng/ml.

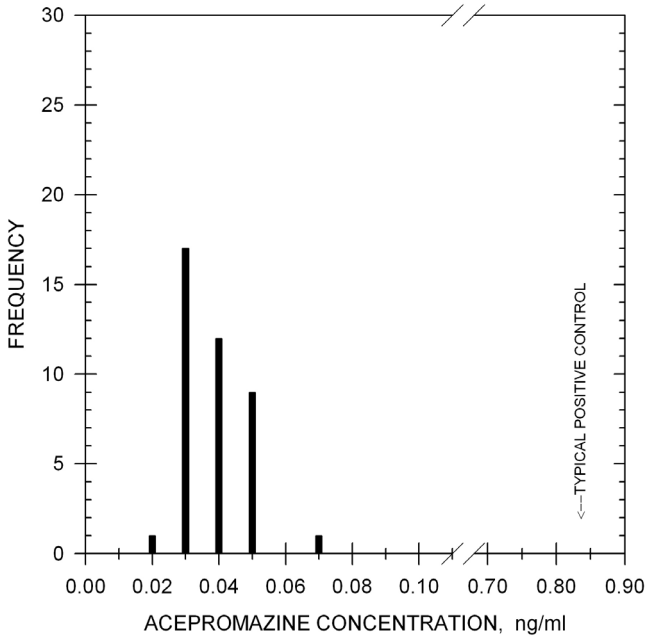
Sample Treatment: No sample dilution is necessary.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples has shown no background levels above 0.07 ng/ml.

Sample Treatment: No sample dilution is necessary.

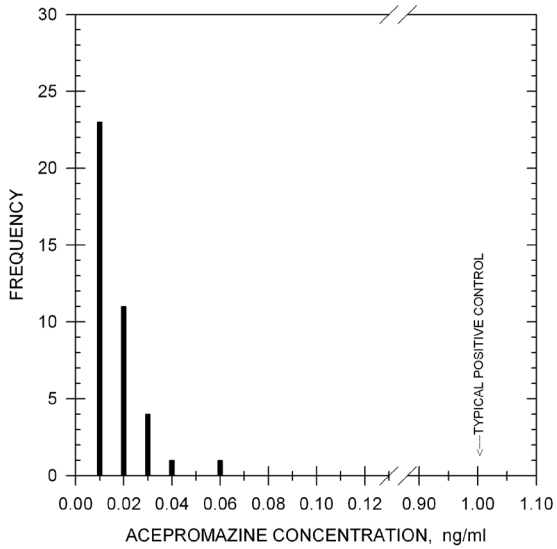


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine plasma samples has shown no background levels above 0.06 ng/ml.

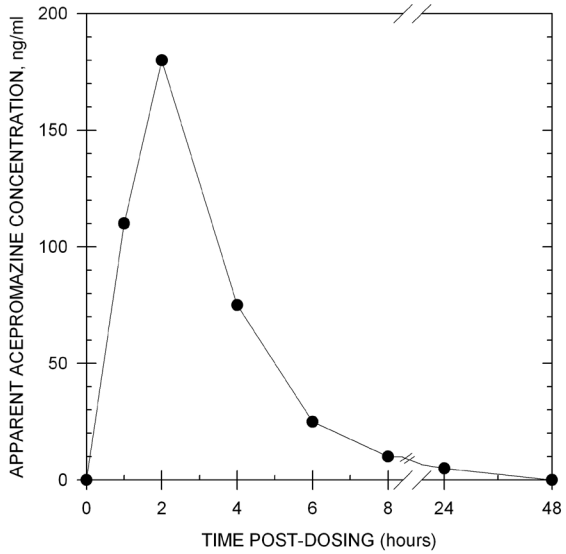
Sample Treatment: No sample dilution is necessary. In some cases, a small dilution (1:1) or sample extraction may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth with plasma samples.



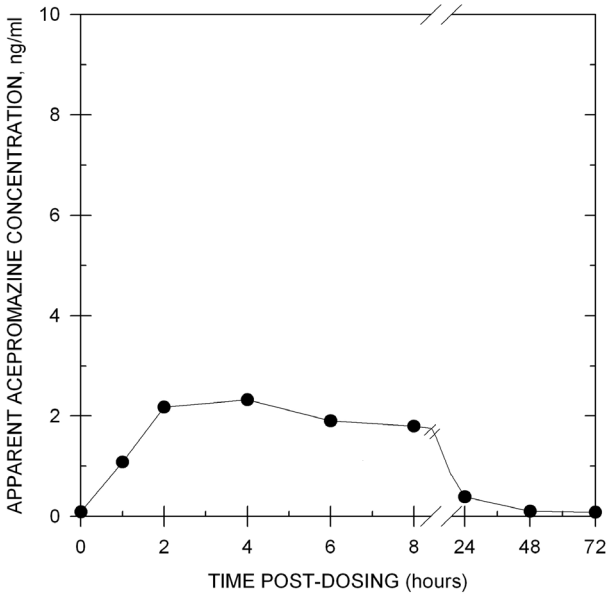
TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 5 mg of acepromazine by intravenous injection to one horse, the presence of this drug was detected for 36 hours in equine urine.



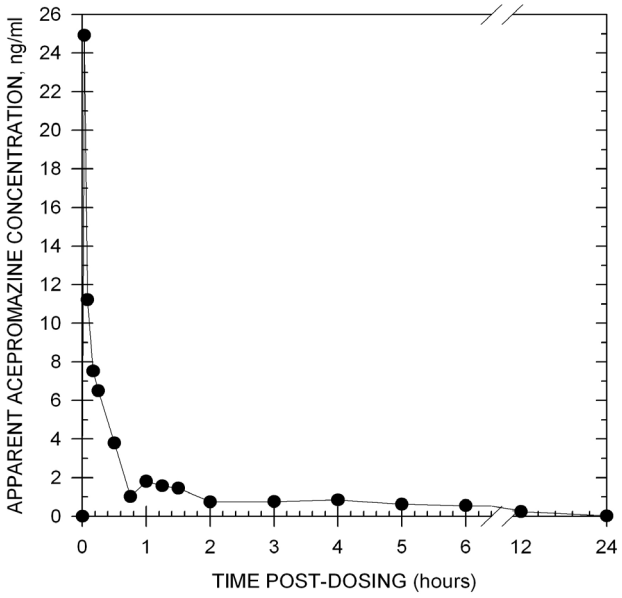
TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 5 mg acepromazine by intravenous injection to one horse, the presence of this drug was detected for 8 hours in equine plasma.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 0.1 mg/kg of acetyl promazine to one dog, the presence of this drug was detected for 12 hours in canine urine. Because post-dose samples up to the 12 hour time point exceeded the range of the assay, samples were diluted 1:100 with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Triflupromazine	250%
Chlorpromazine	200%
Promazine	200%
Acepromazine	100%
Imipramine	100%
Propionylpromazine	71%
Clomipramine	33%
2-(1-Hydroxyethyl) Promazine Sulfoxide (HEPS)	15.9%
Chlorprothixene	6.7%
Promazine Sulfoxide	4.5%
7-Hydroxychlorpromazine	4.4%
Amitriptyline	2.9%
Cyclobenzaprine	2.9%
Mesoridazine	1.9%
3-Hydroxychlorpromazine	1.7%
Thioridazine	1.0%
Doxepin	0.8%
Nortriptyline	0.8%
Desipramine	0.7%
Trimipramine	0.5%
Propiomazine	0.4%
Protriptyline	0.2%
Trifluoperazine	0.06%
Acetophenazine	0.05%
Perphenazine	0.05%
Fluphenazine	0.02%
Thiethylperazine	0.02%
Cyproheptadine	0.01%
Prochlorperazine	0.01%

Alprazolam	<0.01%	Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%	Nordiazepam	<0.01%
E-Amino-n-Caproic Acid	<0.01%	Etodolac	<0.01%	Olanzapine	<0.01%
Amobarbital	<0.01%	Flunitrazepam	<0.01%	Orphenadrine	<0.01%
Aprobarbital	<0.01%	Flunixin	<0.01%	Oxazepam	<0.01%
Ascorbic Acid (Vitamin C)	<0.01%	Furosemide	<0.01%	Oxyphenbutazone	<0.01%
Azaperone	<0.01%	Glycopyrrolate	<0.01%	Pentoxifylline	<0.01%
Barbital	<0.01%	Haloperidol	<0.01%	Phenothiazine	<0.01%
Barbituric Acid	<0.01%	Hexobarbital	<0.01%	Phenylbutazone	<0.01%
Butabarbital	<0.01%	Hordenine	<0.01%	Pimozide	<0.01%
Carprofen	<0.01%	Hydrocortisone	<0.01%	Polyethylene Glycol	<0.01%
Chlorazepate	<0.01%	Ibuprofen	<0.01%	Prazepam	<0.01%
Chlordiazepoxide	<0.01%	Lorazepam	<0.01%	Prednisolone	<0.01%
Clenbuterol	<0.01%	Magnesium	<0.01%	Procaine	<0.01%
Clobazam	<0.01%	Metaclopramide	<0.01%	Pyrantel	<0.01%
Clozapine	<0.01%	Metaproterenol	<0.01%	Salbutamol	<0.01%
Detomidine	<0.01%	Methocarbamol	<0.01%	Salicylamide	<0.01%
Diazepam	<0.01%	Methylene Blue	<0.01%	Salicylic Acid	<0.01%
Diclofenac	<0.01%	6α-Methylprednisolone	<0.01%	Secobarbital	<0.01%
Dihydroergotamine	<0.01%	Naproxen	<0.01%	Spiperone	<0.01%
Dimethyl Sulfoxide	<0.01%	Niacinamide	<0.01%	Temazepam	<0.01%
Dipyrone	<0.01%	Nitrazepam	<0.01%	Thiamine	<0.01%
Droperidol	<0.01%			Trazodone	<0.01%

PROPOXYPHENE (RTU) FORENSIC KIT

Product #131119 & 131115

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Propoxyphene	7.7 ng/mL
Norpropoxyphene	26.0 ng/mL

I-50 in Equine Urine (Diluted 1:3)		**I-50 in Canine Urine**	
Propoxyphene	19.9 ng/mL	Propoxyphene	5.38 ng/mL
Norpropoxyphene	67.3 ng/mL	Norpropoxyphene	18.1 ng/mL

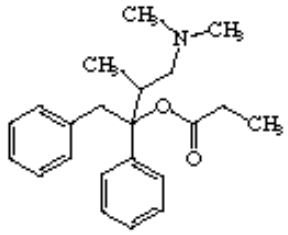
Precision:

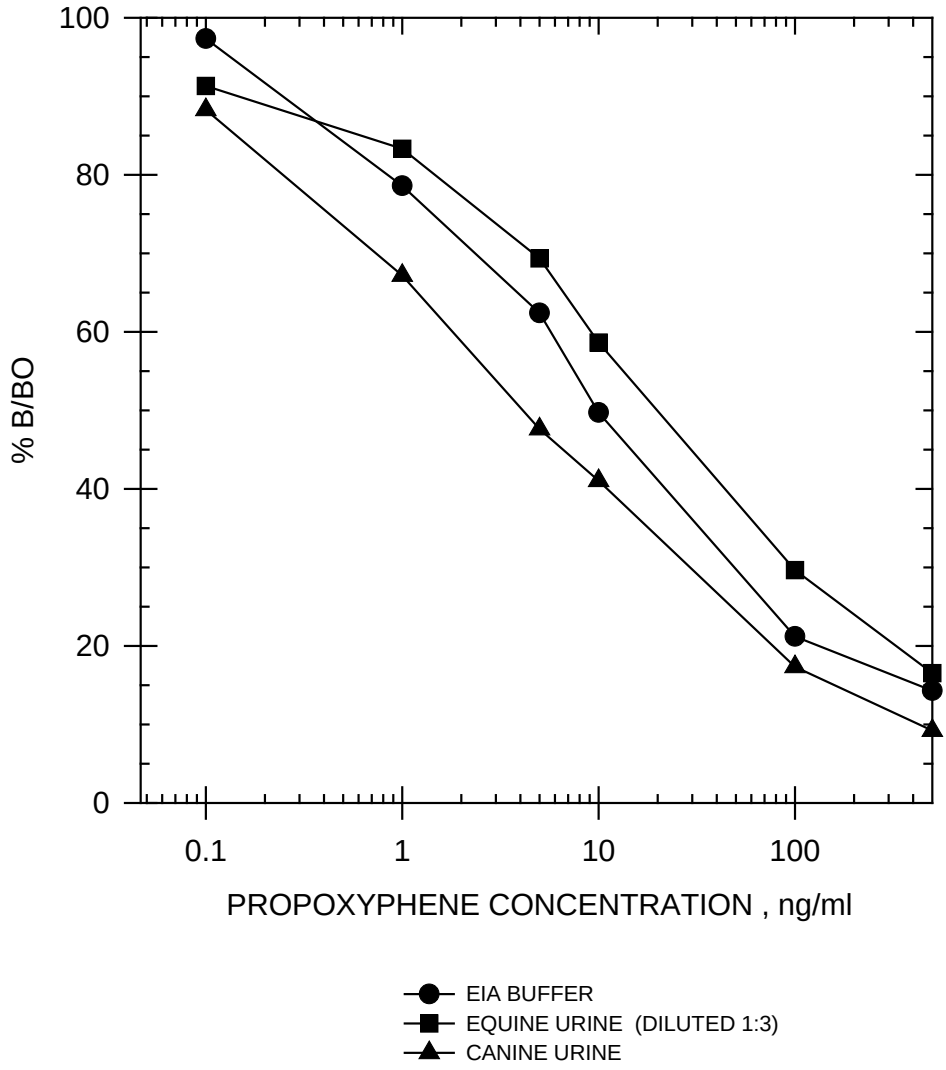
Intra-Assay	6.64%
Inter-Assay	3.61%

Note: Measuring wavelength was 650 nm.

PROPOXYPHENE STANDARD CURVES

Drug Standard Curves

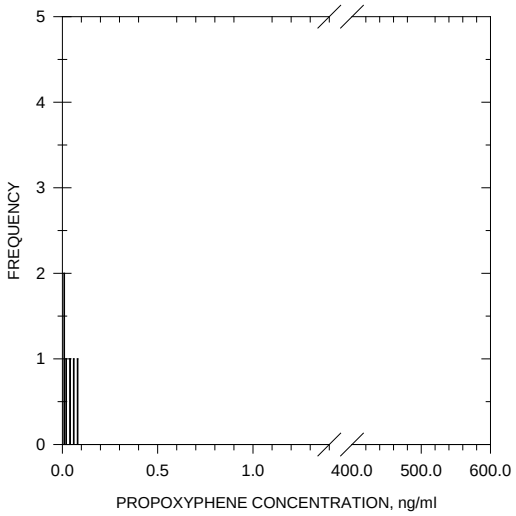




TYPICAL EQUINE URINE BACKGROUND LEVELS

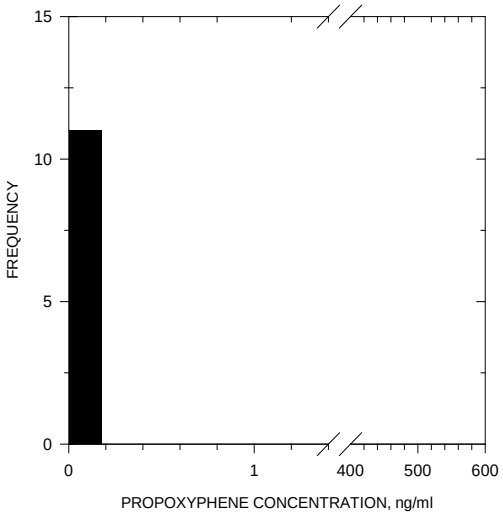
Backgrounds: Analysis of 11 post-race equine urine samples has shown no background levels above 0.08 ng/mL.

Sample Treatment: A dilution of 1:3 (i.e. 1 part urine to 3 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples has shown no background levels above 1.6 ng/mL.



CROSS-REACTIVITY DATA

Please reference the product insert for cross reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT

PROPRANOLOL

Product #107310 & 107315 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Propranolol	1.0 ng/ml
4-Hydroxypropranolol	1.15 ng/ml
Pindolol	3.5 ng/ml
Alprenolol	30 ng/ml
Atenolol	70 ng/ml
Metaprolol	400 ng/ml
Acebutolol	450 ng/ml

I-50 in Equine Urine (Diluted 1:3)

Propranolol	3.5 ng/ml
Pindolol	15 ng/ml
Alprenolol	150 ng/ml

I-50 in Canine Urine

Propranolol	1.0 ng/ml
Pindolol	5 ng/ml
Alprenolol	45 ng/ml

I-50 in Equine Plasma

Propranolol	1.5 ng/ml
Pindolol	7 ng/ml
Alprenolol	30 ng/ml

I-50 in Equine Serum

Propranolol	20 ng/ml
Pindolol	50 ng/ml
Alprenolol	1500 ng/ml

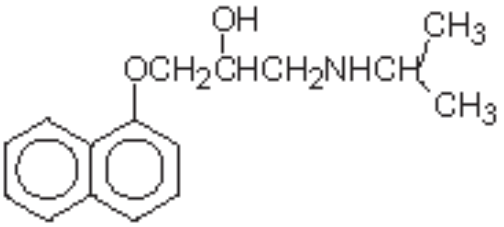
Precision:

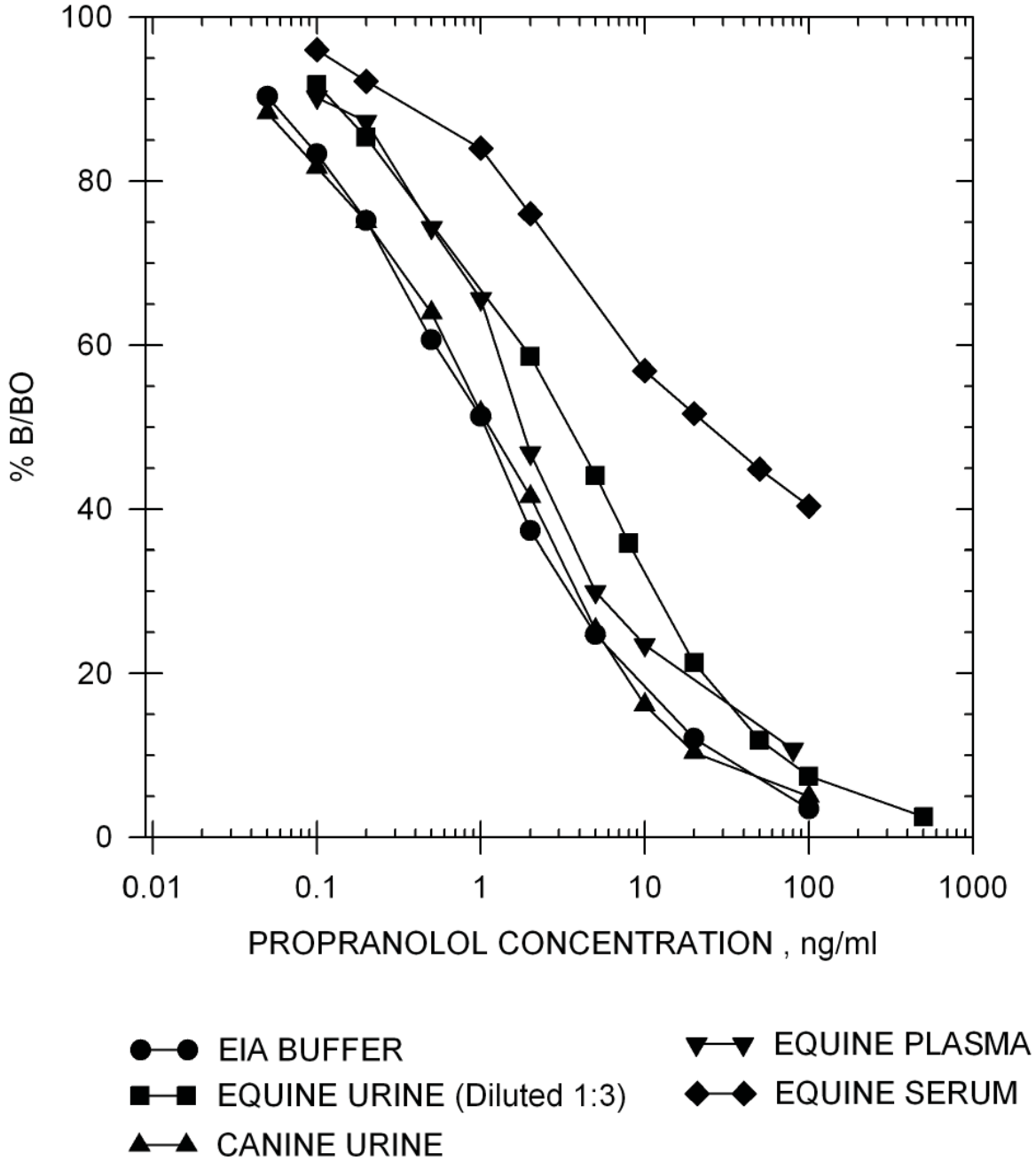
Intra-assay	2.12%
Inter-assay	1.26%

Note: Measuring wavelength was 650 nm**.**

PROPRANOLOL STANDARD CURVES

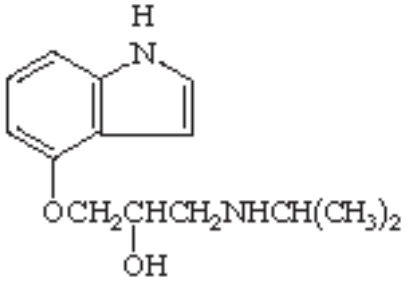
Propranolol

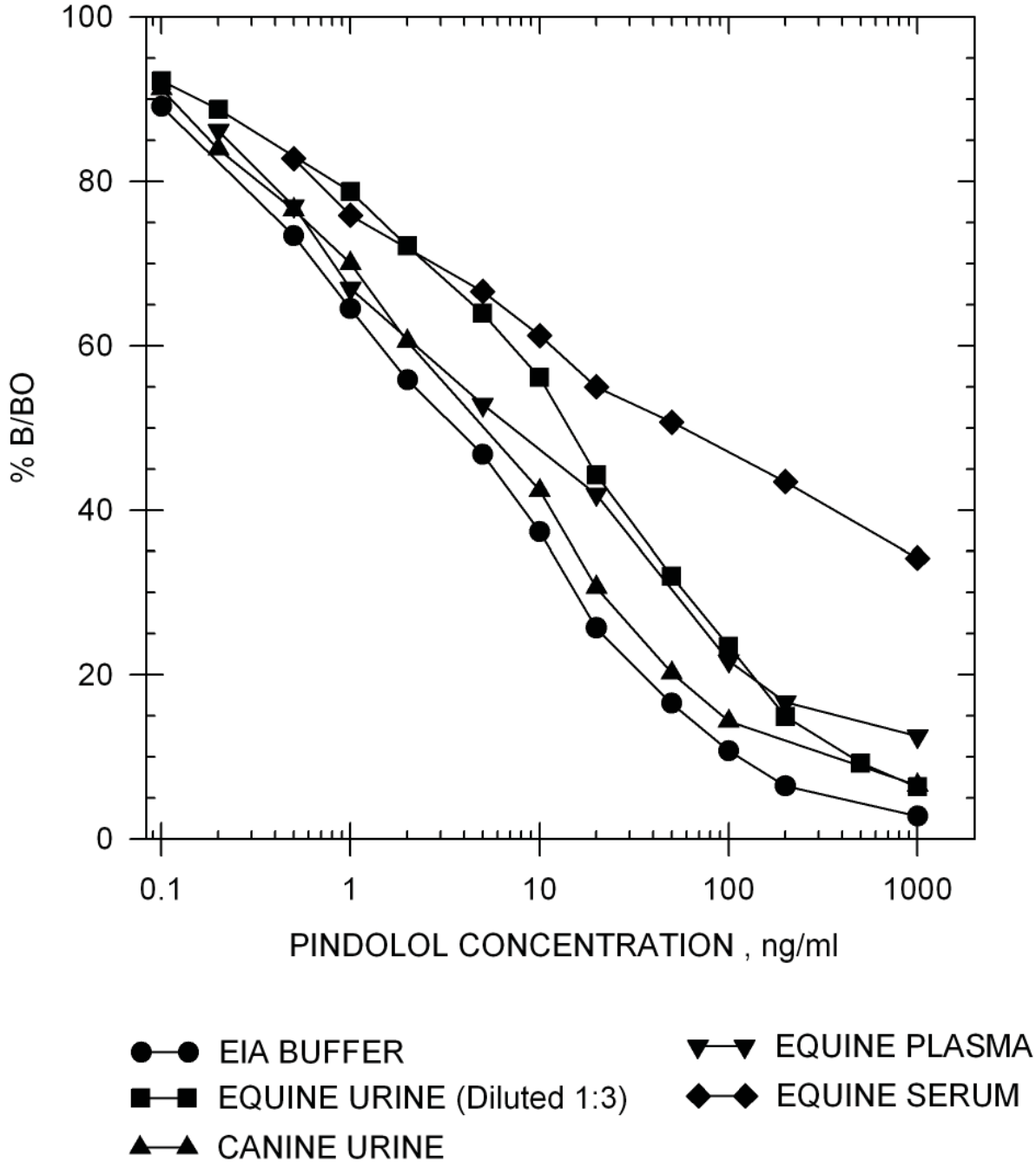




PROPRANOLOL STANDARD CURVES

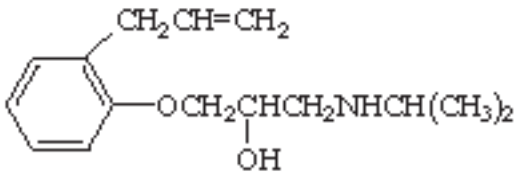
Pindolol

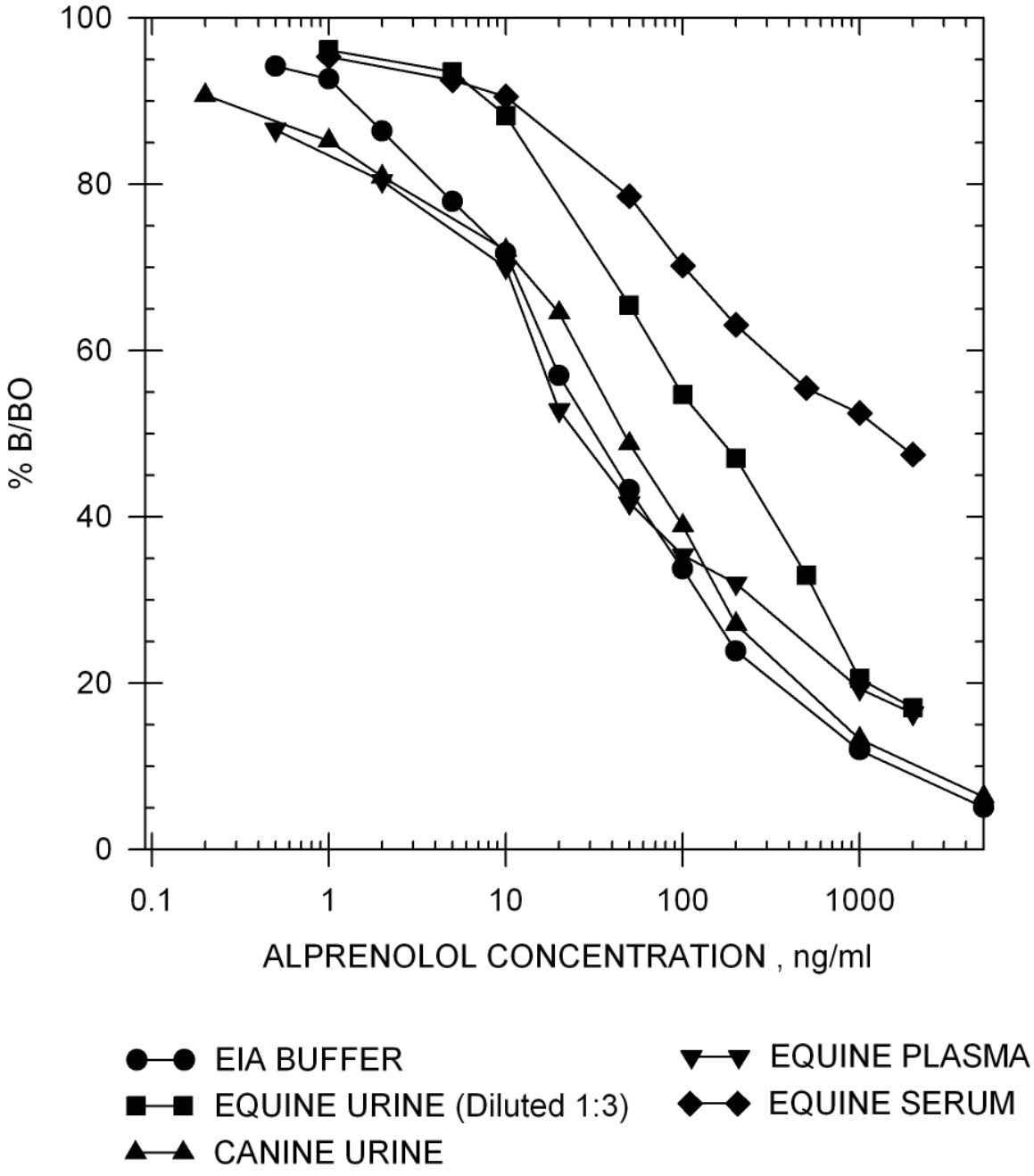




PROPRANOLOL STANDARD CURVES

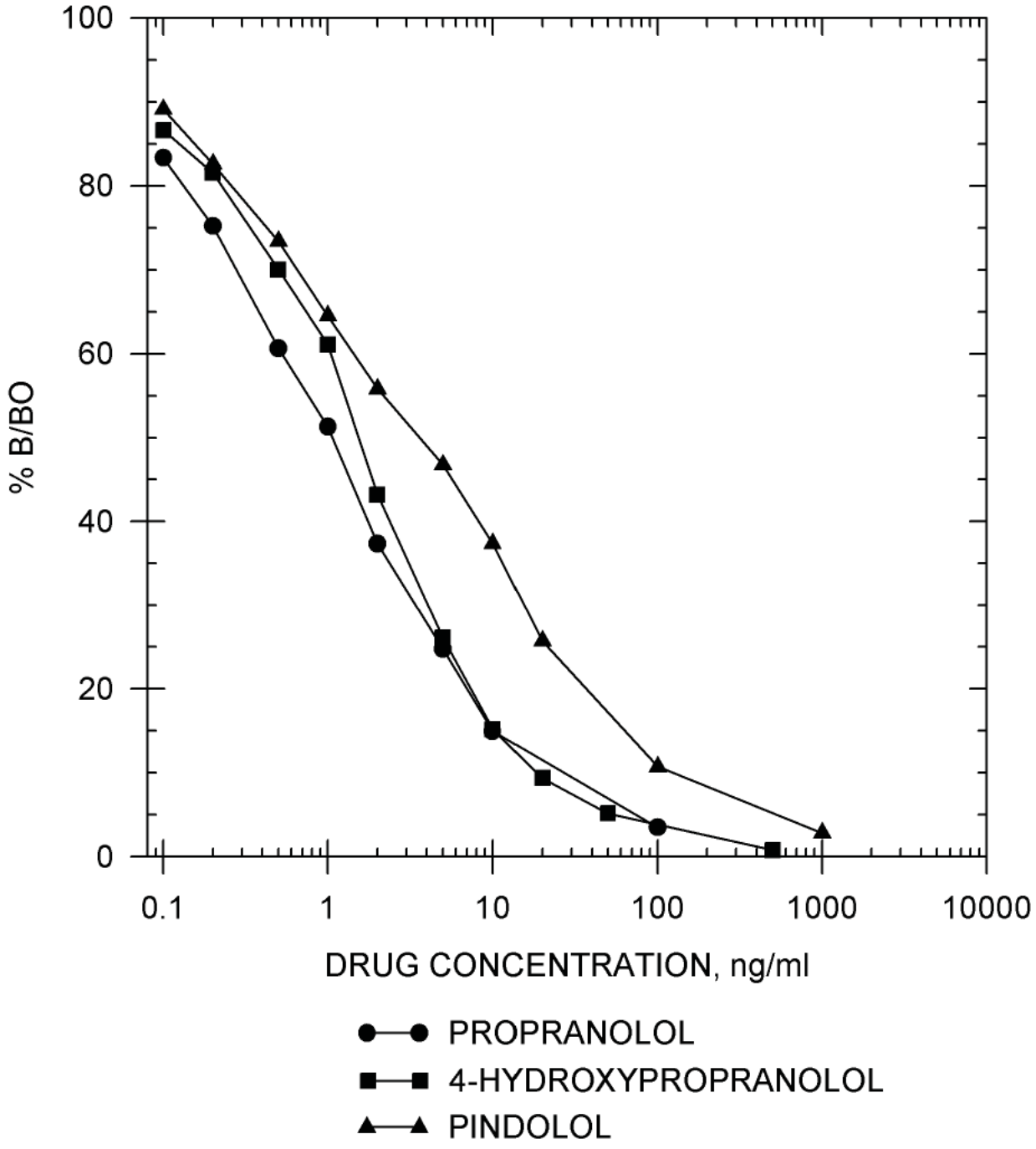
Alprenolol





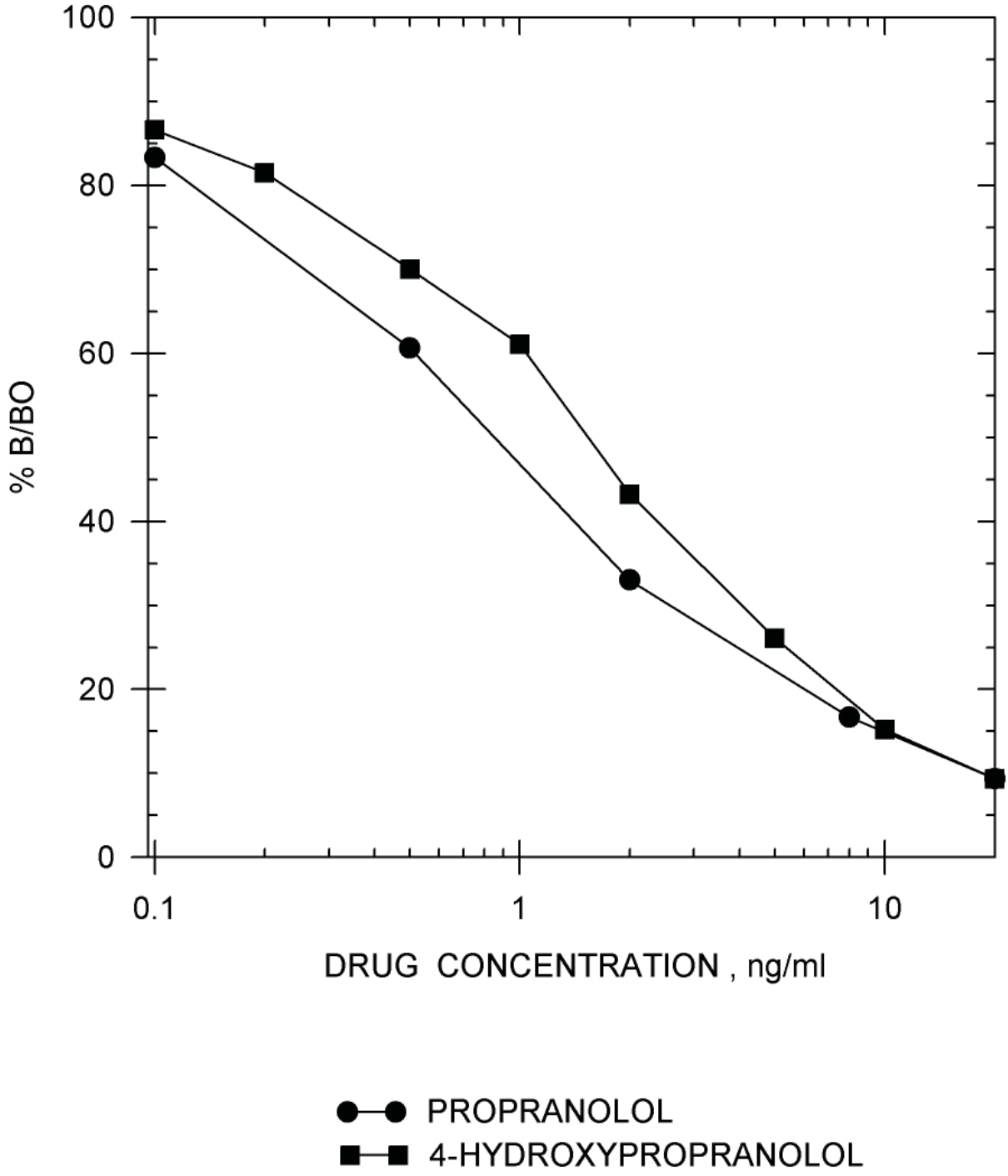
PROPRANOLOL STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



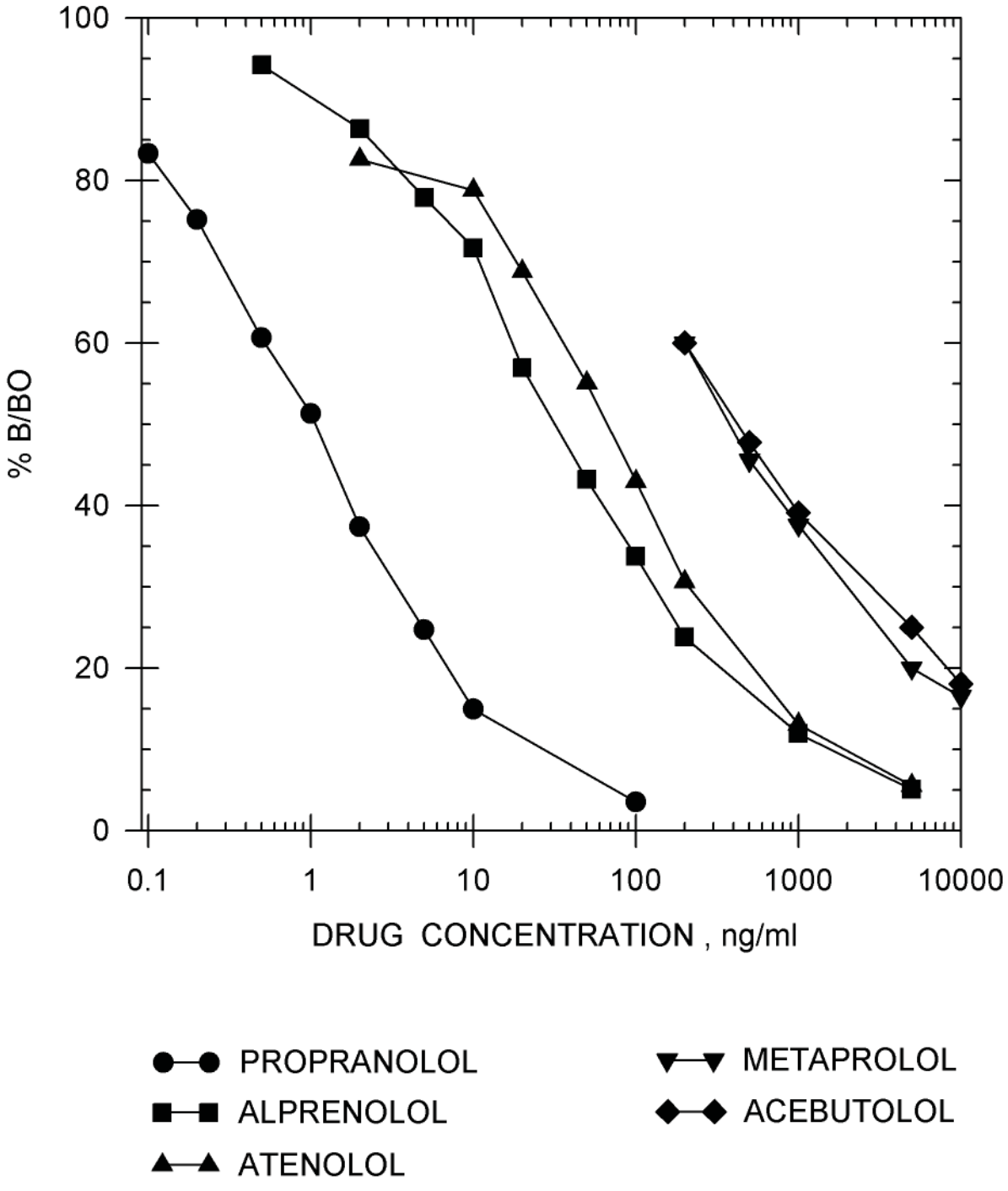
PROPRANOLOL STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



PROPRANOLOL STANDARD CURVES

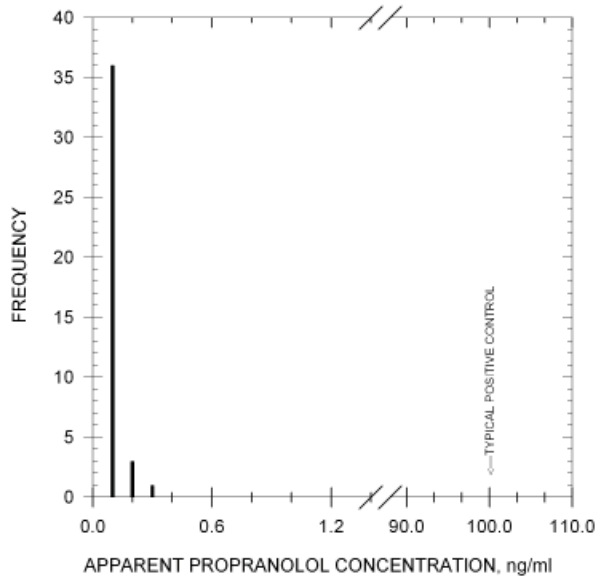
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:3, has shown no background levels above 0.3 ng/ml.

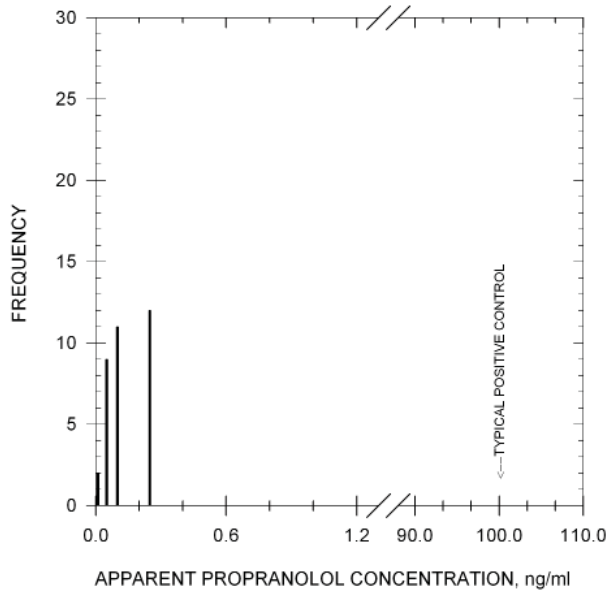
Sample Treatment: A dilution of 1:1 to 1:3 (i.e. 1 part urine to 3 parts buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 34 post-race canine urine samples has shown no background levels above 0.25 ng/ml.

Sample Treatment: No sample dilution isnecessary.

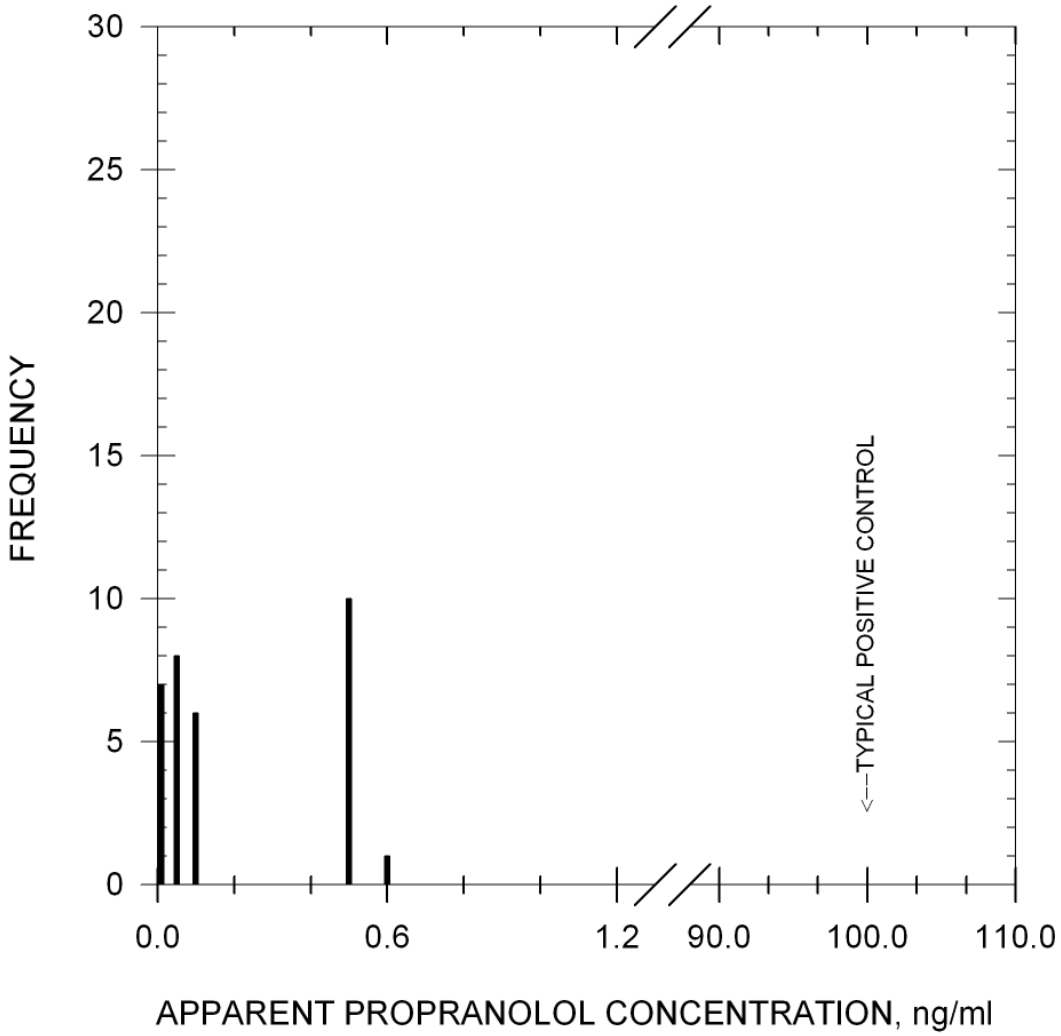


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 32 post-race equine plasma samples has shown no background levels above 0.6 ng/mL.

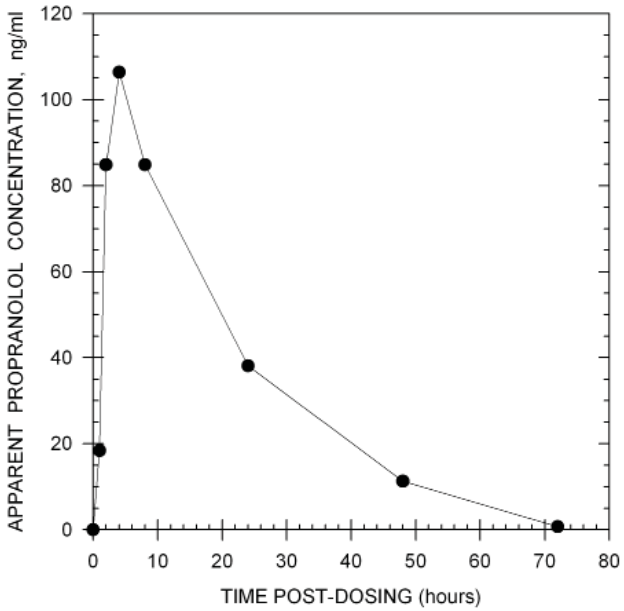
Sample Treatment: No sample dilution is necessary.

Note: Serum samples have not been evaluated. Standard curves in serum have indicated that a small dilution (1:1) or sample extraction may be necessary.



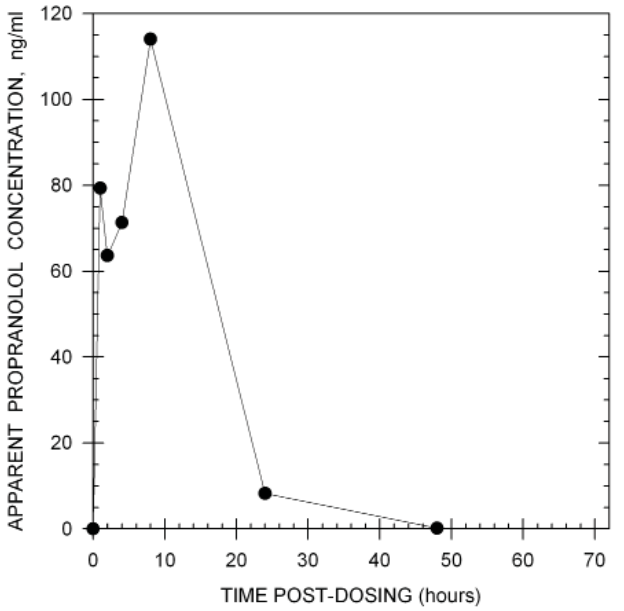
TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 240 mg/horse of propranolol orally to one horse, the presence of this drug was detected for at least 48 hours in equine urine. All samples were diluted 1:3 with EIA buffer before testing according to the recommended sample treatment.



TYPICAL DURATION OF DETECTION

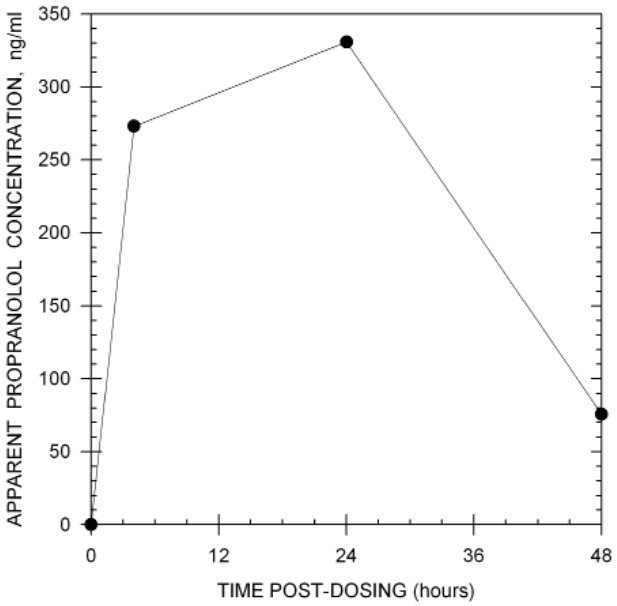
Duration of Detection: After administration of 240 mg/horse of propanolol orally to one horse, the presence of this drug was detected for at least 8 hours in equine plasma.



TYPICAL DURATION OF DETECTION

Duration of Detection:

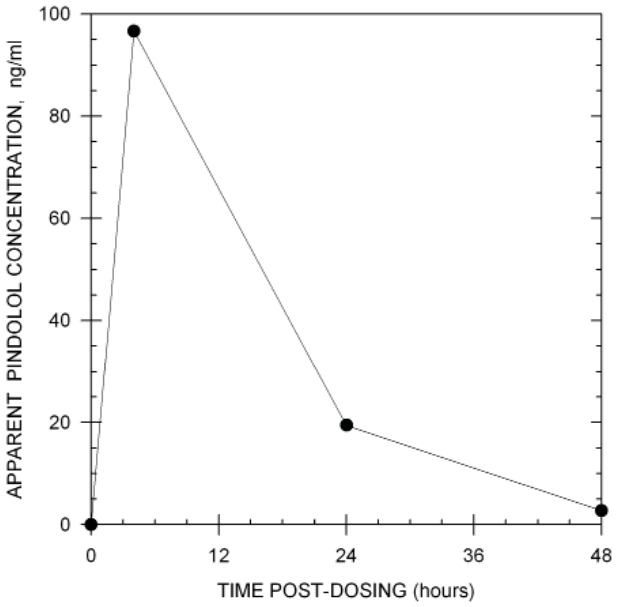
After administration of 20 mg/dog of propranolol orally to one dog, the presence of this drug was detected for at least 48 hours in canine urine.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 2.5 mg/dog of pindolol orally to one dog, the presence of this drug was detected for 24 hours in canine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Propranolol	100%
4-Hydroxypropranolol	79%
Pindolol	40%
Alprenolol	3.3%
Atenolol	1.9%
Isoproterenol	0.1%
Metoprolol	0.32%
Acebutolol	0.30%
Metaproterenol	0.03%
Clenbuterol	0.01%
Nadolol	0.01%
Timolol	0.01%

Methocarbamol	<0.01%	Acepromazine	<0.01%
Methylene Blue	<0.01%	E-Amino-n-Caproic Acid	<0.01%
6α-Methylprednisolone	<0.01%	Ascorbic Acid (Vitamin C)	<0.01%
Naproxen	<0.01%	Dexamethasone	<0.01%
Niacinamide	<0.01%	Diclofenac	<0.01%
Orphenadrine	<0.01%	Dihydroergotamine	<0.01%
Oxyphenbutazone	<0.01%	Dimethyl Sulfoxide	<0.01%
Pentoxifylline	<0.01%	Dipyrone	<0.01%
Phenothiazine	<0.01%	Ethyl p-Amino-Benzoate (Benzocaine)	<0.01%
Phenylbutazone	<0.01%	Fenoterol	<0.01%
Polyethylene Glycol	<0.01%	Flunixin	<0.01%
Prednisolone	<0.01%	Furosemide	<0.01%
Procaine	<0.01%	Glycopyrrolate	<0.01%
Pyrantel	<0.01%	Hordenine	<0.01%
Pyrilamine	<0.01%	Hydrocortisone	<0.01%
Salbutamol (Albuterol)	<0.01%	Ibuprofen	<0.01%
Salicylamide	<0.01%	Isoxsuprine	<0.01%
Salicylic Acid	<0.01%	Lidocaine	<0.01%
Tetracaine	<0.01%		
Thiamine	<0.01%		

PYRILAMINE

Product #105910 & 105915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

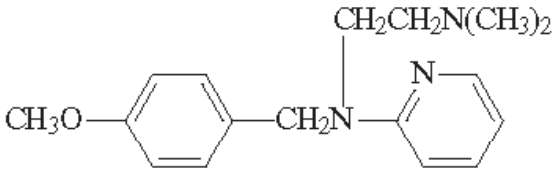
Pyrilamine	0.07 ng/ml
Tripelennamine	0.3 ng/ml
0-Desmethylpyrilamine	0.4 ng/ml
Chlorpheniramine	35 ng/ml
Pheniramine	75 ng/ml

Precision:	Intra-assay	5.11 %
	Inter-assay	7.27 %

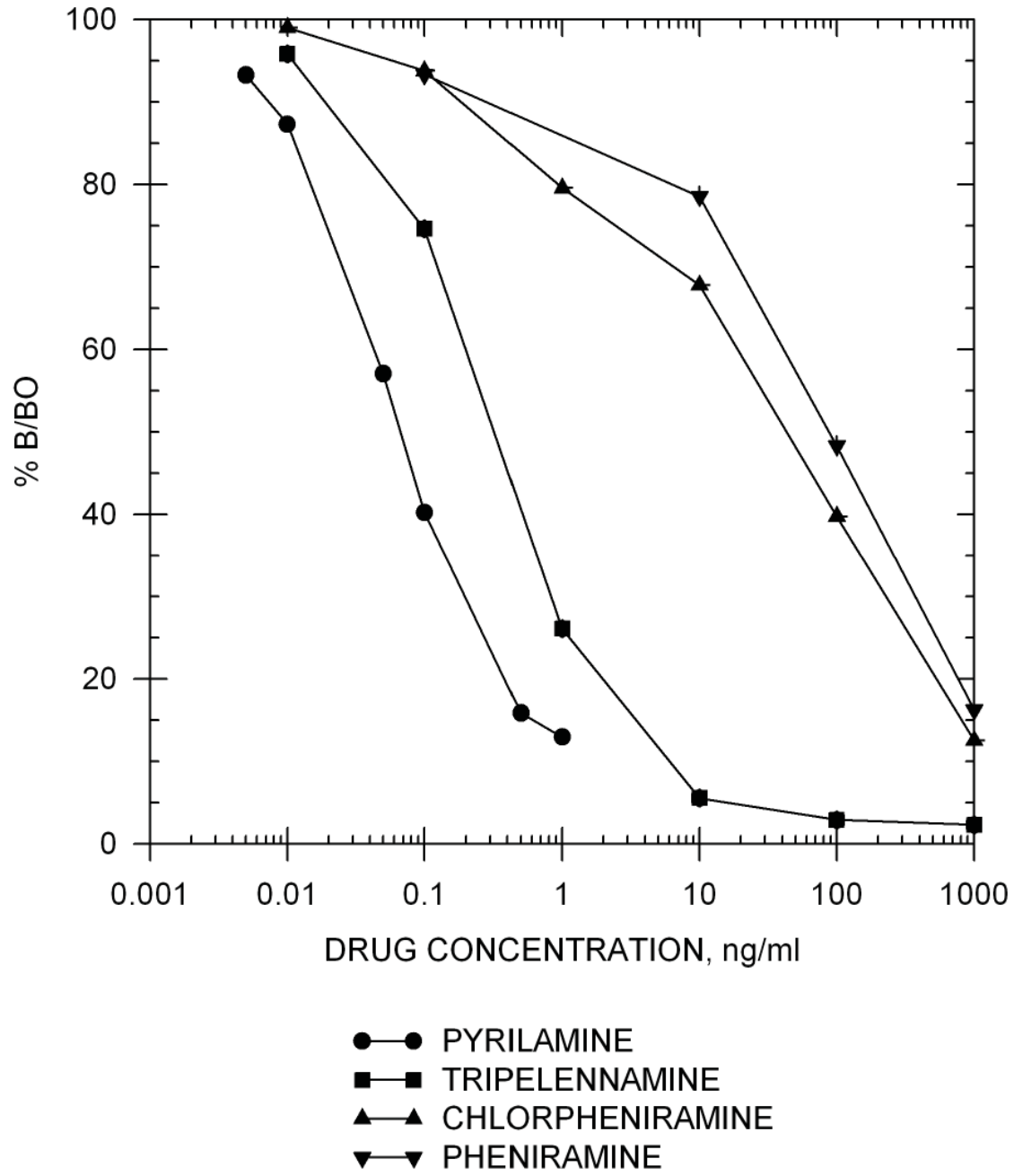
Note: Measuring wavelength was 650 nm**.**

PYRILAMINE STANDARD CURVES

Pyrilamine



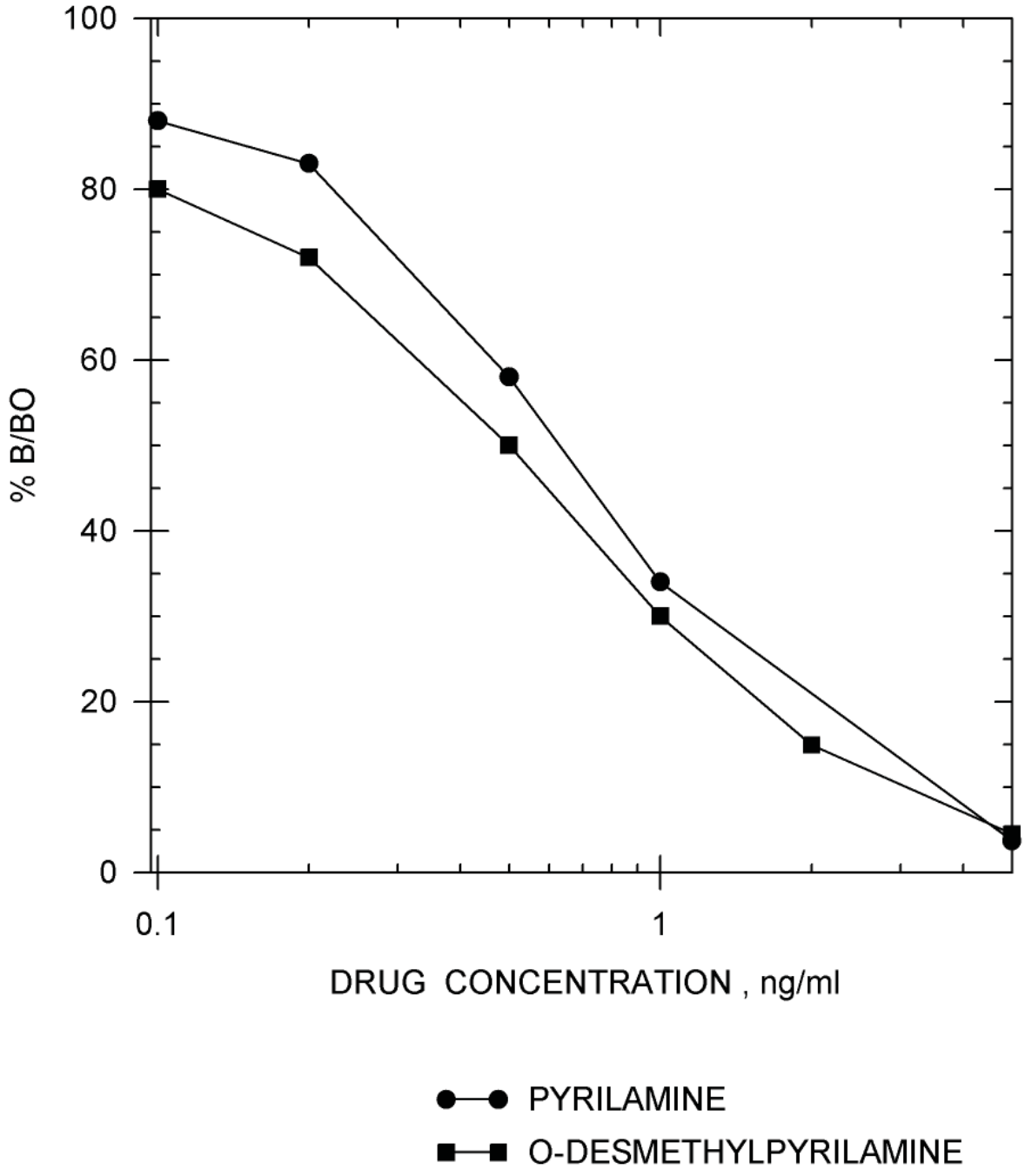
Drug Standard Curve Comparison in EIA Buffer



PYRILAMINE STANDARD CURVES

O-Desmethylpyrilamine

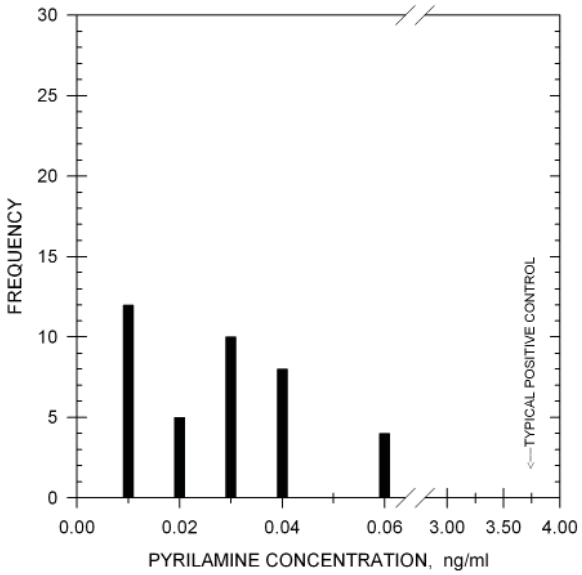
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

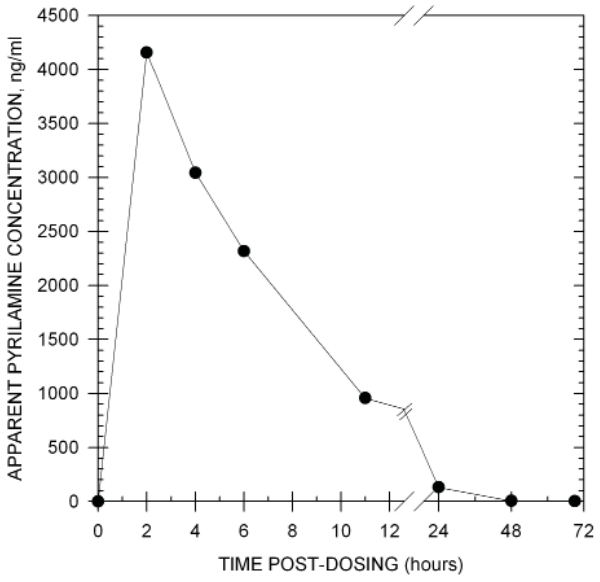
Backgrounds: Analysis of 39 post-race equine urine samples has shown no background levels above 0.06 ng/ml.

Sample Treatment: No sample dilution necessary.



TYPICAL DURATION OF DETECTION

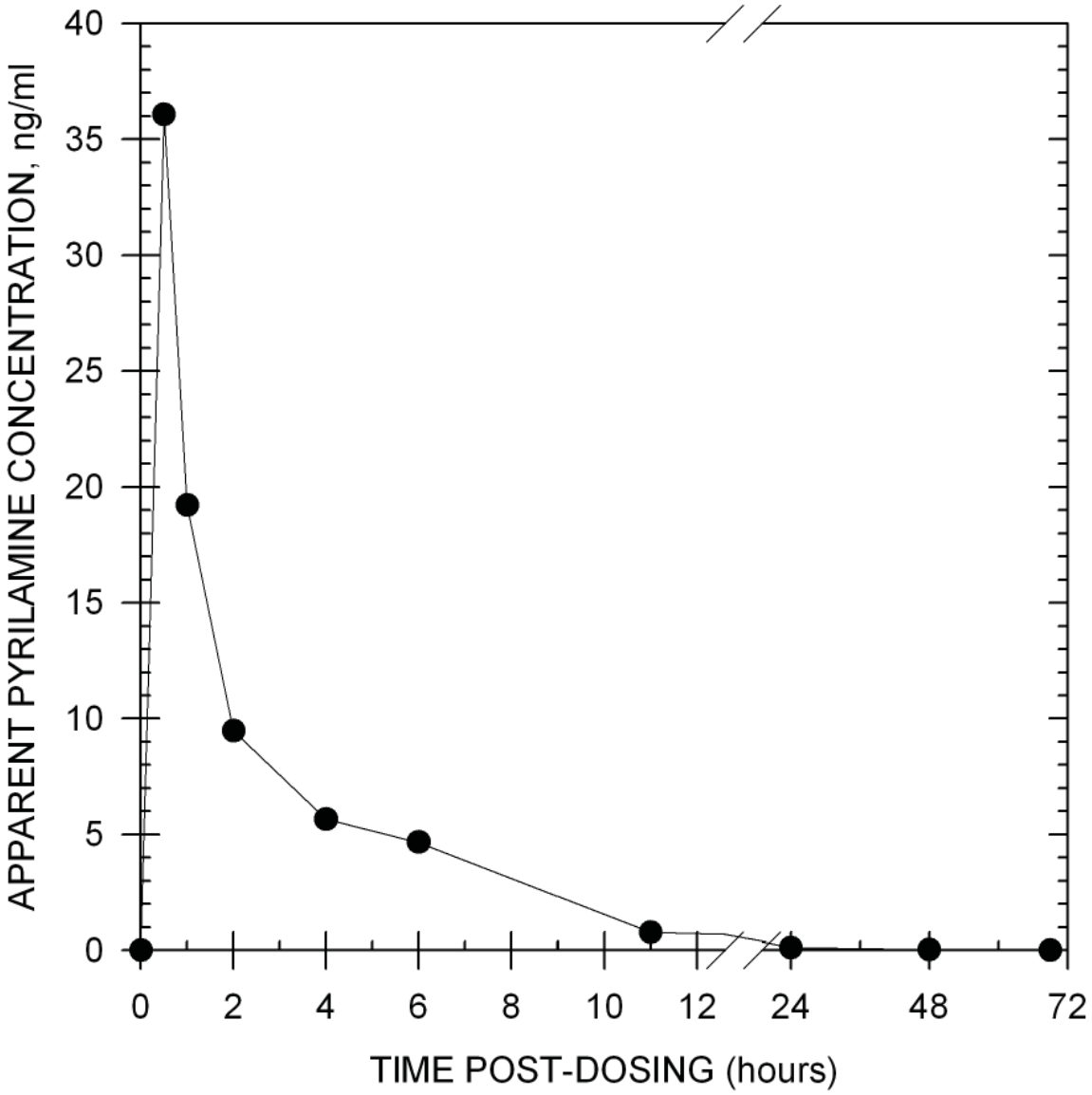
Duration of Detection: After administration of 100 mg of pyrilamine by intravenous injection to one horse, the presence of this drug was detected for 70 hours in equine urine. Because all post-dose samples exceeded the range of the assay, samples were diluted 1:10,000 with EIA buffer and backcalculated.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After administration of 100 mg of pyrilamine by intravenous injection, the presence of this drug was detected for 24 hours in equine serum. Post-dose samples up to 11 hours exceeded the range of the assay, these samples were diluted with EIA buffer and backcalculated.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Pyrilamine	100%	Promazine	0.02%
Tripelennamine	23%	Chlorpromazine	0.02%
0-Desmethylpyrilamine	18%	Nortriptyline	0.02%
Chlorpheniramine	0.2%	Imipramine	0.01%
Doxepin	0.09%	Acepromazine	0.01%
Pheniramine	0.09%	Pyrantel	0.01%
Amitriptyline	0.05%	PCP	0.01%
Orphenadrine	0.02%	Thiordazine	0.01%
Trimpramine	0.02%	Procaine	0.01%

Acetaminophen	< 0.01%	Flunixin	< 0.01%	Niacinamide	< 0.01%
Acetylsalicylic Acid	< 0.01%	Folic Acid	< 0.01%	Nicotine	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Folinic Acid	< 0.01%	Oxphenbutazone	< 0.01%
Ascorbic Acid	< 0.01%	Furosemide	< 0.01%	Penicillin G-Potassium	< 0.01%
Beclomethasone	< 0.01%	Gemfibrozil	< 0.01%	Penicillin G-Procaine	< 0.01%
Benzoic Acid	< 0.01%	Gentisic Acid	< 0.01%	Pentoxifylline	< 0.01%
Budesonide	< 0.01%	Glipizide	< 0.01%	Perphenazine	< 0.01%
Cetirizine	< 0.01%	L-Glutamic Acid	< 0.01%	Phenothiazine	< 0.01%
Chlordiazepoxide	< 0.01%	Glutethimide	< 0.01%	Phenylbutazone	< 0.01%
Chlorphenoxamine	< 0.01%	Glycopyrrolate	< 0.01%	Polyethylene Glycol	< 0.01%
Cinnarizine	< 0.01%	Heparin	< 0.01%	Prednisolone	< 0.01%
Clenbuterol	< 0.01%	Hippuric Acid	< 0.01%	Primadone	< 0.01%
Codeine	< 0.01%	Hordenine	< 0.01%	Procainamide	< 0.01%
Cotinine	< 0.01%	Hydrocortisone	< 0.01%	Prochlorperazine	< 0.01%
Cyclizine	< 0.01%	Hydroxyzine	< 0.01%	Pseudoephedrine	< 0.01%
Dexamethasone	< 0.01%	Ibuprofen	< 0.01%	Pyrimethamine	< 0.01%
Dextromethorphan	< 0.01%	Ipratropium Bromide	< 0.01%	Quinidine	< 0.01%
Diclofenac	< 0.01%	Isoxsuprine	< 0.01%	Quinine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Lidocaine	< 0.01%	Salbutamol	< 0.01%
Diphenhydramine	< 0.01%	Meclizine	< 0.01%	Salicylamide	< 0.01%
Dipyrone	< 0.01%	Meperidine	< 0.01%	Salicylic Acid	< 0.01%
EDTA	< 0.01%	Metaproterenol	< 0.01%	Theophylline	< 0.01%
Ephedrine	< 0.01%	Methadone	< 0.01%	Thiamine	< 0.01%
Erythromycin	< 0.01%	Methaqualone	< 0.01%	Thiethylperazine	< 0.01%
Ethanolamine	< 0.01%	Methocarbamol	< 0.01%	Thiordazine	< 0.01%
Ethylenediamine	< 0.01%	Methylene Blue	< 0.01%	Trifluoperazine	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Methylprednisolone	< 0.01%	Trimethoprim	< 0.01%
Fenoprofen	< 0.01%	Nalorphine	< 0.01%	Uric Acid	< 0.01%
Flunarizine	< 0.01%	Naproxen	< 0.01%		

RESERPINE

Product #104810 & 104815 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Reserpine	0.28 ng/ml
Rescinnamine	10 ng/ml
Methylreserpate	45 ng/ml

Precision:

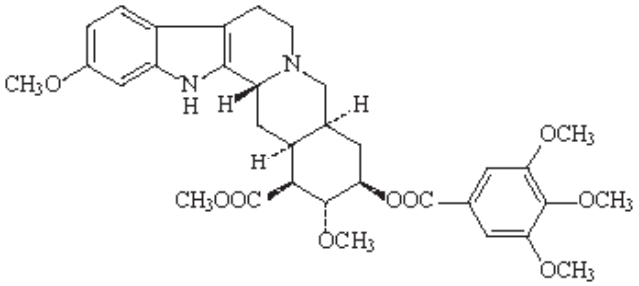
Intra-assay	5.98 %
Inter-assay	4.13 %

Utilization: Neogen suggests using extracted serum with this assay for optimal detection of Reserpine.

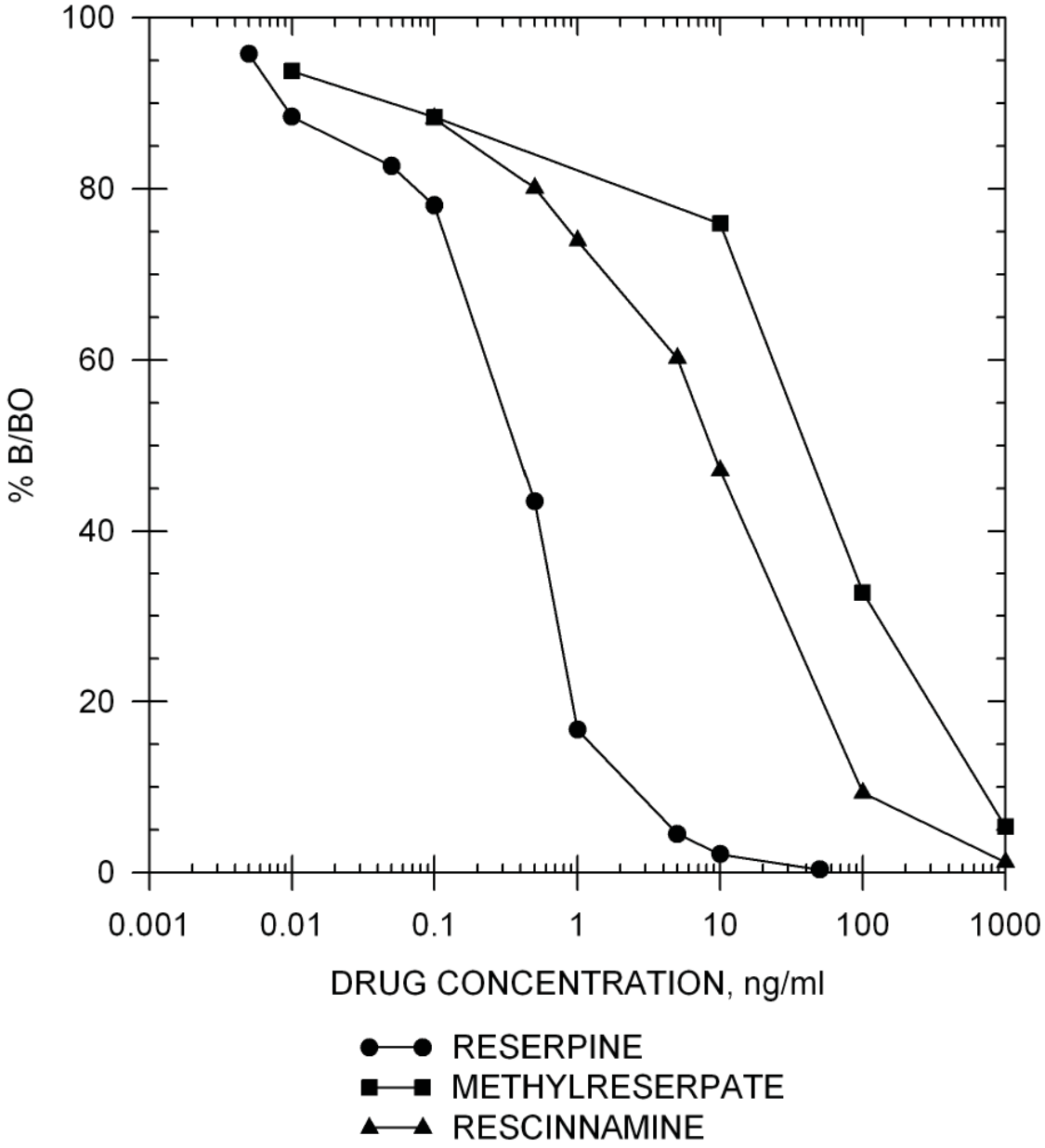
Note: Measuring wavelength was 650 nm**.**

RESERPINE STANDARD CURVES

Reserpine



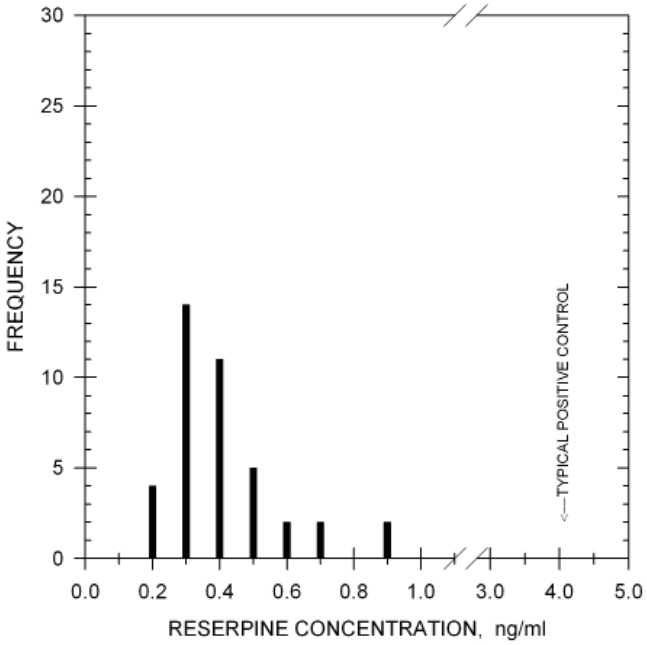
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

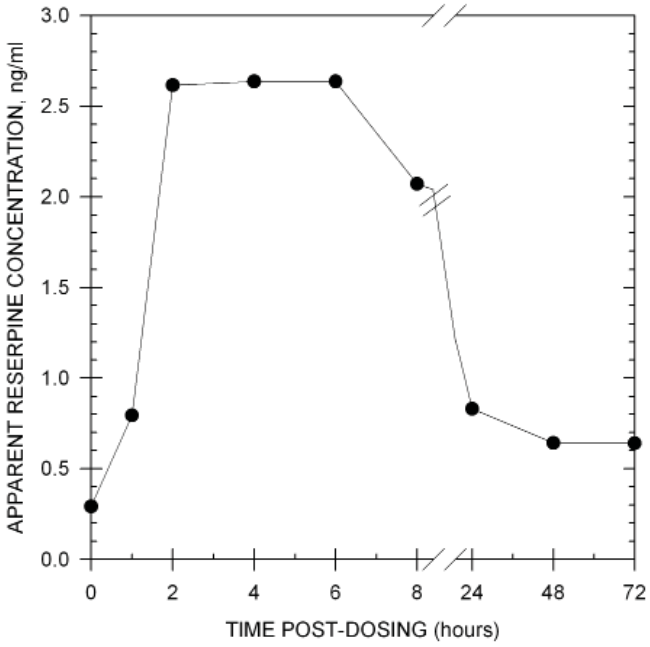
Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.9 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 5 mg of reserpine by intravenous injection to one horse, the presence of this drug was detected for 8 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Reserpine	100%
Rescinnamine	2.8%
Methylreserpate	0.62%

Acebutolol	< 0.01%	Furosemide	< 0.01%	PCP	< 0.01%
Acepromazine	< 0.01%	Gemfibrozil	< 0.01%	Penbutolol	< 0.01%
Acetaminophen	< 0.01%	Gentisic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
Acetylsalicylic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Procaine	< 0.01%
Alprenolol	< 0.01%	L-Glutamic Acid	< 0.01%	Pentoxifylline	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glutethimide	< 0.01%	Phenothiazine	< 0.01%
Amitriptyline	< 0.01%	Glycopyrrolate	< 0.01%	Phenylbutazone	< 0.01%
Ascorbic Acid	< 0.01%	Guanabenz	< 0.01%	Pindolol	< 0.01%
Atenolol	< 0.01%	Heparin	< 0.01%	Polyethylene Glycol	< 0.01%
Benzoic Acid	< 0.01%	Hippuric Acid	<0.01%	Prednisolone	< 0.01%
Betaxolol	< 0.01%	Hordenine	< 0.01%	Primadone	< 0.01%
Carteolol	< 0.01%	Hydrochlorothiazide	< 0.01%	Procainamide	< 0.01%
Chlordiazepoxide	< 0.01%	Hydrocortisone	< 0.01%	Procaine	< 0.01%
Chlorothiazide	< 0.01%	Ibuprofen	< 0.01%	Promazine	< 0.01%
Chlorpromazine	< 0.01%	Imipramine	< 0.01%	Propranolol	< 0.01%
Clenbuterol	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Clonidine	< 0.01%	Labetalol	< 0.01%	Pyrantel	< 0.01%
Clozapine	< 0.01%	Lidocaine	< 0.01%	Pyrilamine	< 0.01%
Codeine	< 0.01%	Meperidine	< 0.01%	Pyrimethamine	< 0.01%
Cotinine	< 0.01%	Metaclopramide	< 0.01%	Quinidine	< 0.01%
Detomidine	< 0.01%	Metaproterenol	< 0.01%	Quinine	< 0.01%
Dexamethasone	< 0.01%	Methadone	< 0.01%	Reserpic Acid	< 0.01%
Dextromethorphan	< 0.01%	Methaqualone	< 0.01%	Salbutamol	< 0.01%
Diclofenac	< 0.01%	Methocarbamol	< 0.01%	Salicylamide	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Methylene Blue	< 0.01%	Salicylic Acid	< 0.01%
Dipyrone	< 0.01%	Methylprednisolone	< 0.01%	Sotalol	< 0.01%
Doxepin	< 0.01%	Nadolol	< 0.01%	Theophylline	< 0.01%
Droperidol	< 0.01%	Nalorphine	< 0.01%	Thiamine	< 0.01%
Ephedrine	< 0.01%	Naproxen	< 0.01%	Timolol	< 0.01%
Erythromycin	< 0.01%	Niacinamide	< 0.01%	Trichlorothiazide	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Nicotine	< 0.01%	Trimethoprim	< 0.01%
Fenoprofen	< 0.01%	Nortriptyline	< 0.01%	Trimipramine	< 0.01%
Flunixin	< 0.01%	Orphenadrine	< 0.01%	Uric Acid	< 0.01%
Folic Acid	< 0.01%	Oxphenbutazone	< 0.01%	Yohimbine	< 0.01%
Folinic Acid	< 0.01%	Oxprenolol	< 0.01%	Zolpidem	< 0.01%

ENHANCED SUFENTANIL

Product #104910 & 104915 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

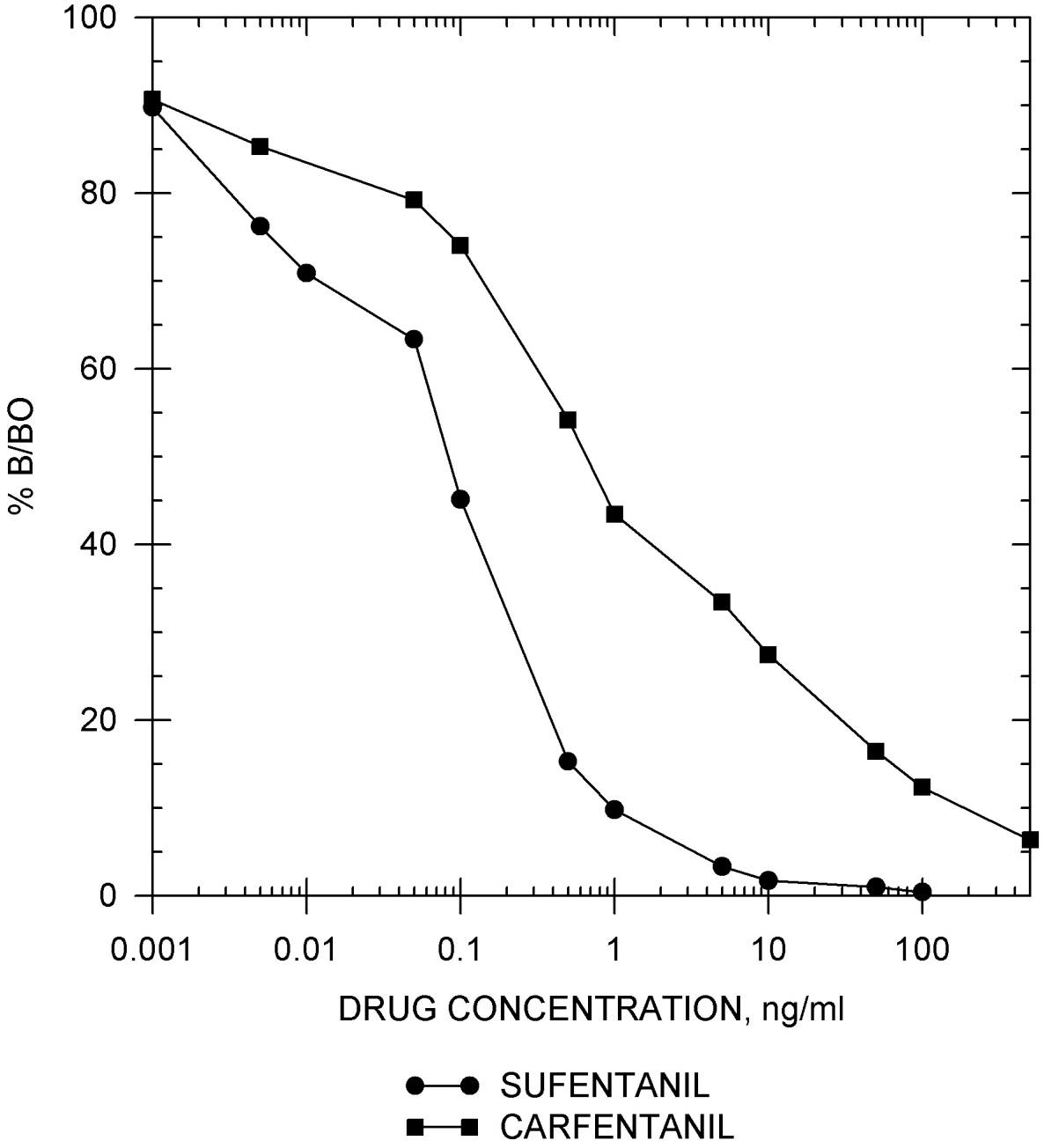
I-50 in EIA Buffer

Sufentanil	0.09 ng/ml
Carfentanil	0.7 ng/ml

Precision:	Intra-assay	4.36 %
	Inter-assay	4.81 %

Note: Measuring wavelength was 650 nm.

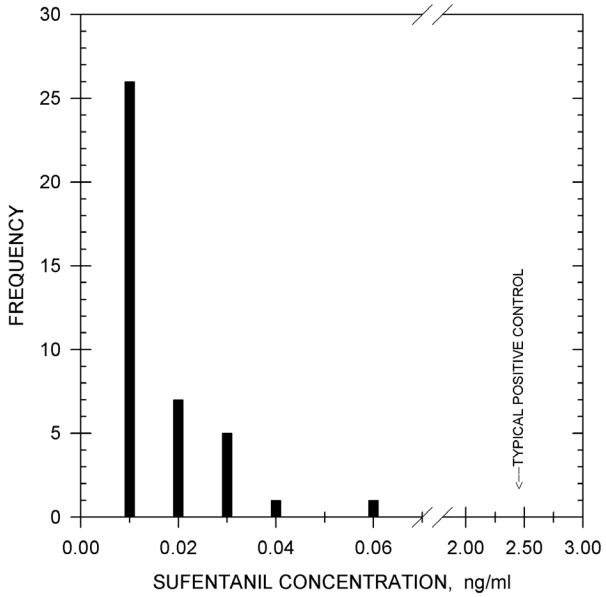
SUFENTANIL STANDARD CURVES



TYPICAL EQUINE URINE BACKGROUND LEVELS

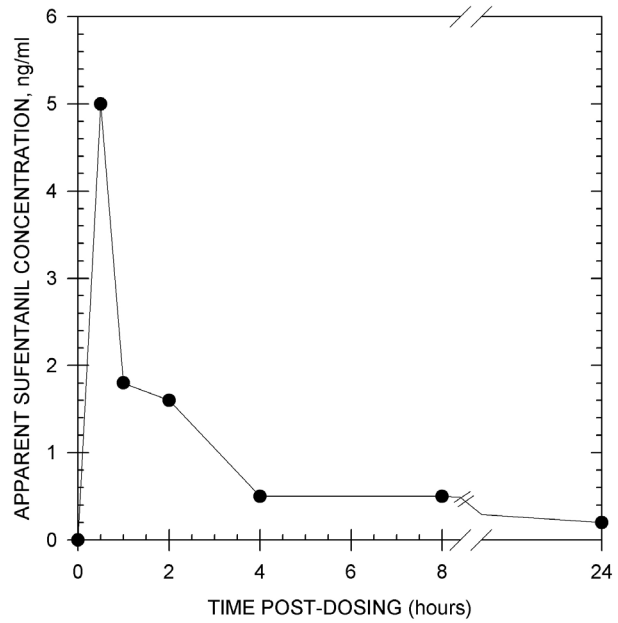
Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 0.06 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 200 µg of sufentanil by intravenous injection to one horse, the presence of this drug was detected for 8 hours in equine urine.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/ml.

Sufentanil	100%	Furanylethylfentanyl	2.63%
Acetylfentanyl	100%	4-Fluorobutyrfentanyl	2.1%
Carfentanil	12.7%	p-Fluorofentanyl	1.5%
Butyrfentanyl	12.4%	Lofentanil	0.9%
Acrylfentanyl	10.4%	Fluoroisobutyrfentanyl	0.8%
Methoxyacetylfentanyl	7.43%	α-Methylthiofentanyl	0.8%
Thiofentanyl	6.4%	p-Chlorisobutyrylfentanyl	0.72%
Ocfentanyl	6.1%	3-Methylfentanyl	0.6%
Valerylfentanyl	5.2%	B-Methylfentanyl	0.37%
Furanylfentanyl	3.7%	B-Hydroxythiofentanyl	0.17%
Cyclopropylfentanyl	3.6%	α-Methylfentanyl	0.15%
Isobutryfentanyl	3.4%	Desproprionylfentanyl	0.03%
Cyclopentylfentanyl	3.04%	Benzylfentanyl	0.02%
Fentanyl	3.0%		

Acetaminophen	<0.01%	Meperidine	<0.01%
Alfentanil	<0.01%	Methadone	<0.01%
Amitriptyline	<0.01%	Methaqualone	<0.01%
Aspirin	<0.01%	Nalorphine	<0.01%
Chlordiazepoxide	<0.01%	Naproxen	<0.01%
Chlorpromazine	<0.01%	Norfentanyl	<0.01%
Cotinine	<0.01%	Norsufentanil	<0.01%
Dexamethasone	<0.01%	Nortriptyline	<0.01%
Dextromethorphan	<0.01%	Penicillin G-Potassium	<0.01%
Doxepin	<0.01%	Penicillin G-Procaine	<0.01%
Erythromycin	<0.01%	Pentoxifylline	<0.01%
Fenoprofen	<0.01%	Phencyclidine	<0.01%
Gemfibrozil	<0.01%	Primadone	<0.01%
Gentisic Acid	<0.01%	Procainamide	<0.01%
Glipizide	<0.01%	Procaine	<0.01%
Glutethimide	<0.01%	Propofol	<0.01%
B-Hydroxyfentanyl	<0.01%	Quinidine	<0.01%
Ibuprofen	<0.01%	Quinine	<0.01%
Imipramine	<0.01%	Remifentanil	<0.01%
Lidocaine	<0.01%	Theophylline	<0.01%
		Trimipramine	<0.01%

SULFAMETHAZINE

Product #103410 & 103415 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer	
Sulfamethazine	14 ng/ml

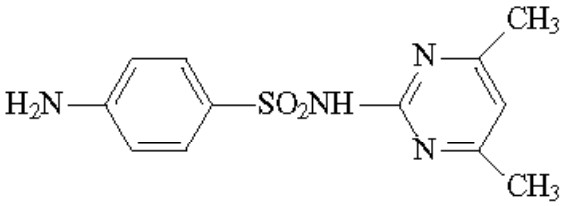
Precision:

Intra-assay	5.00 %
Inter-assay	2.96 %

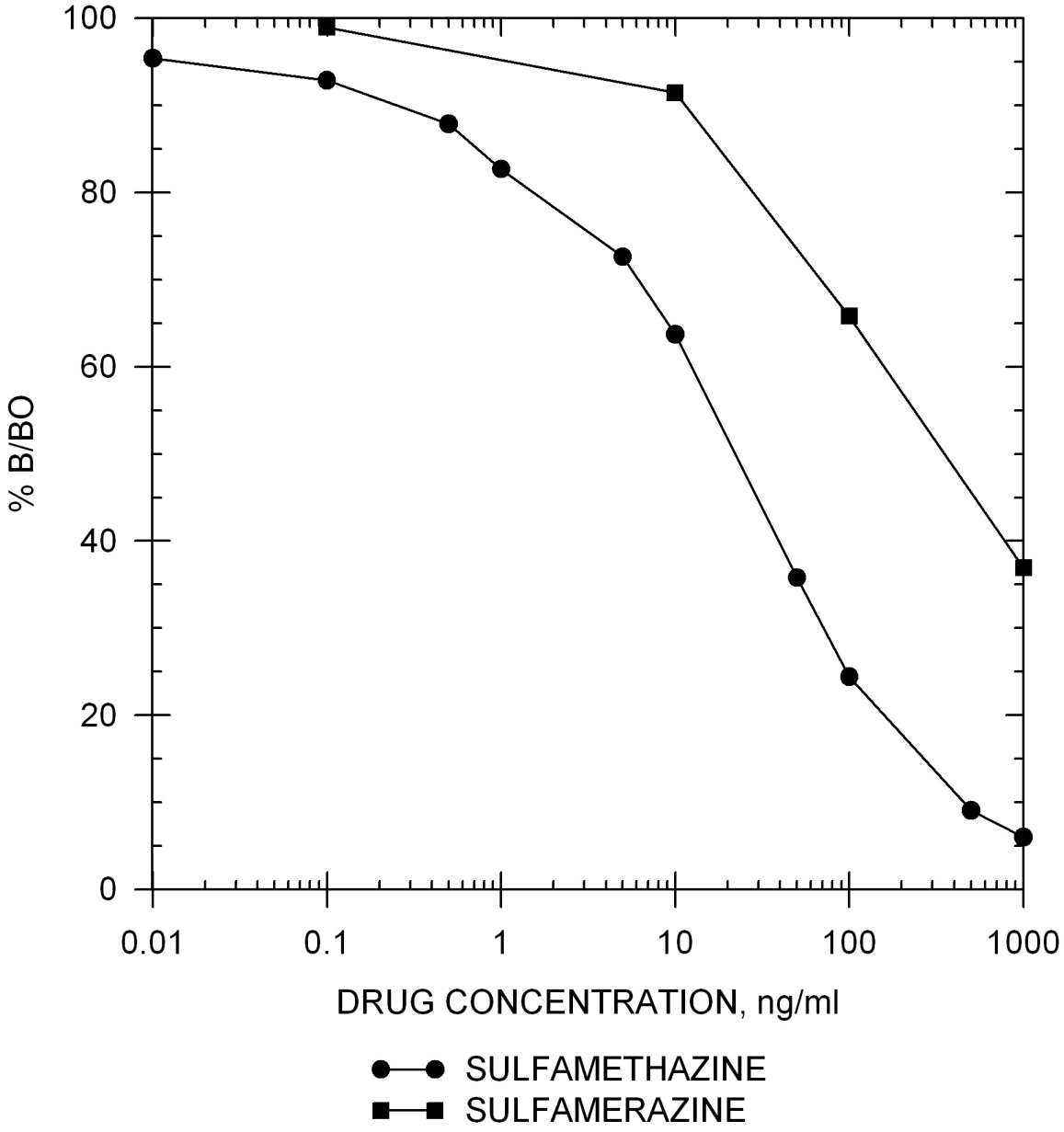
Note: Measuring wavelength was 650 nm**.**

SULFAMETHAZINE STANDARD CURVES

Sulfamethazine



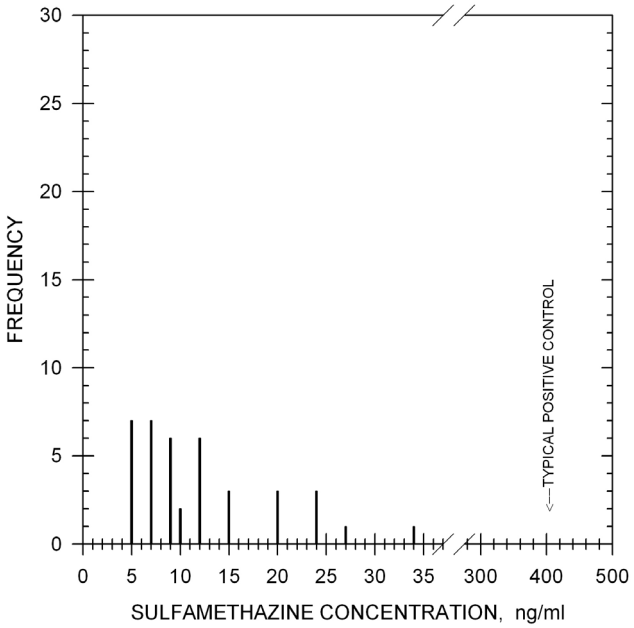
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

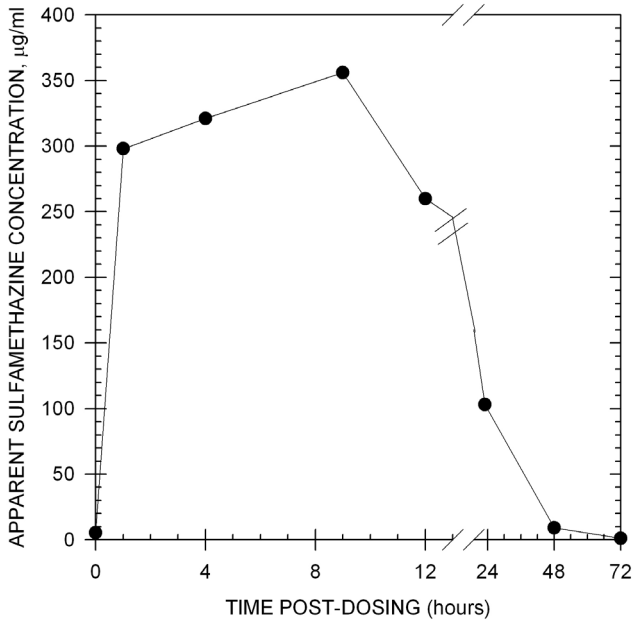
Backgrounds: Analysis of 40 post-race equine urine samples has shown no background levels above 34 ng/ml.

Sample Treatment: No sample dilution is necessary.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 3 g of sulfamethazine by intravenous injection to one horse, the presence of this drug was detected for at least 72 hours in equine urine. Because all post-dose samples exceeded the range of the assay, samples were diluted 1:1000 with EIA buffer (except the 48 & 72 hour post-dose) and backcalculated.



CROSS REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 µg/ml.

Sulfamethazine	100%
Sulfamerazine	5.5%
Sulfapyridine	0.1%

p-Aminobenzoic Acid	<0.1%
Sulfadiazine	<0.1%
Sulfadimethoxine	<0.1%
Sulfamethoxazole	<0.1%
Sulfanilamide	<0.1%
Sulfisoxazole	<0.1%

SYNTHETIC CANNABINOIDS (JWH-018) (RTU) Forensic Kit

Product #133519 & 133515

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer	
JWH-018	0.98 ng/ml

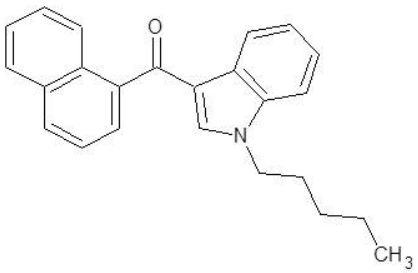
I-50 in Equine Urine (Diluted 1:19)		I-50 in Canine Urine (Diluted 1:19)	
JWH-018	29.45 ng/ml	JWH-018	45.31 ng/ml

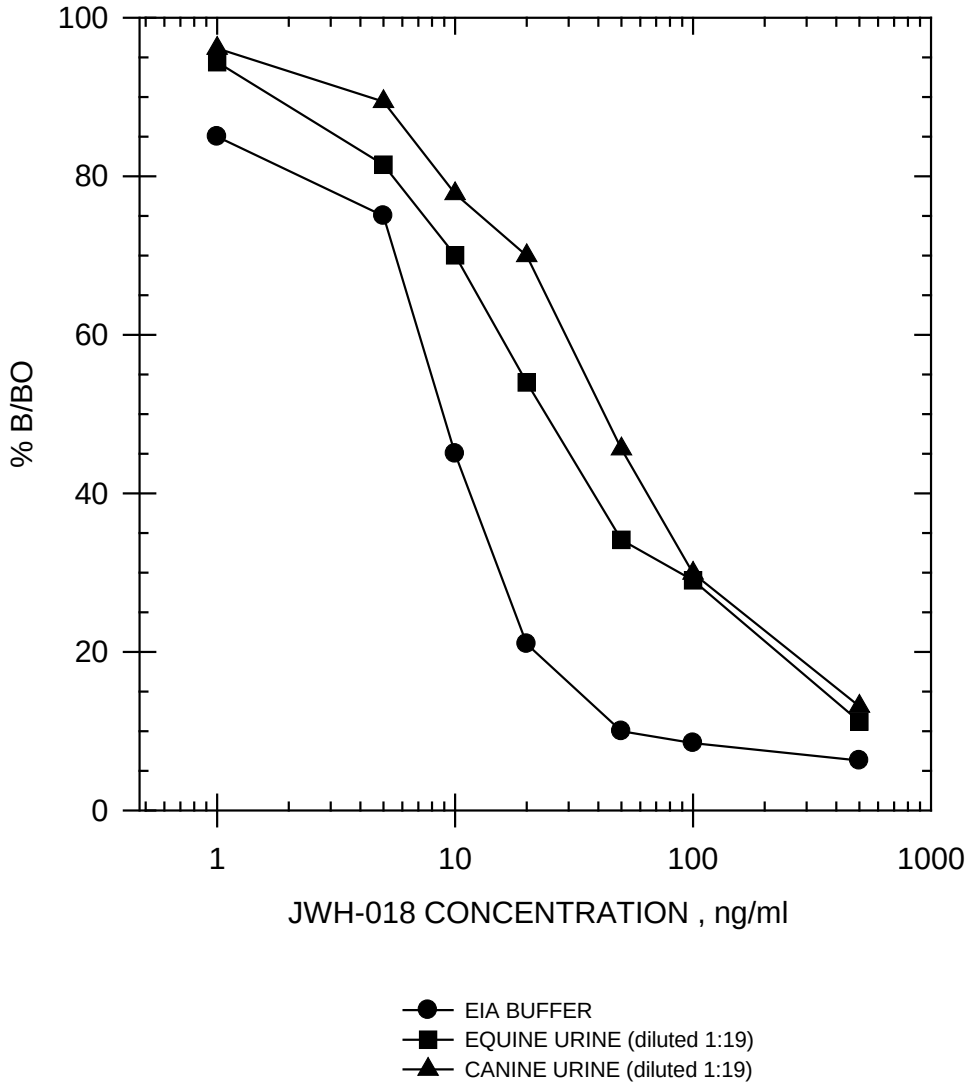
Precision:	Intra-assay	2.39%
	Inter-assay	3.26%

Note: Measuring wavelength was 650 nm**.**

SYNTHETIC CANNABINOIDS (JWH-018) STANDARD CURVE

JWH-018

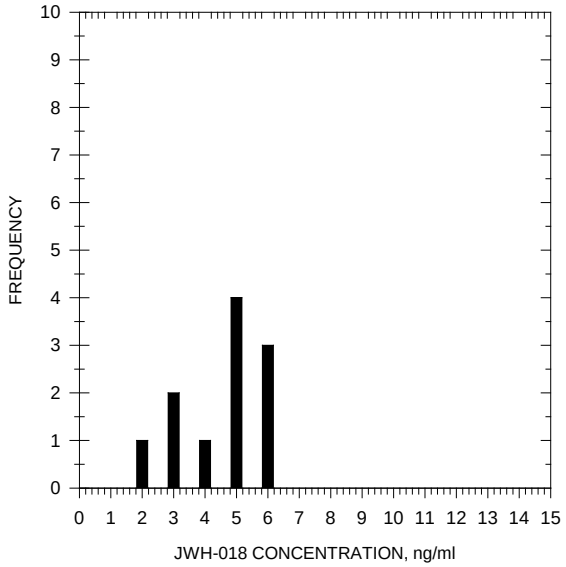




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:19, has shown no background levels above 6.54 ng/ml.

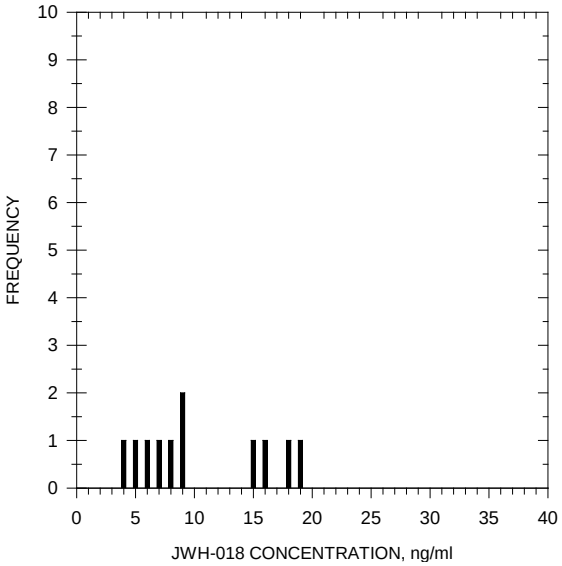
Sample Treatment: A dilution of 1:19 (i.e. 1 part to 19 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples, diluted 1:19, has shown no background levels above 19.29 ng/ml.

Sample Treatment: A dilution of 1:19 (i.e. 1 part to 19 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

THC (RTU) Forensic Kit

Product #131019 & 131015

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Δ^9-THC-COOH	0.5 ng/ml

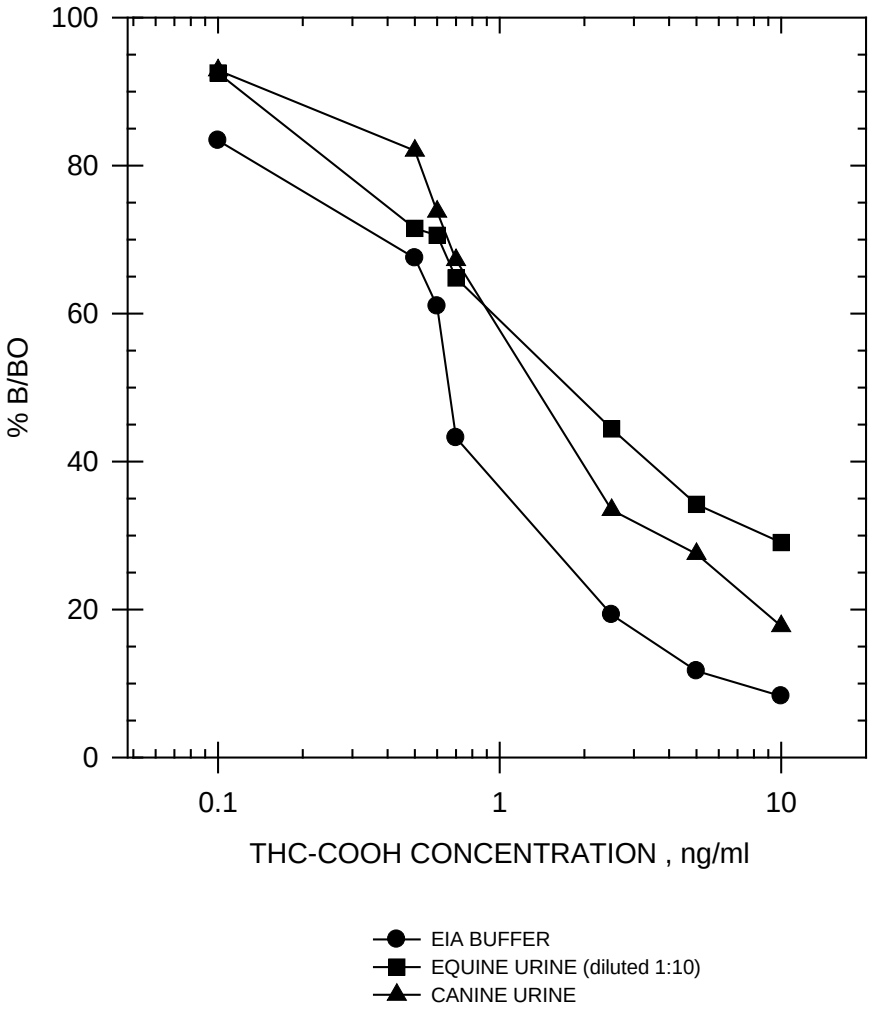
I-50 in Equine Urine (Diluted 1:10)		**I-50 in Canine Urine**	
Δ^9-THC-COOH	2.12 ng/ml	Δ^9-THC-COOH	1.72 ng/ml

Precision:	Intra-assay	2.2 %
	Inter-assay	6.0 %

Note: Measuring wavelength was 650 nm**.**

CANNABINOID STANDARD CURVES

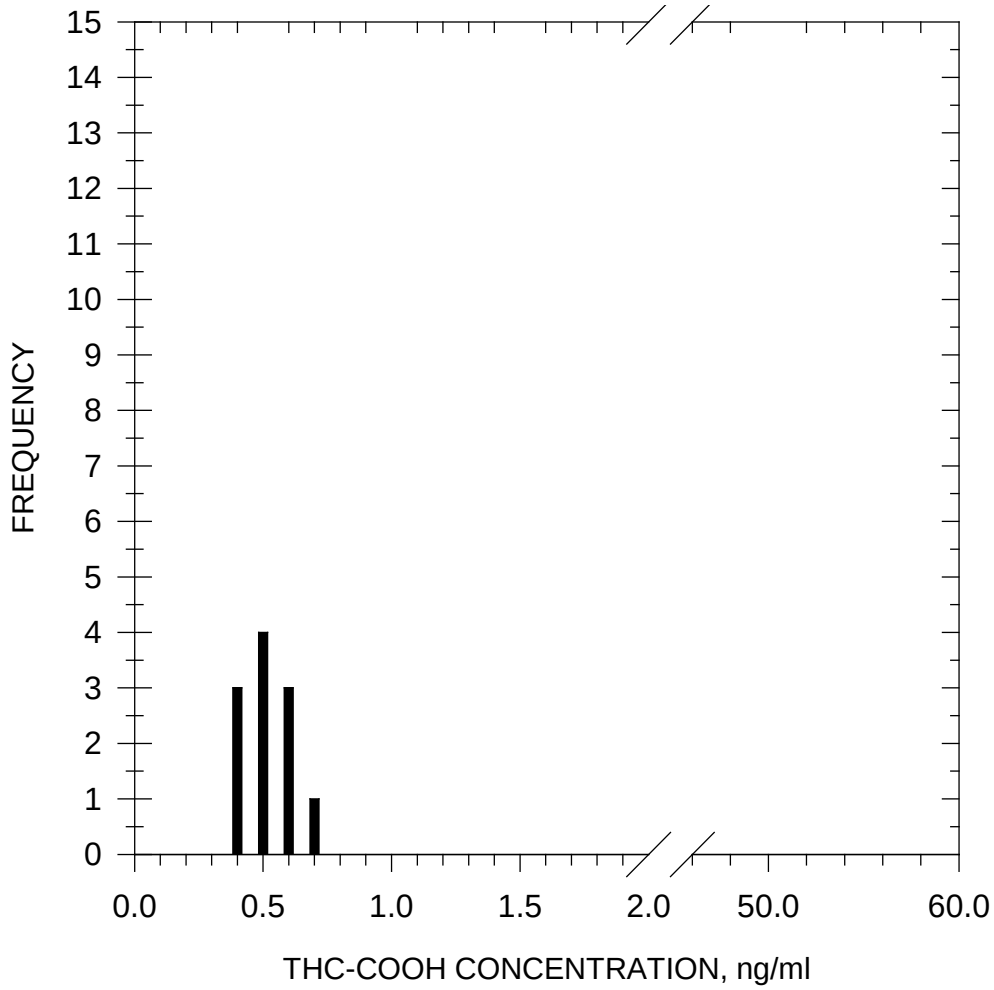
Drug Standard Curve Comparison



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:10, has shown no background levels above 0.70 ng/ml.

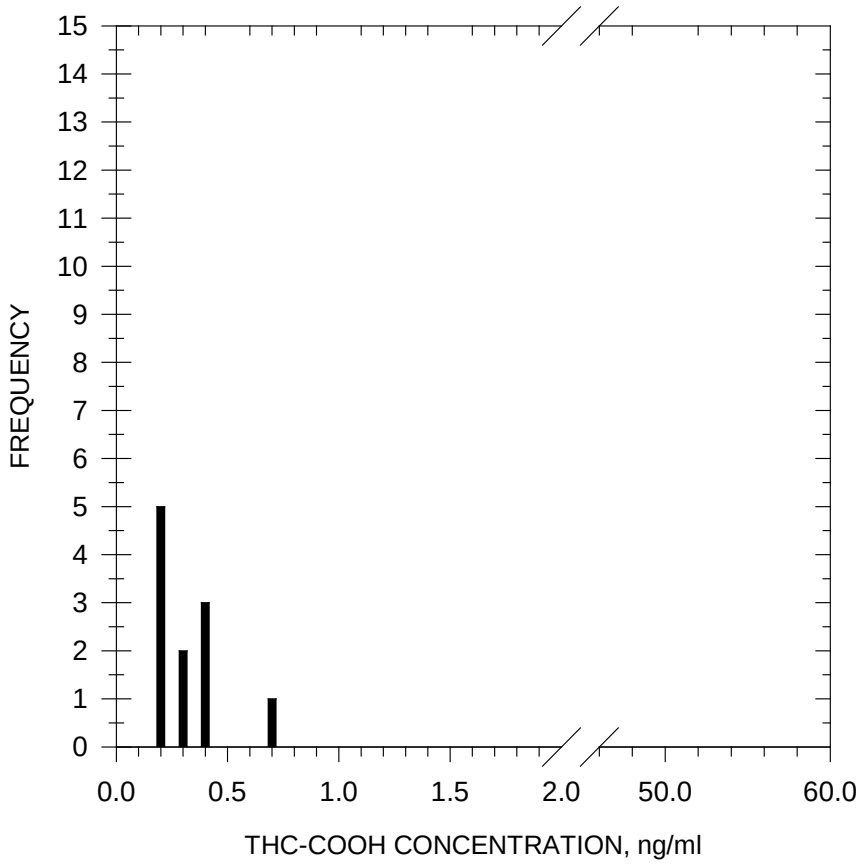
Sample Treatment: A dilution of 1:10 (i.e. 1 part urine to 10 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples has shown no background levels above 0.74 ng/ml.

Sample Treatment: No sample dilution necessary.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT
THEOPHYLLINE

Product #106010 &
106015 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

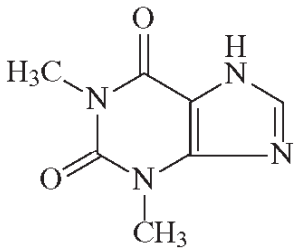
Theophylline	2.0 ng/ml
Aminophylline	4.0 ng/ml
1-Methylxanthine	40 ng/ml
Theobromine	50 ng/ml
3-Methylxanthine	88 ng/ml
Caffeine	1722 ng/ml

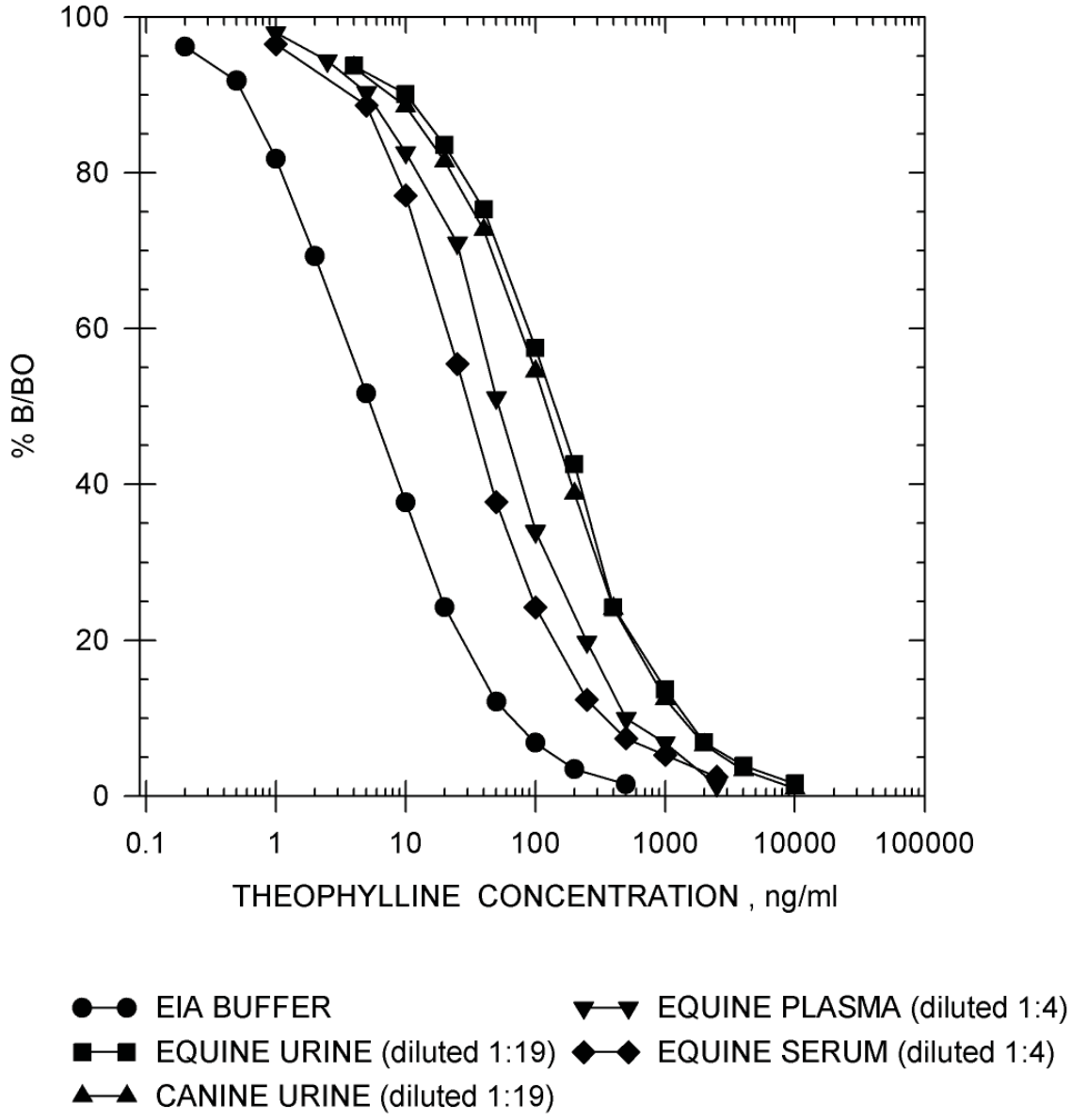
Precision:	Intra-assay	1.70 %
	Inter-assay	2.78 %

Note: Measuring wavelength was 650 nm**.**

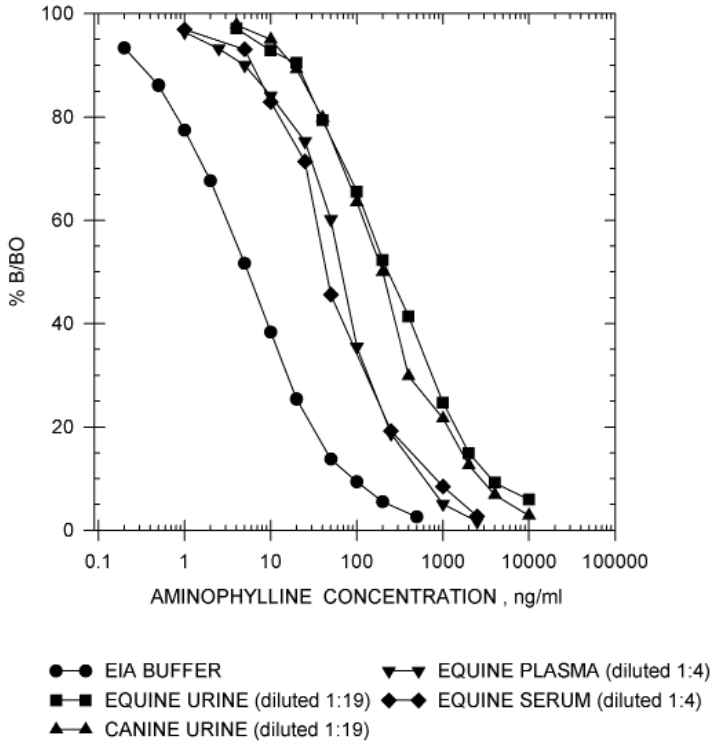
THEOPHYLLINE STANDARD CURVES

Theophylline

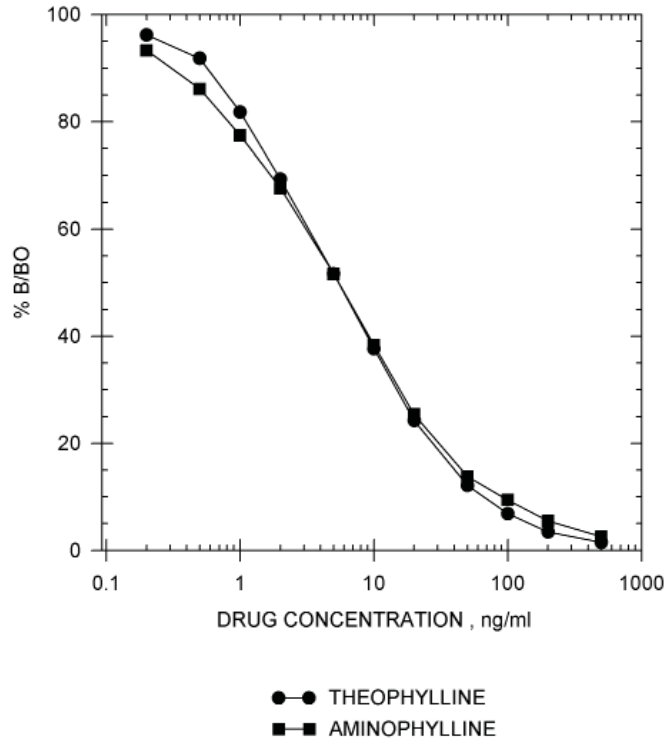




AMINOPHYLLINE STANDARD CURVES



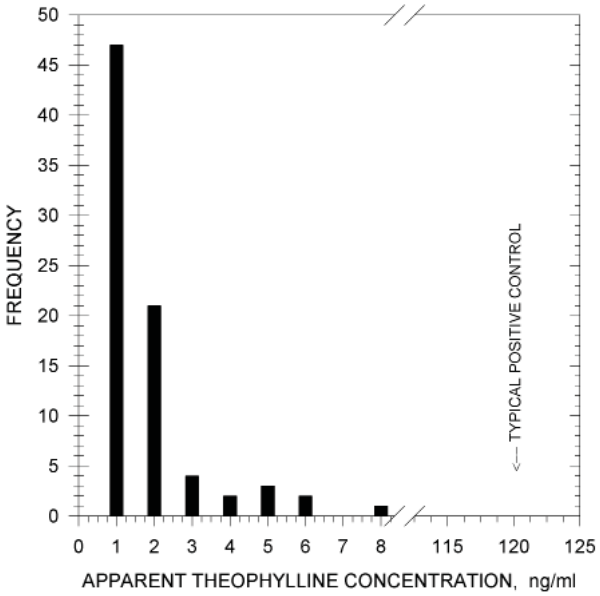
DRUG STANDARD CURVE COMPARISON IN EIA BUFFER



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:19, has shown no background levels above 7.4 ng/ml.

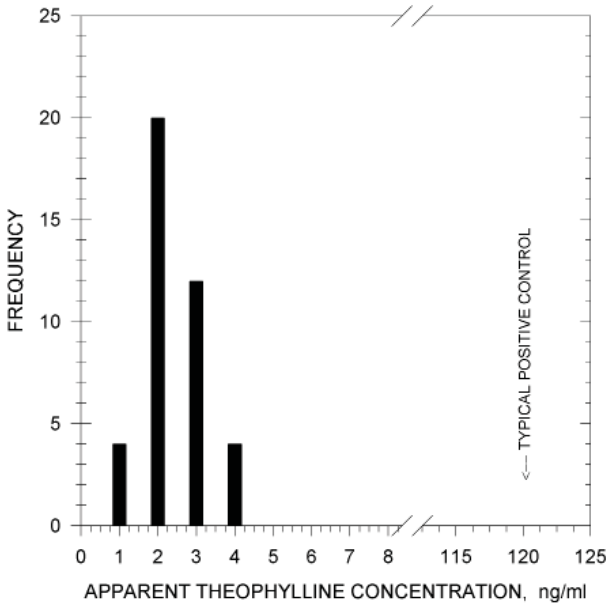
Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA Buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Background: Analysis of 41 post-race canine urine samples, diluted 1:19, has shown no background levels above 3.9 ng/ml.

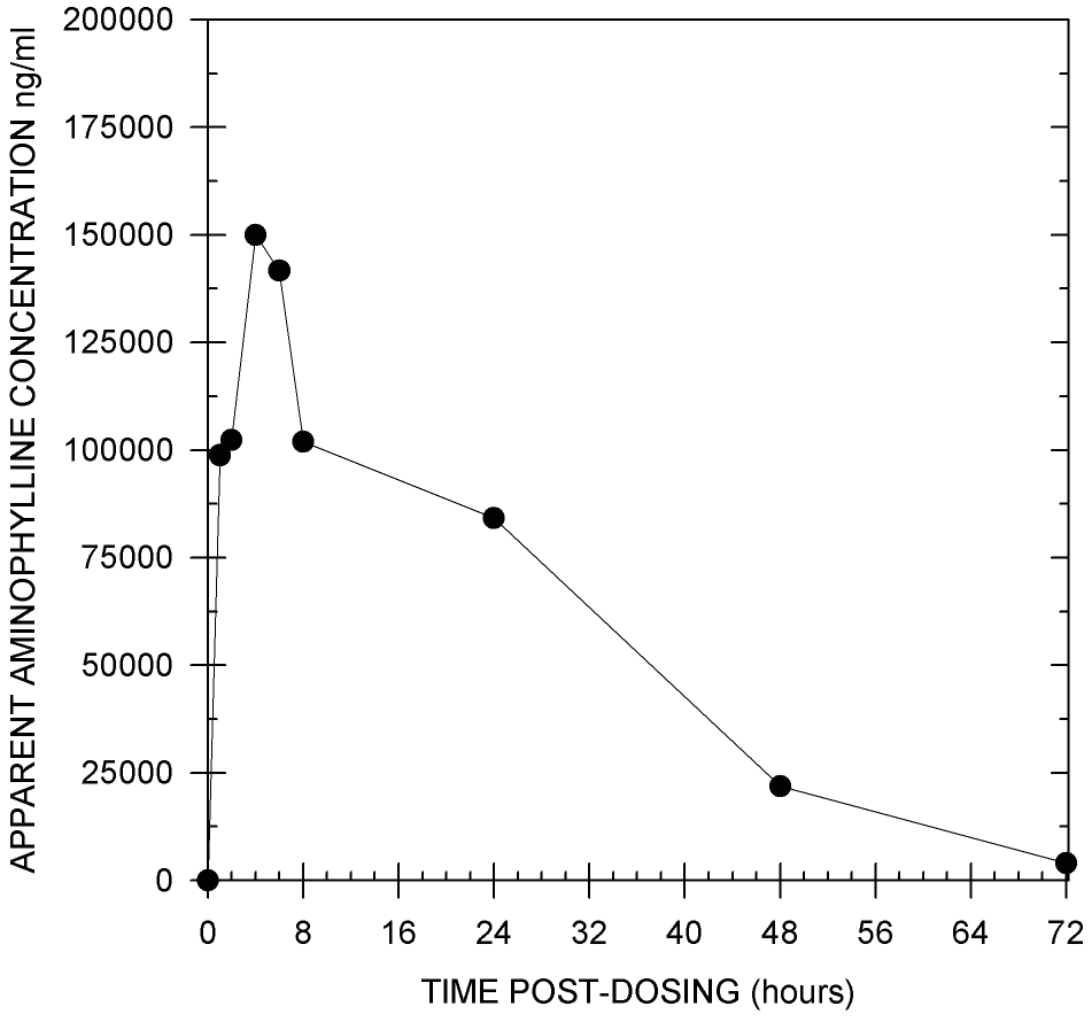
Sample Treatment: A dilution of 1:19 (i.e. 1 part sample to 19 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection:

After IV administration of 5 grams of Aminophylline to one horse, the presence of this drug was detected up to 72 hours post-administration. Initially, samples were diluted 1:19 with EIA buffer before testing according to the recommended sample treatment. The administration samples required an additional 100 fold dilution.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Theophylline	100%
Aminophylline	49%
1-Methylxanthine	4.9%
Theobromine	3.9%
3-Methylxanthine	2.2%
Methylene Blue	0.13%
Caffeine	0.11%

Acepromazine	< 0.01%	Gemfibrozil	< 0.01%	PCP	< 0.01%
Acetaminophen	< 0.01%	Gentisic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
Acetylsalicylic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Procaine	< 0.01%
E-amino-n-caproic Acid	< 0.01%	L-Glutamic Acid	< 0.01%	Pentifylline	< 0.01%
Amitriptyline	< 0.01%	Glutethimide	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	Heparin	< 0.01%	Phenylbutazone	< 0.01%
Chlordiazepoxide	< 0.01%	Hippuric Acid	< 0.01%	Polyethylene Glycol	< 0.01%
Chlorpromazine	< 0.01%	Hordenine	< 0.01%	Prednisolone	< 0.01%
Clenbuterol	< 0.01%	Hydrocortisone	< 0.01%	Primadone	< 0.01%
Codeine	< 0.01%	Hypoxanthine	< 0.01%	Procainamide	< 0.01%
Cotinine	< 0.01%	Ibuprofen	< 0.01%	Procaine	< 0.01%
Dexamethasone	< 0.01%	Imipramine	< 0.01%	Promazine	< 0.01%
Dextromethorphan	< 0.01%	Isoxsuprine	< 0.01%	Propentofylline	< 0.01%
Diclofenac	< 0.01%	Lidocaine	< 0.01%	Pseudoephedrine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Meperidine	< 0.01%	Pyrantel	< 0.01%
Dipyrone	< 0.01%	Metaproterenol	< 0.01%	Pyrilamine	< 0.01%
Doxepin	< 0.01%	Methadone	< 0.01%	Pyrimethamine	< 0.01%
Dyphylline	< 0.01%	Methaqualone	< 0.01%	Quinidine	< 0.01%
Enprofylline	< 0.01%	Methocarbamol	< 0.01%	Quinine	< 0.01%
Ephedrine	< 0.01%	Methylprednisolone	< 0.01%	Salbutamol	< 0.01%
Erythromycin	< 0.01%	Nalorphine	< 0.01%	Salicylamide	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Naproxen	< 0.01%	Salicylic Acid	< 0.01%
Fenoprofen	< 0.01%	Niacinamide	< 0.01%	Thiamine	< 0.01%
Flunixin	< 0.01%	Nicotine	< 0.01%	Trimethoprim	< 0.01%
Folic Acid	< 0.01%	Nortriptyline	< 0.01%	Trimipramine	< 0.01%
Folinic Acid	< 0.01%	Orphenadrine	< 0.01%	Uric Acid	< 0.01%
Furosemide	< 0.01%	Oxyphenbutazone	< 0.01%	Xanthine	< 0.01%

TRAMADOL (RTU) Forensic Kit

Product #131819 & 131815

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Tramadol	9.7 ng/ml

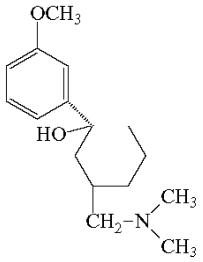
I-50 in Equine Urine (Diluted 1:2)		I-50 in Canine Urine (Diluted 1:2)	
Tramadol	9.51 ng/ml	Tramadol	29.9 ng/ml

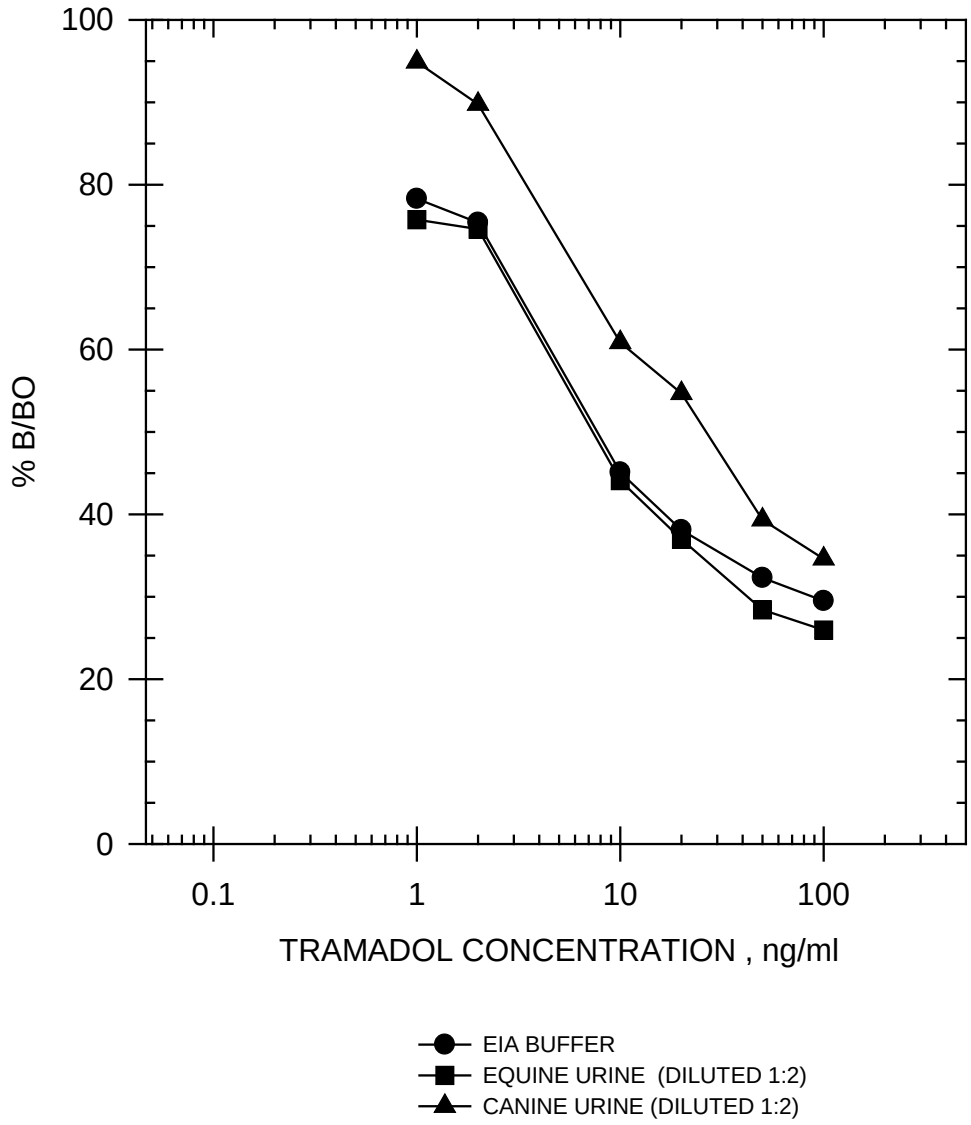
Precision:	Intra-assay	4.32%
	Inter-assay	3.51%

Note: Measuring wavelength was 650 nm.

TRAMADOL STANDARD CURVES

Tramadol

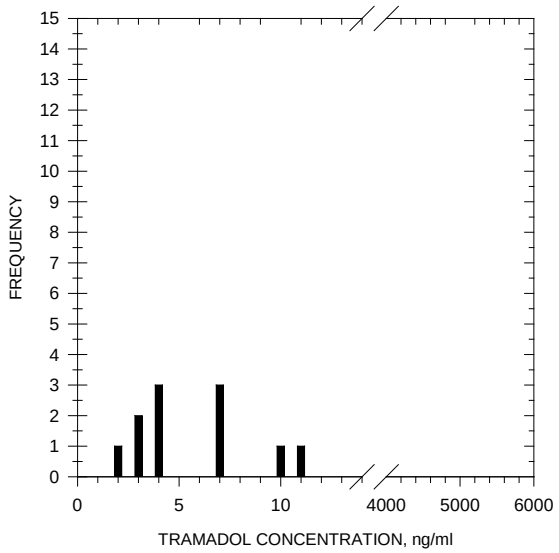




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:2, has shown no background levels above 11.8 ng/ml.

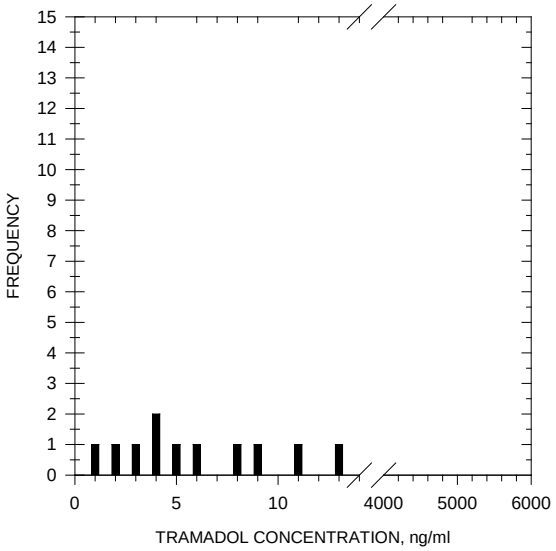
Sample Treatment: A dilution of 1:2 (i.e. 1 part urine to 2 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Background: Analysis of 11 post-race canine urine samples, diluted 1:2, has shown no background levels above 14.0 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part urine to 2 parts EIA buffer) willl reduce natural backgrounds.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

TRAZODONE (RTU) FORENSIC KIT

Product #132819 & 132815

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

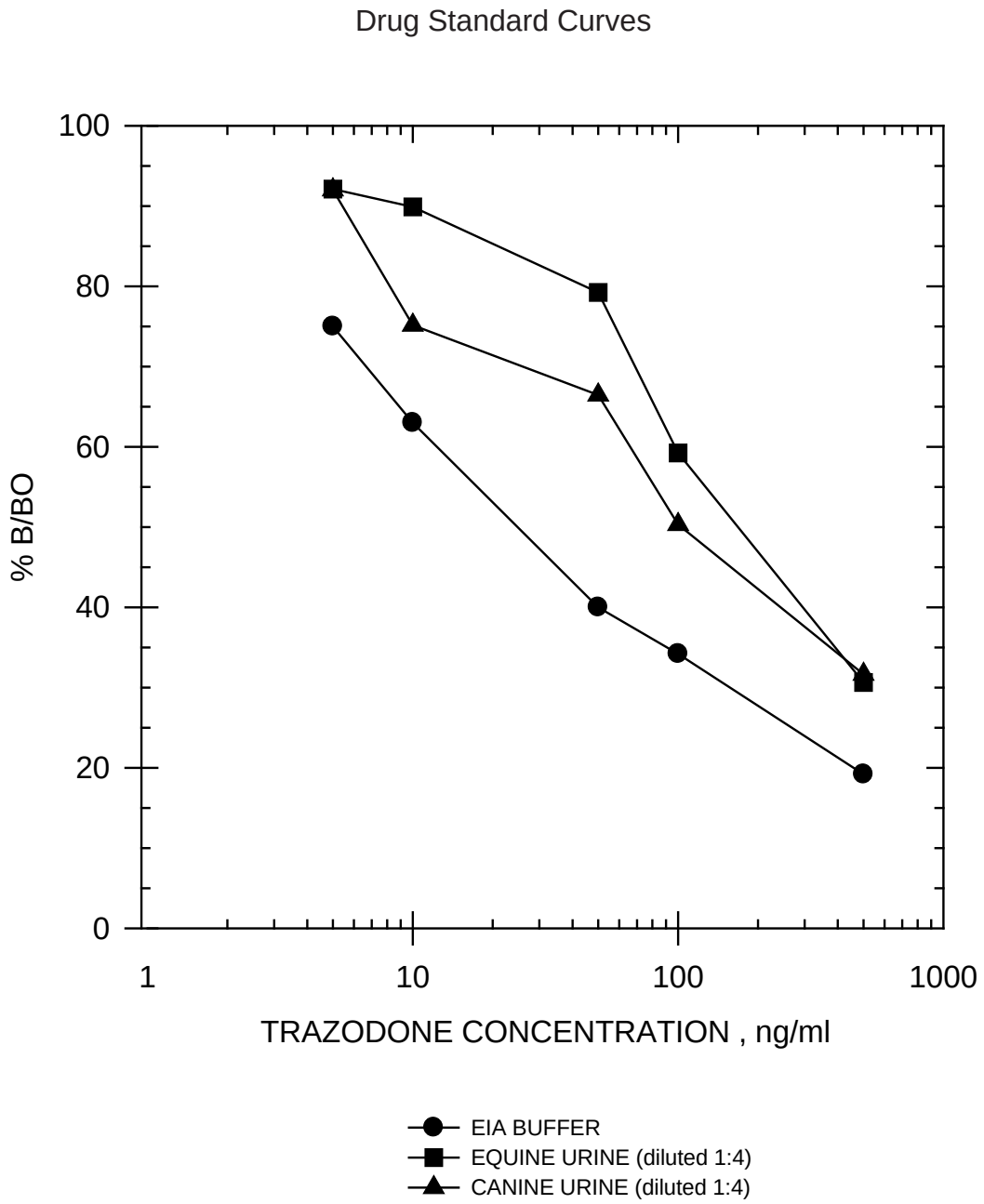
Trazodone	20.0 ng/ml

I-50 in Equine Urine (Diluted 1:4)		**I-50 in Canine Urine (Diluted 1:4)**	
Trazodone	188.1 ng/ml	Trazodone	128.01 ng/ml

Precision:	Intra-assay	2.60%
	Inter-assay	3.75%

Note: Measuring wavelength was 650 nm**.**

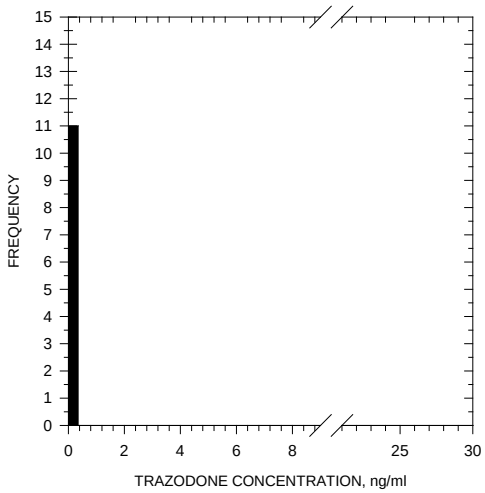
TRAZODONE STANDARD CURVES



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:4, has shown no background levels above 0.0 ng/ml.

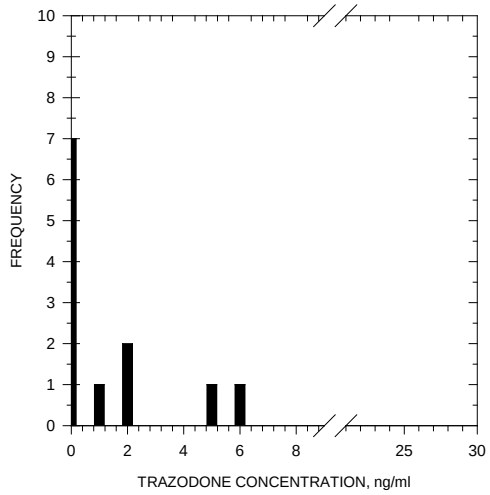
Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples, diluted 1:4, has shown no background levels above 6.68 ng/ml.

Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

ENHANCED KIT

TRENBOLONE

Product #109710
& 109715 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Trenbolone	0.1 ng/ml
Nandrolone	0.5 ng/ml
Mesterlone	1.7 ng/ml
Testosterone	2.7 ng/ml
Boldenone	7.5 ng/ml
Epitrenbolone	16.9 ng/ml
Estradiol	17.3 ng/ml

I-50 in Equine Urine (Diluted 1:9)

Trenbolone	0.8 ng/ml
Nandrolone	9.8 ng/ml
Testosterone	77 ng/ml
Boldenone	117 ng/ml

I-50 in Canine Urine (Diluted 1:49)

Trenbolone	6.8 ng/ml
Nandrolone	169 ng/ml
Testosterone	N/A
Boldenone	N/A

I-50 in Equine Plasma

Trenbolone	0.2 ng/ml
Nandrolone	1.3 ng/ml
Testosterone	4.7 ng/ml
Boldenone	23 ng/ml

I-50 in Equine Serum

Trenbolone	0.1 ng/ml
Nandrolone	2.9 ng/ml
Testosterone	6.5 ng/ml
Boldenone	11 ng/ml

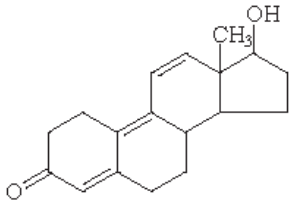
Precision:

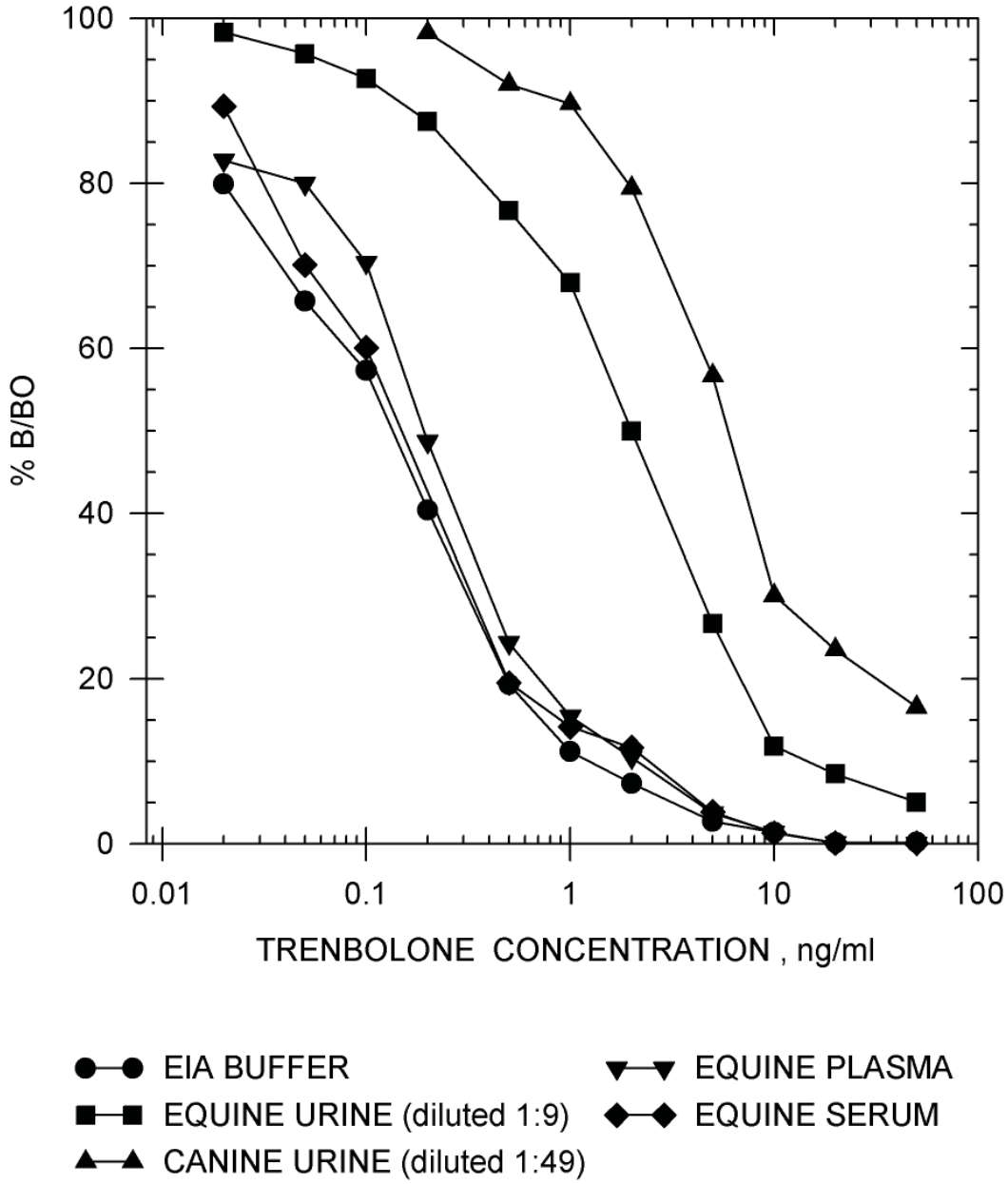
Intra-Assay	3.76%
Inter-Assay	5.33%

Note: Measuring wavelength was 650 nm.

TRENBOLONE STANDARD CURVES

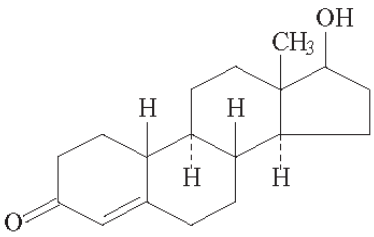
Trenbolone

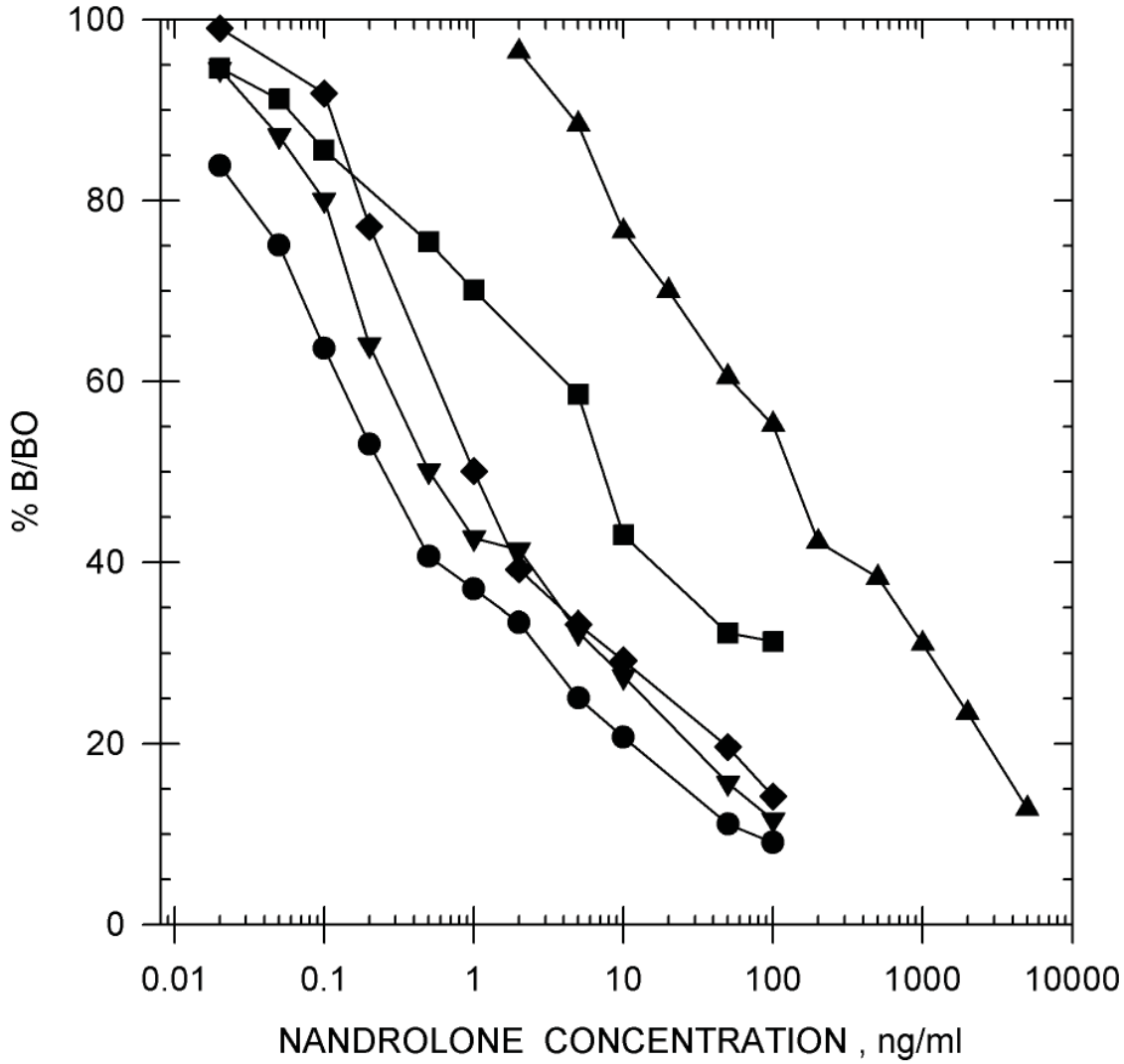




TRENBOLONE STANDARD CURVES

Nandrolone

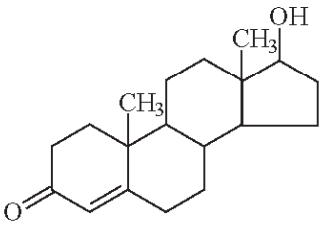


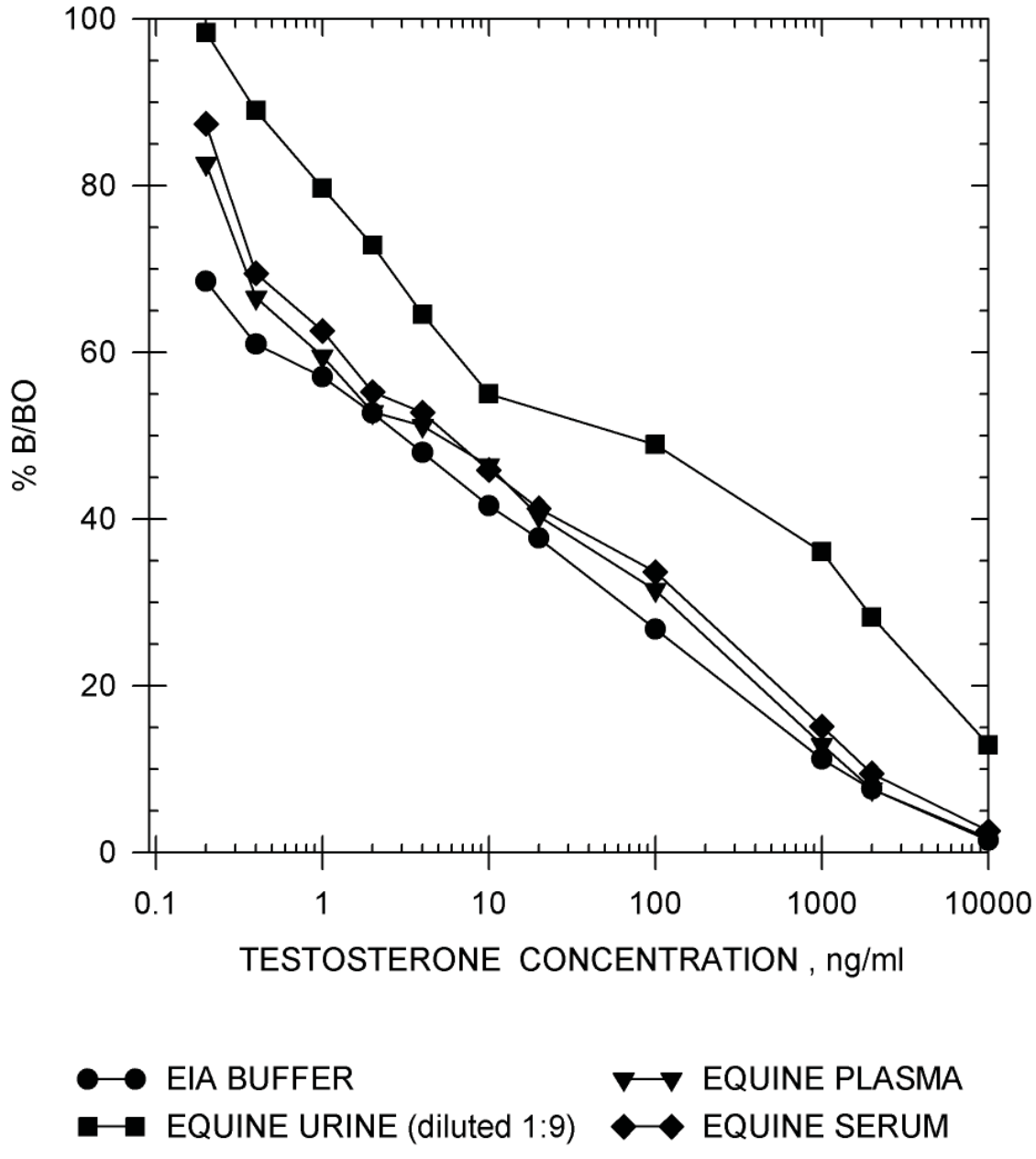


EIA BUFFER
EQUINE URINE (diluted 1:9)
CANINE URINE (diluted 1:49)
EQUINE PLASMA
EQUINE SERUM

TRENBOLONE STANDARD CURVES

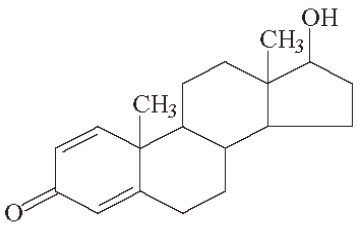
Testosterone

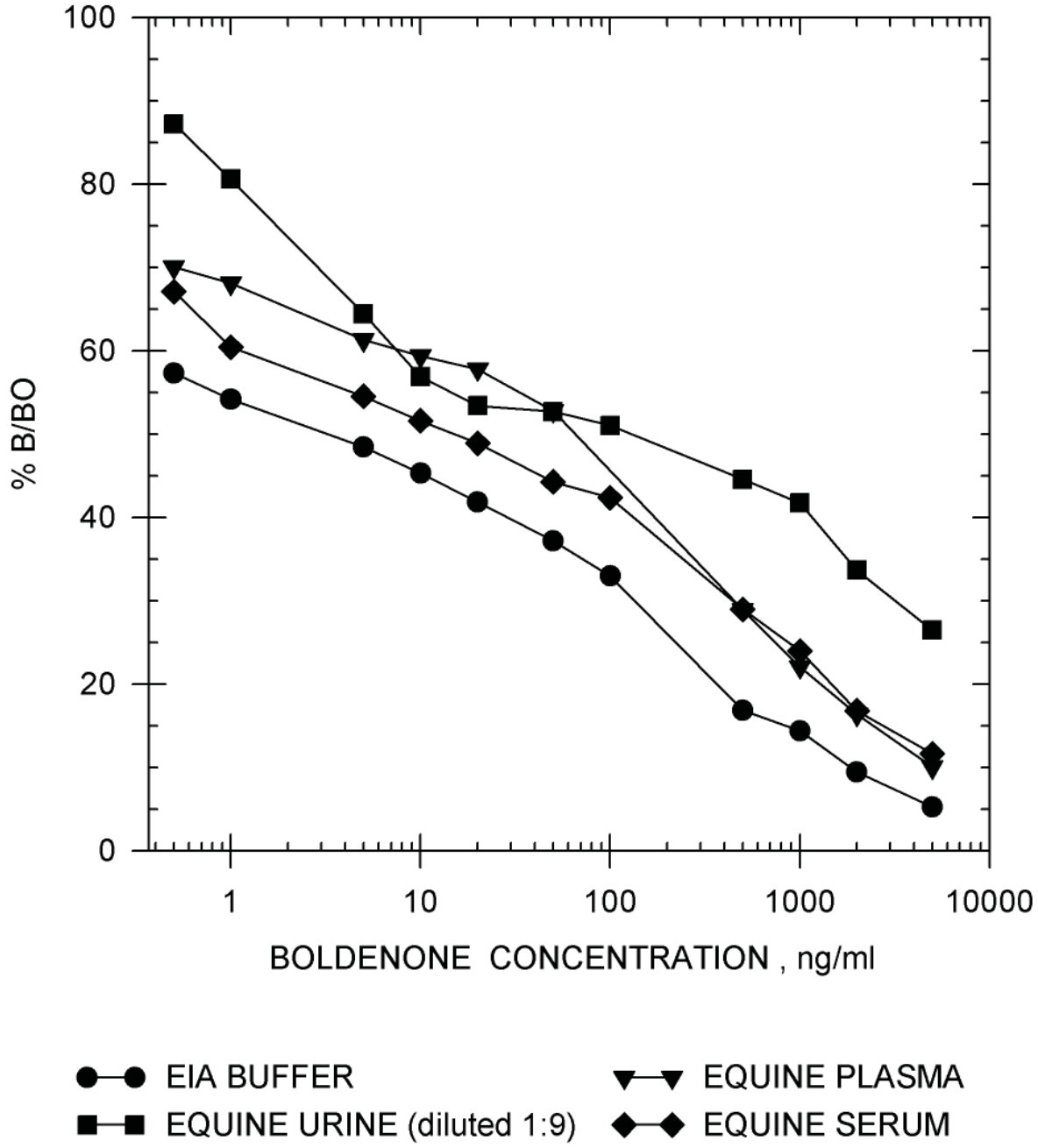




TRENBOLONE STANDARD CURVES

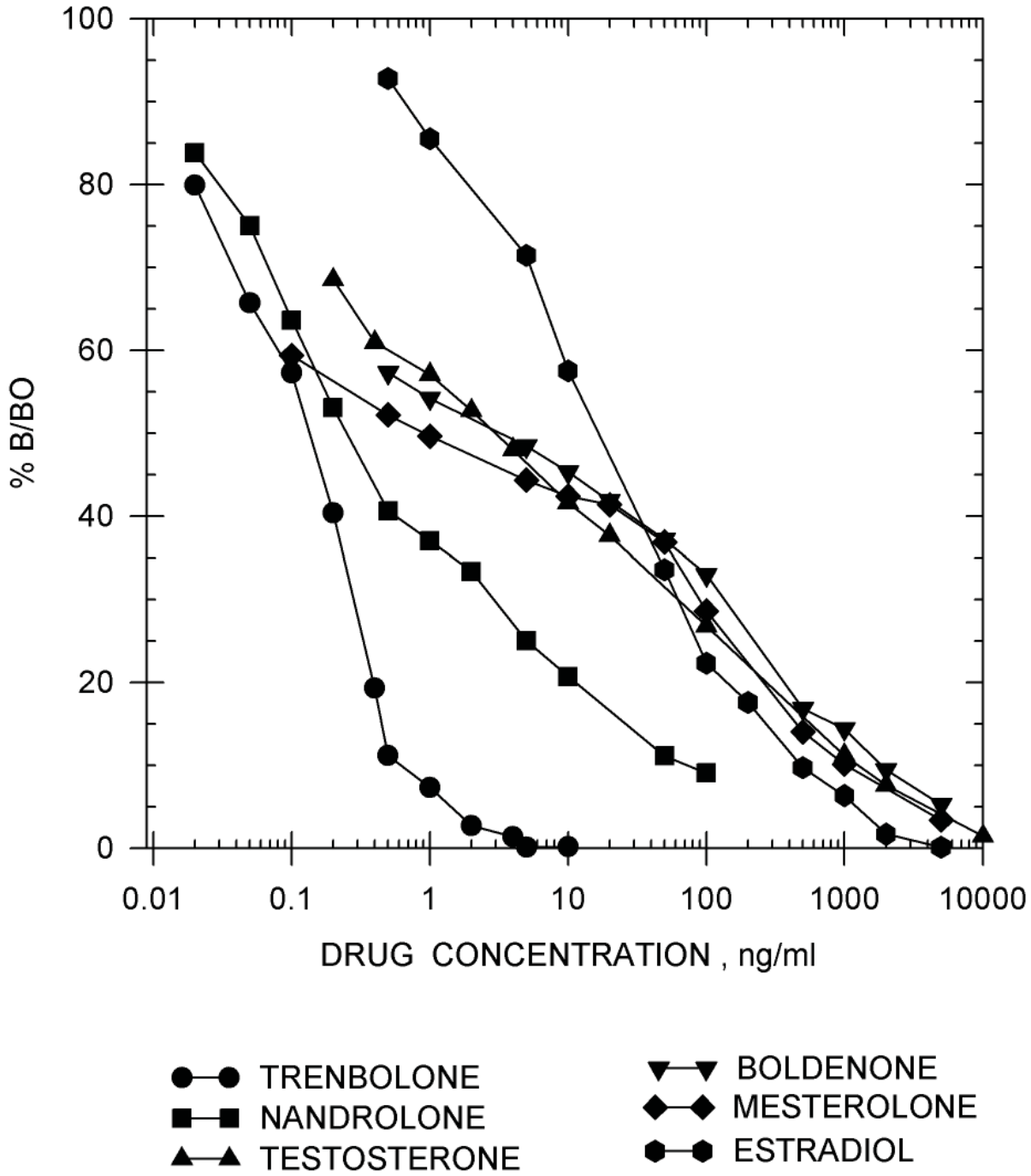
Boldenone





TRENBOLONE STANDARD CURVES

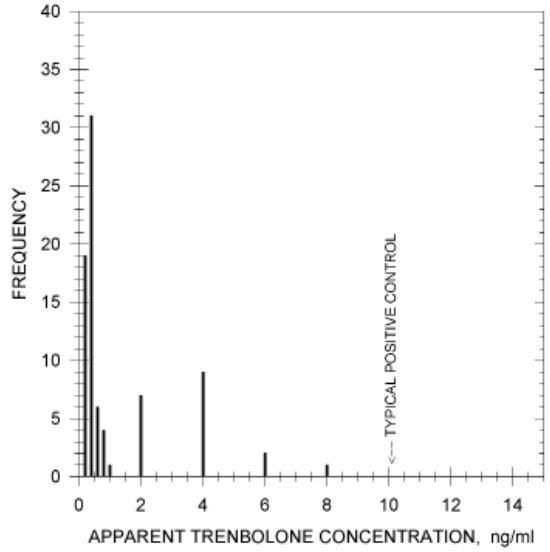
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 81 post-race equine urine samples, diluted 1:9, has shown no background levels above 7.5 ng/ml.

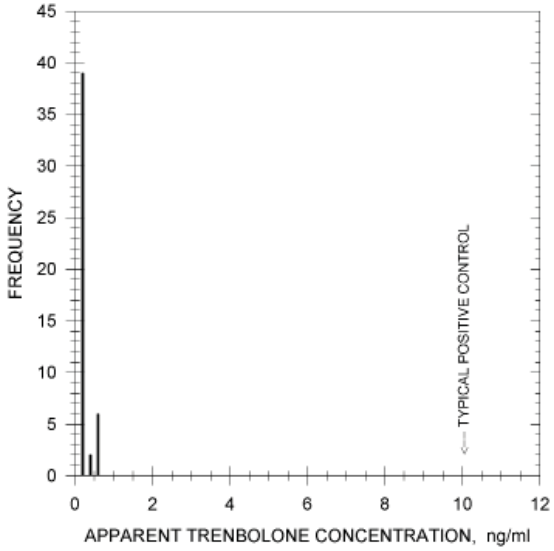
Sample Treatment: A dilution of 1:9 (i.e. 1 part urine to 9 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 42 post-race canine urine samples, diluted 1:49, has shown no background levels above 0.24 ng/ml.

Sample Treatment: A dilution of 1:49 (i.e. 1 part urine to 49 parts EIA buffer) will reduce natural backgrounds.

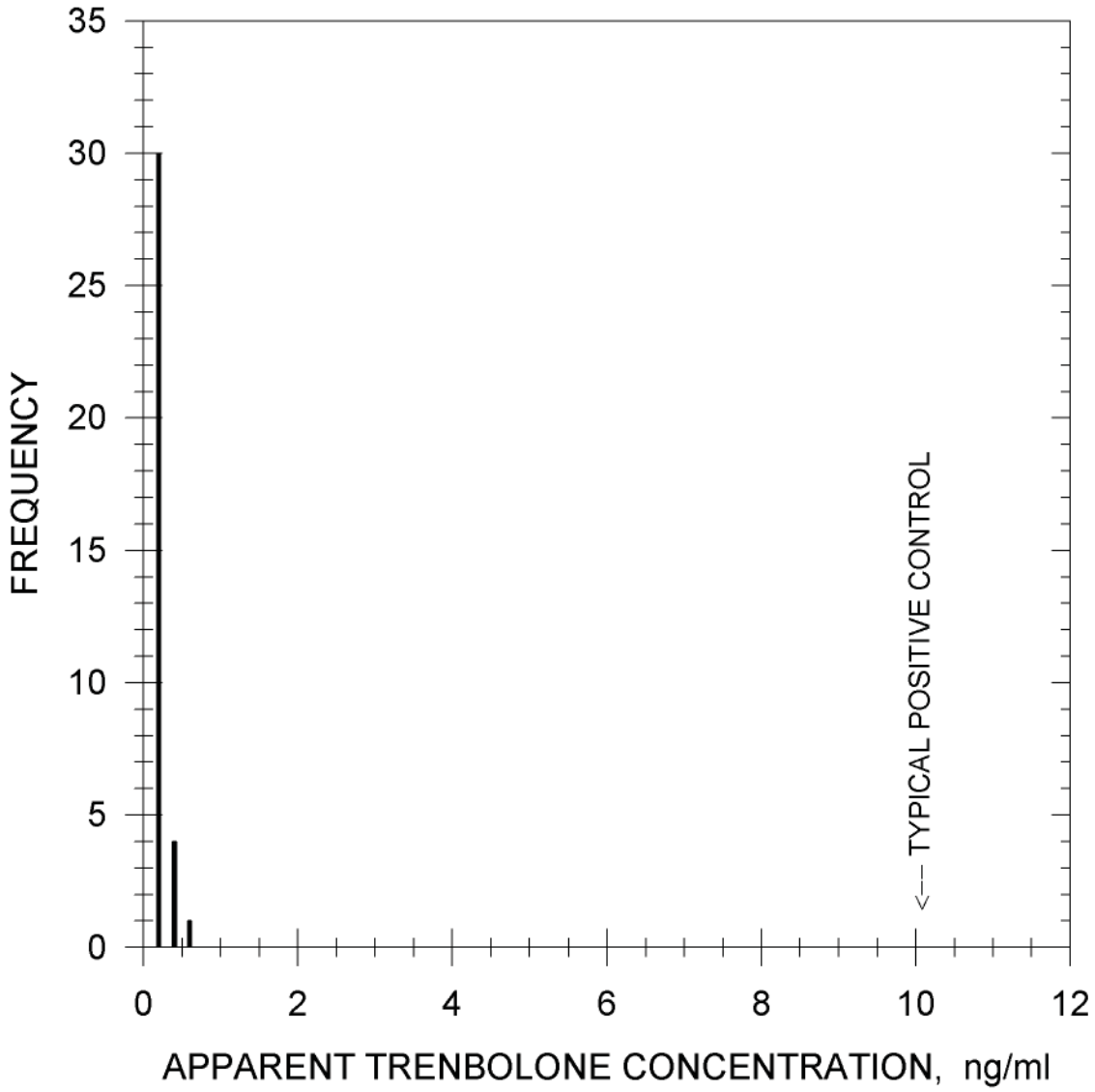


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 35 post-race equine plasma samples has shown no background levels above 0.4 ng/ml.

Sample Treatment: A small dilution (1:1) may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Trenbolone	100%	Andosterone	0.04%
Nandrolone	41%	Testosterone Benzoate	0.04%
Boldenone	3.4%	Pregnenolone	0.03%
Testosterone	3.1%	Testosterone Enthanate	0.03%
Mesterlone	1.4%	Methandrostenolone	0.03%
Equilin	0.8%	Stanozolol	0.03%
Epitrenbolone	0.6%	Androstenedione	0.02%
Estradiol	0.6%	Estriol	0.02%
Epitestosterone	0.5%	Oxandrolone	0.02%
17-α-Methyltestosterone	0.05%	Dehydroepiandrosterone	0.01%

Acepromazine	<0.01%	Fluoxymesterone	<0.01%	Orphenadrine	<0.01%
Acetaminophen	<0.01%	Folic Acid	<0.01%	Oxymetholone	<0.01%
Acetylsalicylic Acid	<0.01%	Folinic Acid	<0.01%	Oxyphenbutazone	<0.01%
d-Aldosterone	<0.01%	Furosemide	<0.01%	PCP	<0.01%
ε-Amino-n-caproic acid	<0.01%	Gemfibrozil	<0.01%	Penicillin G-Potassium	<0.01%
Amitriptyline	<0.01%	Gentisic Acid	<0.01%	Penicillin G-Procaine	<0.01%
Ascorbic Acid	<0.01%	Glipizide	<0.01%	Pentoxifylline	<0.01%
Benzoic Acid	<0.01%	L-Glutamic Acid	<0.01%	Phenothiazine	<0.01%
Caffeine	<0.01%	Glutethimide	<0.01%	Phenylbutazone	<0.01%
Chlordiazepoxide	<0.01%	Glycopyrrolate	<0.01%	Polyethylene Glycol	<0.01%
Chlorpromazine	<0.01%	Heparin	<0.01%	Prednisolone	<0.01%
Clenbuterol	<0.01%	Hippuric Acid	<0.01%	Primadone	<0.01%
Codeine	<0.01%	Hordenine	<0.01%	Procaine	<0.01%
Corticosterone	<0.01%	Hydrocortisone	<0.01%	Procainamide	<0.01%
Cortisol	<0.01%	17α-Hydroxyprogesterone	<0.01%	Progesterone	<0.01%
Cortisone	<0.01%	Ibuprofen	<0.01%	Promazine	<0.01%
Cotinine	<0.01%	Imipramine	<0.01%	Pseudoephedrine	<0.01%
11-Dehydrocorticosterone	<0.01%	Isoxsuprine	<0.01%	Pyrantel	<0.01%
Dexamethasone	<0.01%	Lidocaine	<0.01%	Pyrilamine	<0.01%
Dextromethorphan	<0.01%	Meperidine	<0.01%	Pyrimethamine	<0.01%
Diclofenac	<0.01%	Metaproterenol	<0.01%	Quinidine	<0.01%
Dimethyl Sulfoxide	<0.01%	Methadone	<0.01%	Quinine	<0.01%
Doxepin	<0.01%	Methaqualone	<0.01%	Salbutamol	<0.01%
Ephedrine	<0.01%	Methocarbamol	<0.01%	Salicylamide	<0.01%
5α-Estran-3β,17α-diol	<0.01%	Methylene Blue	<0.01%	Salicylic Acid	<0.01%
Erythromycin	<0.01%	6α-Methylprednisolone	<0.01%	Testosterone 17 β-cypionate	<0.01%
Estrone	<0.01%	Nalorphine	<0.01%	Theophylline	<0.01%
Estrone 3-Sulfate	<0.01%	Naproxen	<0.01%	Thiamine	<0.01%
Ethyl p-amino-benzoate	<0.01%	Niaciamide	<0.01%	Trimethoprim	<0.01%
Fenoprofen	<0.01%	Nicotine	<0.01%	Trimipramine	<0.01%
Flunixin	<0.01%	Nortriptyline	<0.01%	Uric Acid	<0.01%

TRIAMCINOLONE ACETONIDE

Product #105110 & 105115 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY
I-50 in EIA Buffer

Triamcinolone Acetonide	0.3 ng/ml
Fluocinonide	0.3 ng/ml
Fluocinolone Acetonide	0.45 ng/ml
Amcinonide	0.7 ng/ml
Flunisolide	1.4 ng/ml
Halcinonide	1.5 ng/ml
Budesonide	5.4 ng/ml
Flurandrenolide	8 ng/ml
Diflorasone Diacetate	18 ng/ml
Flumethasone	42 ng/ml
Triamcinolone	60 ng/ml
Triamcinolone Diacetate	60 ng/ml
Desoximethasone	65 ng/ml
Dexamethasone	78 ng/ml
Betamethasone	95 ng/ml
Clobetasol Propionate	100 ng/ml
Prednisolone	100 ng/ml
Beclomethasone	127 ng/ml

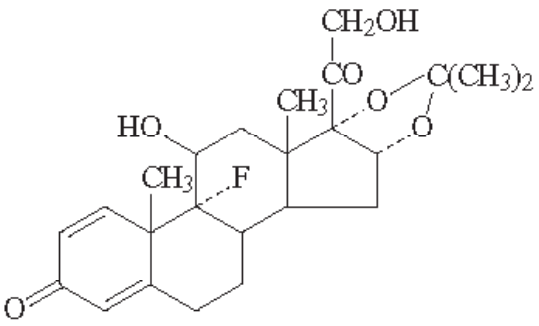
Precision:	Intra-assay	2.01 %
	Inter-assay	5.05 %

Note: Measuring wavelength was 650 nm**.**

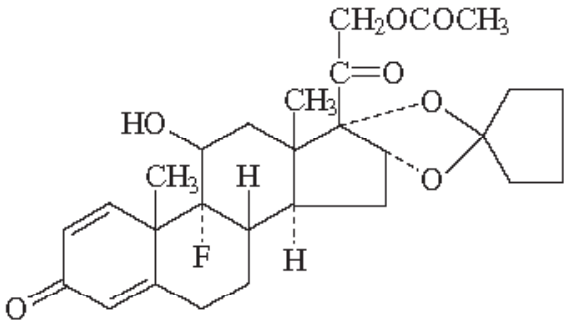
Acknowledgements: The antiserum for this ELISA was developed by Drs. Allen Stenhouse and Jean Ralston of Perth, Western Australia.

TRIAMCINOLONE ACETONIDE STANDARD CURVES

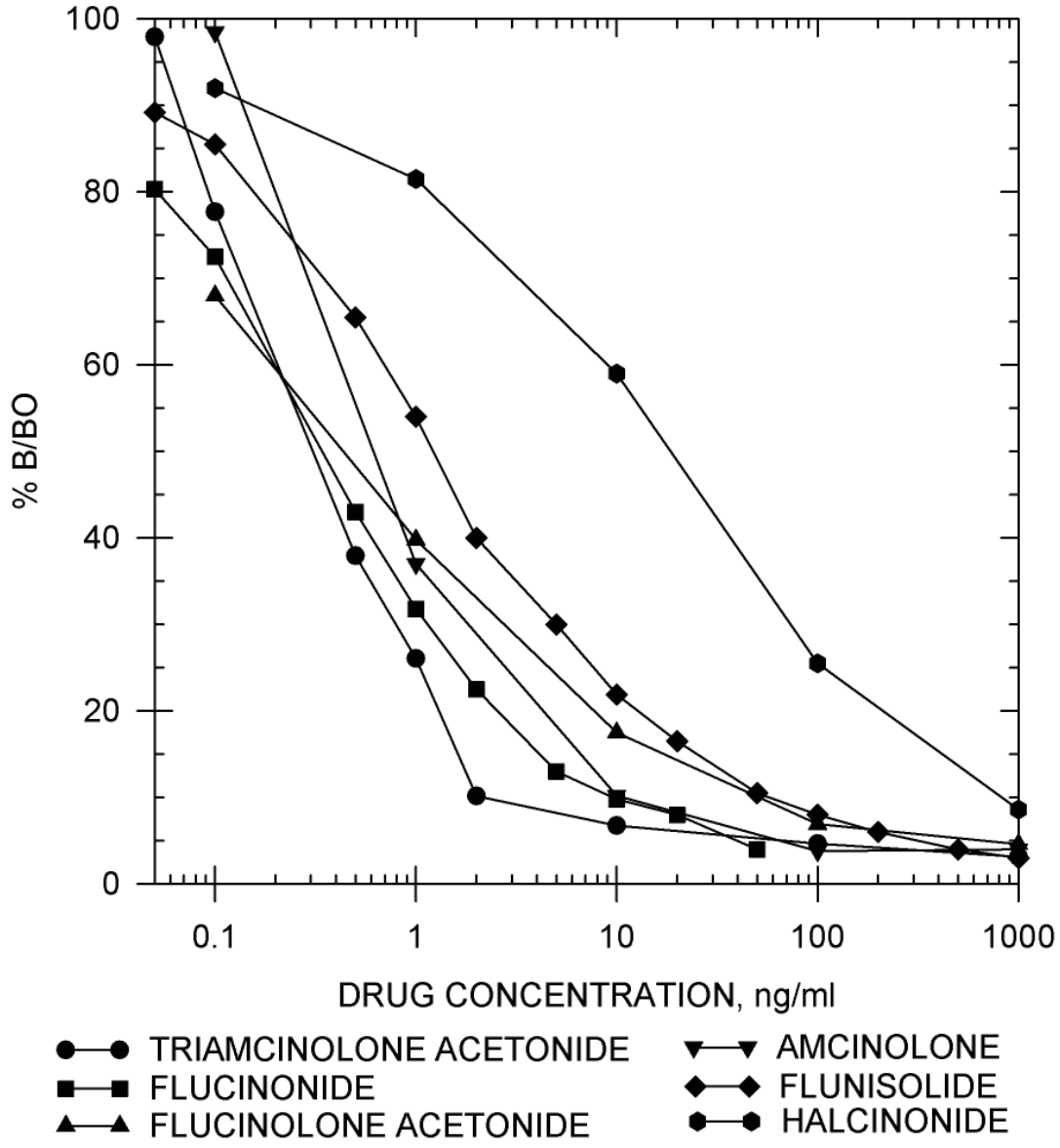
Triamcinolone Acetonide



Amcinonide

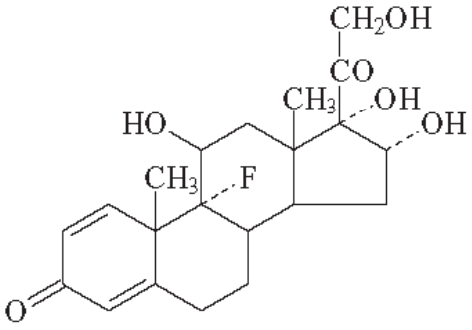


Drug Standard Curve Comparison in EIA Buffer

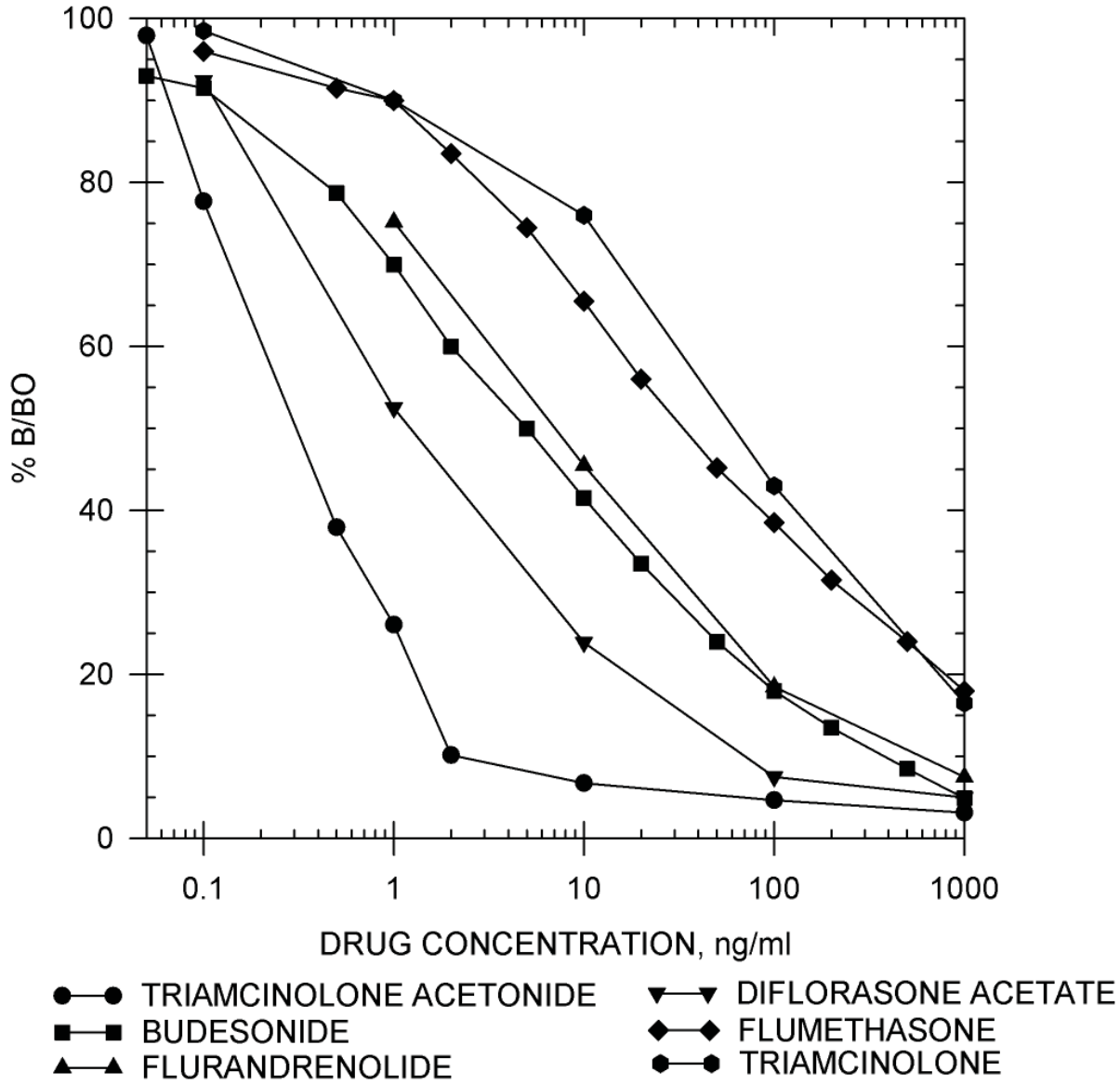


TRIAMCINOLONE ACETONIDE STANDARD CURVES

Triamcinolone

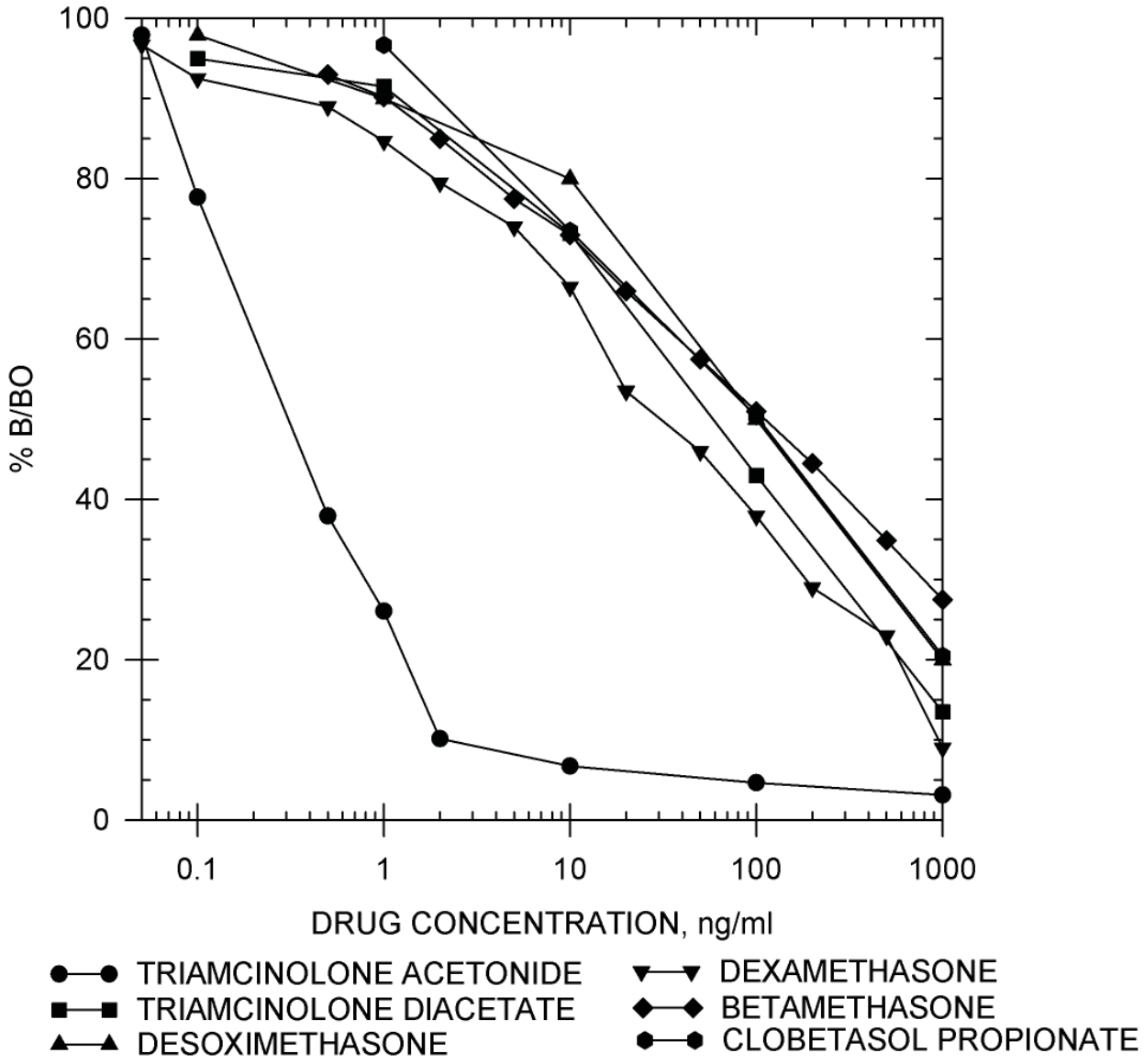


Drug Standard Curve Comparison in EIA Buffer



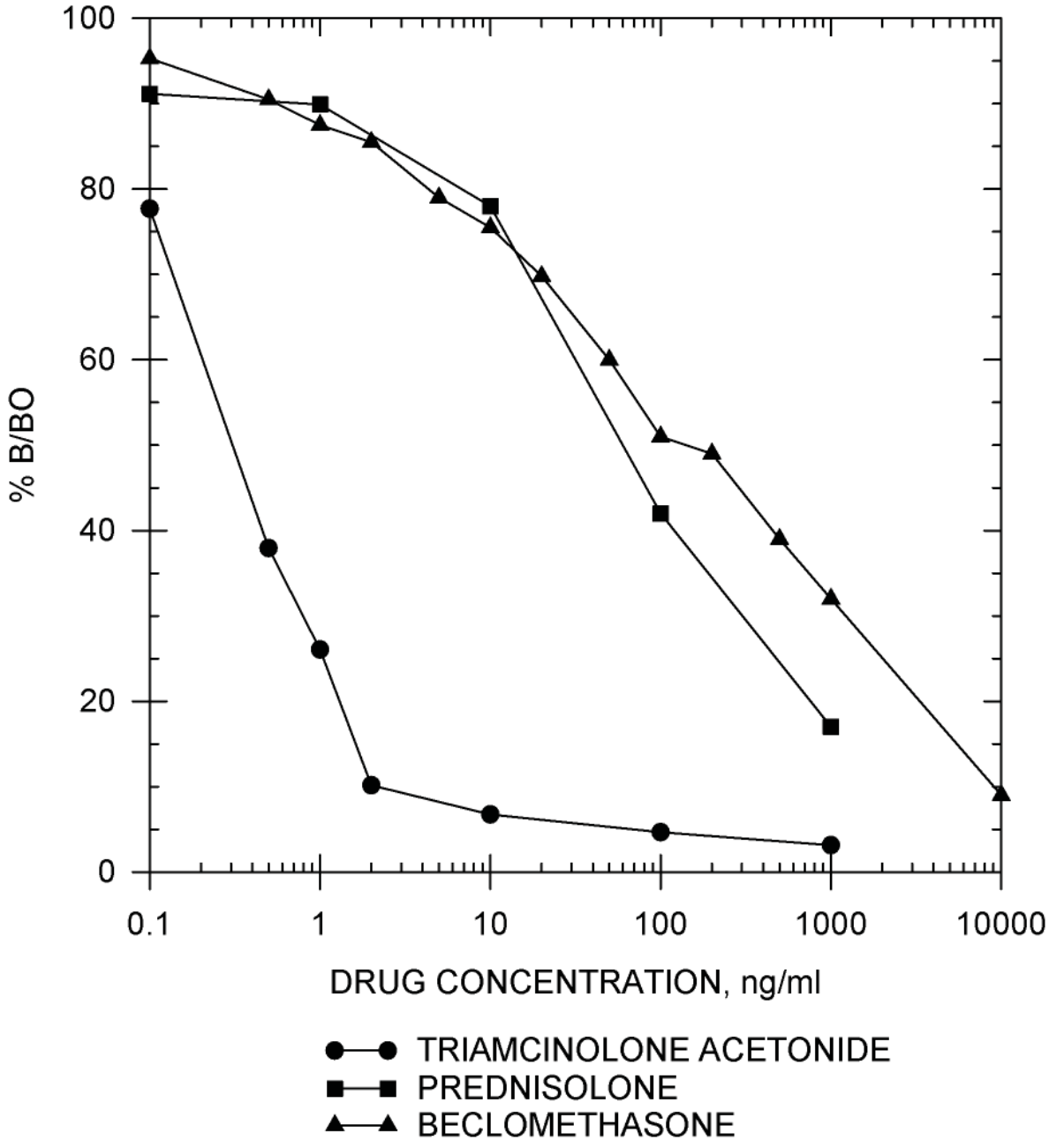
TRIAMCINOLONE ACETONIDE STANDARD CURVES

Drug Standard Curve Comparison in EIA Buffer



TRIAMCINOLONE ACETONIDE STANDARD CURVES

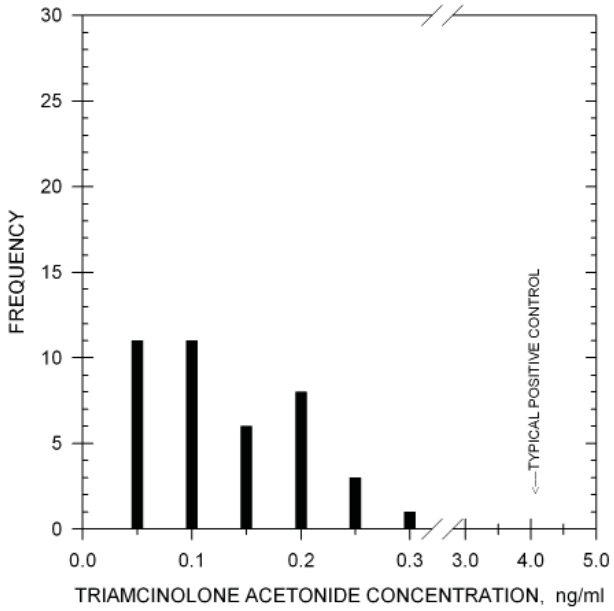
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

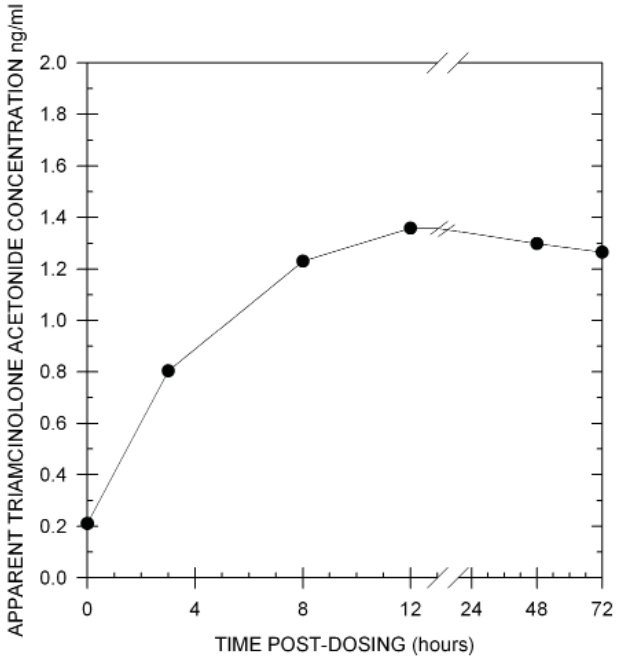
Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:6, has shown no background levels above 0.3 ng/ml.

Sample Treatment: A dilution of 1:6 (i.e. 1 part sample to 6 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 30 mg of triamcinolone acetonide by intramuscular injection to one horse, the presence of this drug was detected for 72 hours in equine urine. All samples were diluted 1:7 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Triamcinolone Acetonide	100%	Triamcinolone Diacetate	0.5%
Fluocinonide	100%	Dexamethasone	0.4%
Fluocinolone Acetonide	67%	Betamethasone	0.3%
Amcinolone	43%	Clobetasol Propionate	0.3%
Flunisolide	26%	Prednisolone	0.3%
Halcinonide	20%	Beclomethasone	0.2%
Budesonide	7%	Corticosterone	0.1%
Flurandrenolide	3.8%	Hydrocortisone	0.04%
Diflorasone Acetate	1.7%	Methylprednisolone	0.03%
Flumethasone	0.9%	Cortisone Acetate	0.02%
Desoximethasone	0.5%	Prednisone	<0.02%
Triamcinolone	0.5%		

Acepromazine	< 0.01%	Furosemide	< 0.01%	Oxphenbutazone	< 0.01%
Acetaminophen	< 0.01%	Gemfibrozil	< 0.01%	PCP	< 0.01%
Acetylsalicylic Acid	< 0.01%	Gentisic Acid	< 0.01%	Penicillin G-Potassium	< 0.01%
E-amino-n-caproic Acid	< 0.01%	Glipizide	< 0.01%	Penicillin G-Procaine	< 0.01%
Amitriptyline	< 0.01%	L-Glutamic Acid	< 0.01%	Pentoxifylline	< 0.01%
Ascorbic Acid	< 0.01%	Glutethimide	< 0.01%	Phenothiazine	< 0.01%
Benzoic Acid	< 0.01%	Glycopyrrolate	< 0.01%	Phenylbutazone	< 0.01%
Chlordiazepoxide	< 0.01%	Heparin	< 0.01%	Polyethylene Glycol	< 0.01%
Chlorpromazine	< 0.01%	Hippuric Acid	< 0.01%	Primadone	< 0.01%
Clenbuterol	< 0.01%	Hordenine	< 0.01%	Procainamide	< 0.01%
Codeine	< 0.01%	Ibuprofen	< 0.01%	Procaine	< 0.01%
Cotinine	< 0.01%	Imipramine	< 0.01%	Promazine	< 0.01%
Dextromethorphan	< 0.01%	Isoxsuprine	< 0.01%	Pseudoephedrine	< 0.01%
Diclofenac	< 0.01%	Lidocaine	< 0.01%	Pyrantel	< 0.01%
2,2-dimethyl-		Meclofenamic Acid	< 0.01%	Pyrilamine	< 0.01%
1,3 dioxolane	< 0.01%	Meperidine	< 0.01%	Pyrimethamine	< 0.01%
Dimethyl Sulfoxide	< 0.01%	Metaproterenol	< 0.01%	Quinidine	< 0.01%
Dipyrone	< 0.01%	Methadone	< 0.01%	Quinine	< 0.01%
Doxepin	< 0.01%	Methaqualone	< 0.01%	Salbutamol	< 0.01%
Ephedrine	< 0.01%	Methocarbamol	< 0.01%	Salicylamide	< 0.01%
Erythromycin	< 0.01%	Methylene Blue	< 0.01%	Salicylic Acid	< 0.01%
Ethyl p-amino Benzoate	< 0.01%	Nalorphine	< 0.01%	Theophylline	< 0.01%
Fenoprofen	< 0.01%	Naproxen	< 0.01%	Thiamine	< 0.01%
Flunixin	< 0.01%	Niacinamide	< 0.01%	Trimethoprim	< 0.01%
Fluorometholone	< 0.01%	Nicotine	< 0.01%	Trimipramine	< 0.01%
Folic Acid	< 0.01%	Nortriptyline	< 0.01%	Uric Acid	< 0.01%
Folinic Acid	< 0.01%	Orphenadrine	< 0.01%		

ENHANCED TRICYCLICS GROUP

Product #100810 & 100815 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Amitriptyline	0.2 ng/ml
Dothiepin	0.4 ng/ml
Doxepin	0.4 ng/ml
Nortriptyline	0.5 ng/ml
Cyclobenzaprine	0.6 ng/ml
Nordoxepin	1.3 ng/ml
Clomipramine	1.4 ng/ml
Imipramine	1.9 ng/ml
Desipramine	2.5 ng/ml
Trimipramine	2.9 ng/ml
Protriptyline	3.0 ng/ml
Chlorpromazine	8.3 ng/ml
Perphenazine	8.6 ng/ml
Prochlorperazine	14 ng/ml
Promazine	24 ng/ml
Trifluprom azine	27 ng/ml
Fluphenazine	29 ng/ml
Maprotiline	31 ng/ml
Trifluoperazine	39 ng/ml
Thioridazine	96 ng/ml
Acetophenazine	233 ng/ml
Acepromazine	534 ng/ml
Propionylpromazine	808 ng/ml

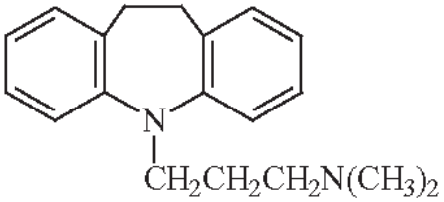
Precision:

Intra-assay	4.42 %
Inter-assay	2.20 %

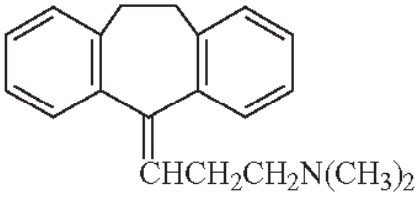
Note: Measuring wavelength was 650 nm**.**

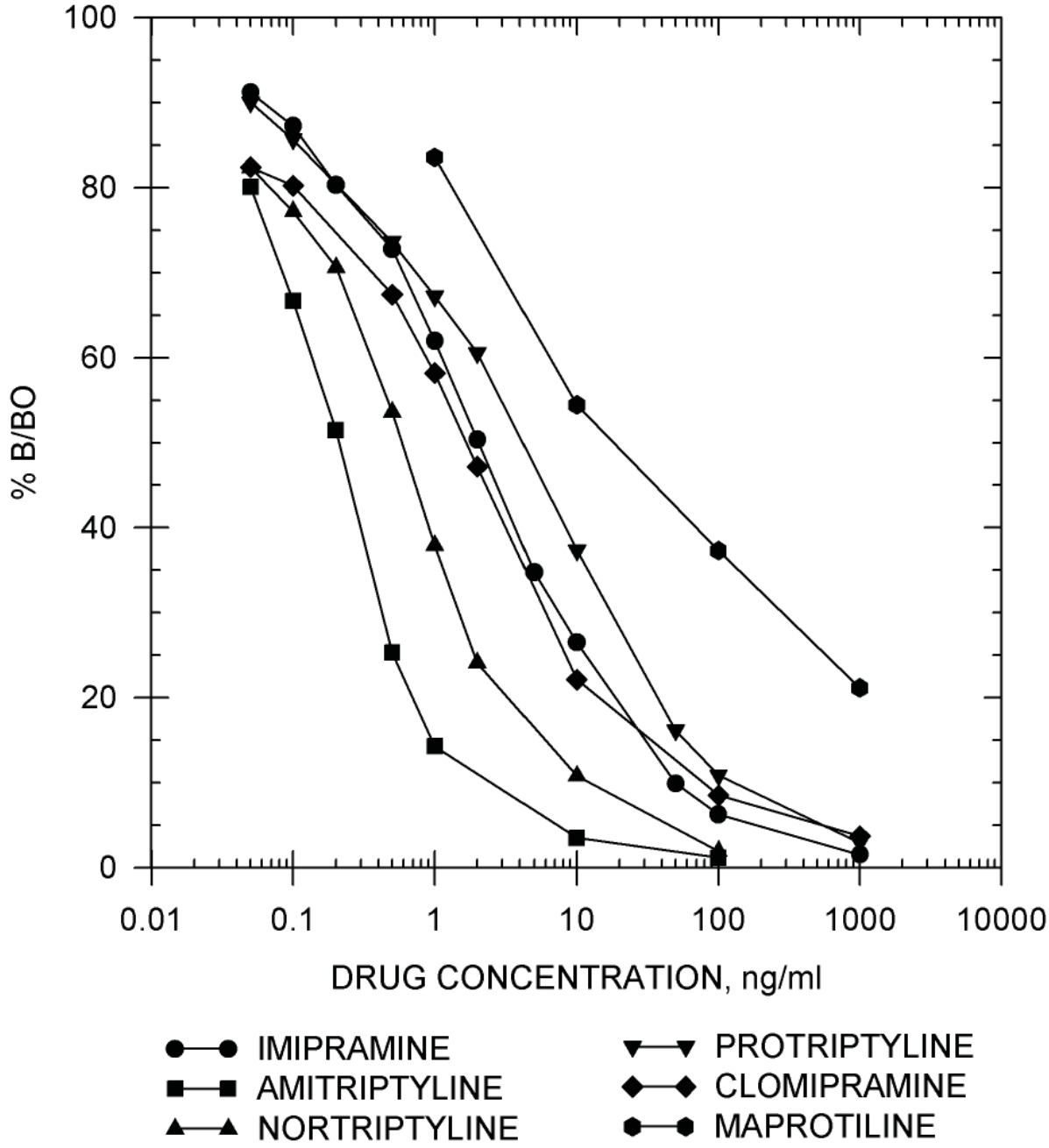
TRICYCLICS STANDARD CURVES

Imipramine



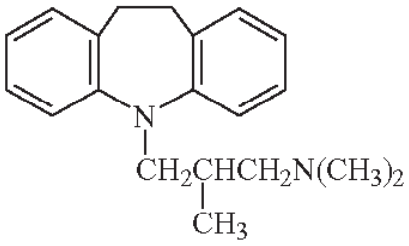
Amitriptyline



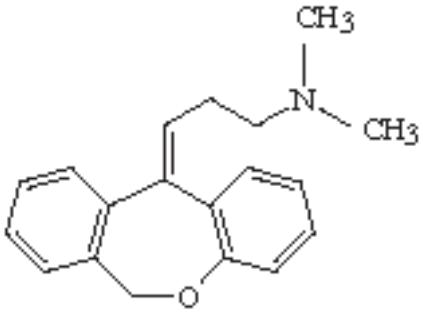


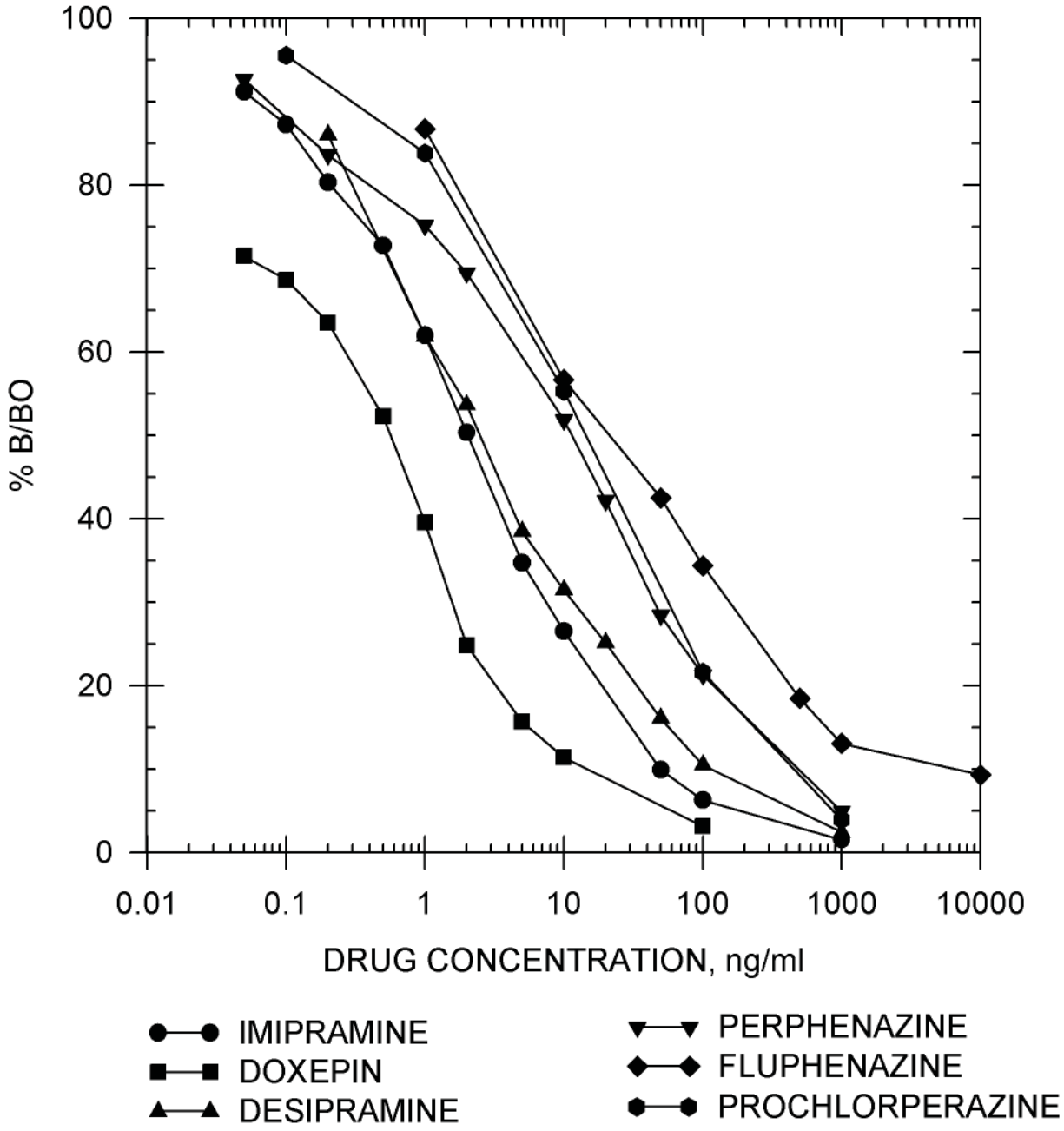
TRICYCLICS STANDARD CURVES

Trimipramine



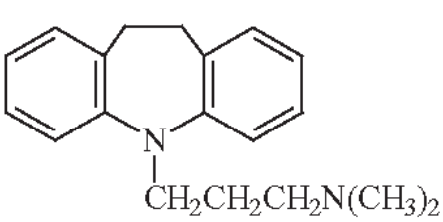
Doxepin



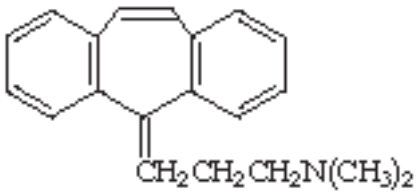


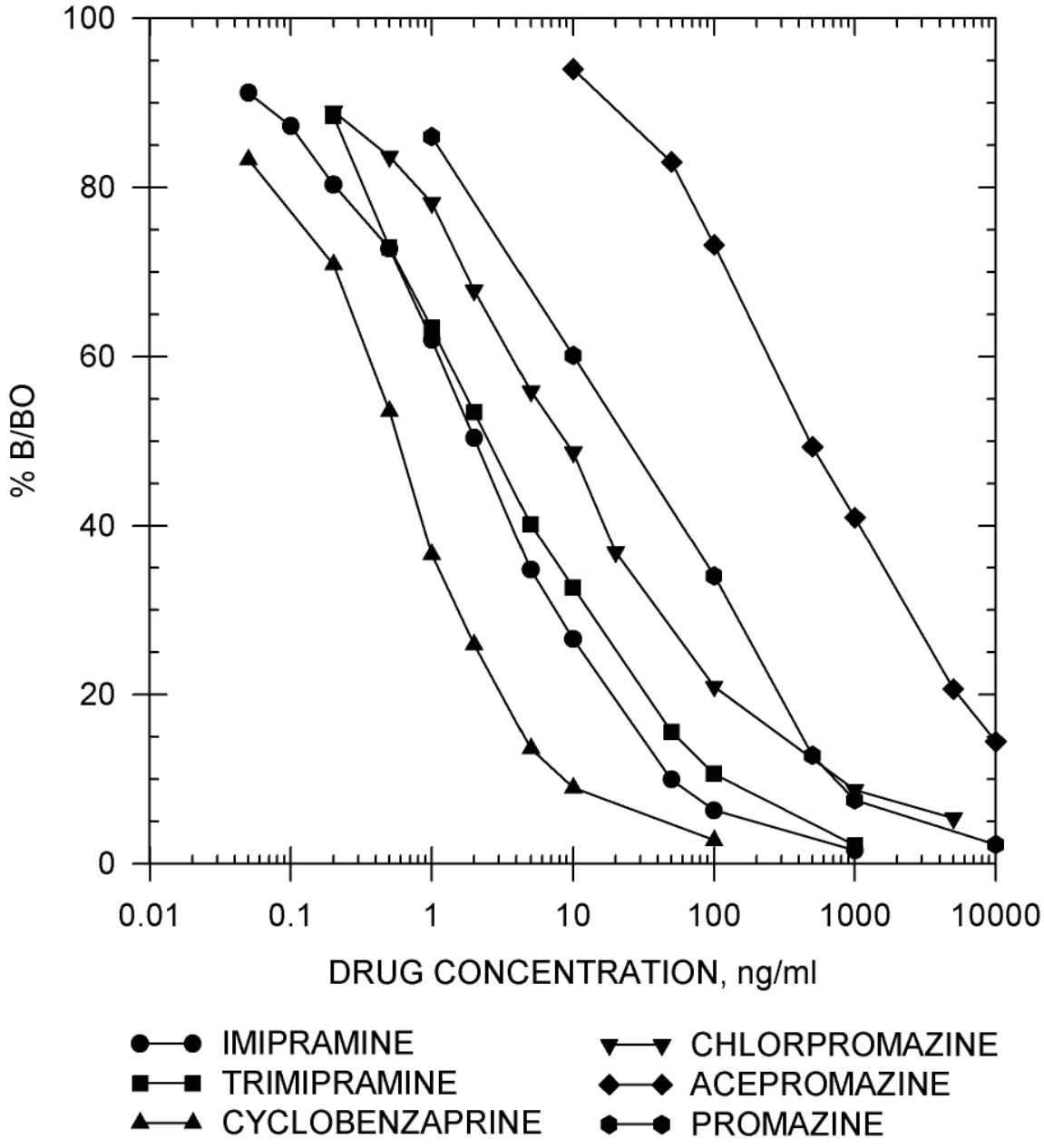
TRICYCLICS STANDARD CURVES

Imipramine

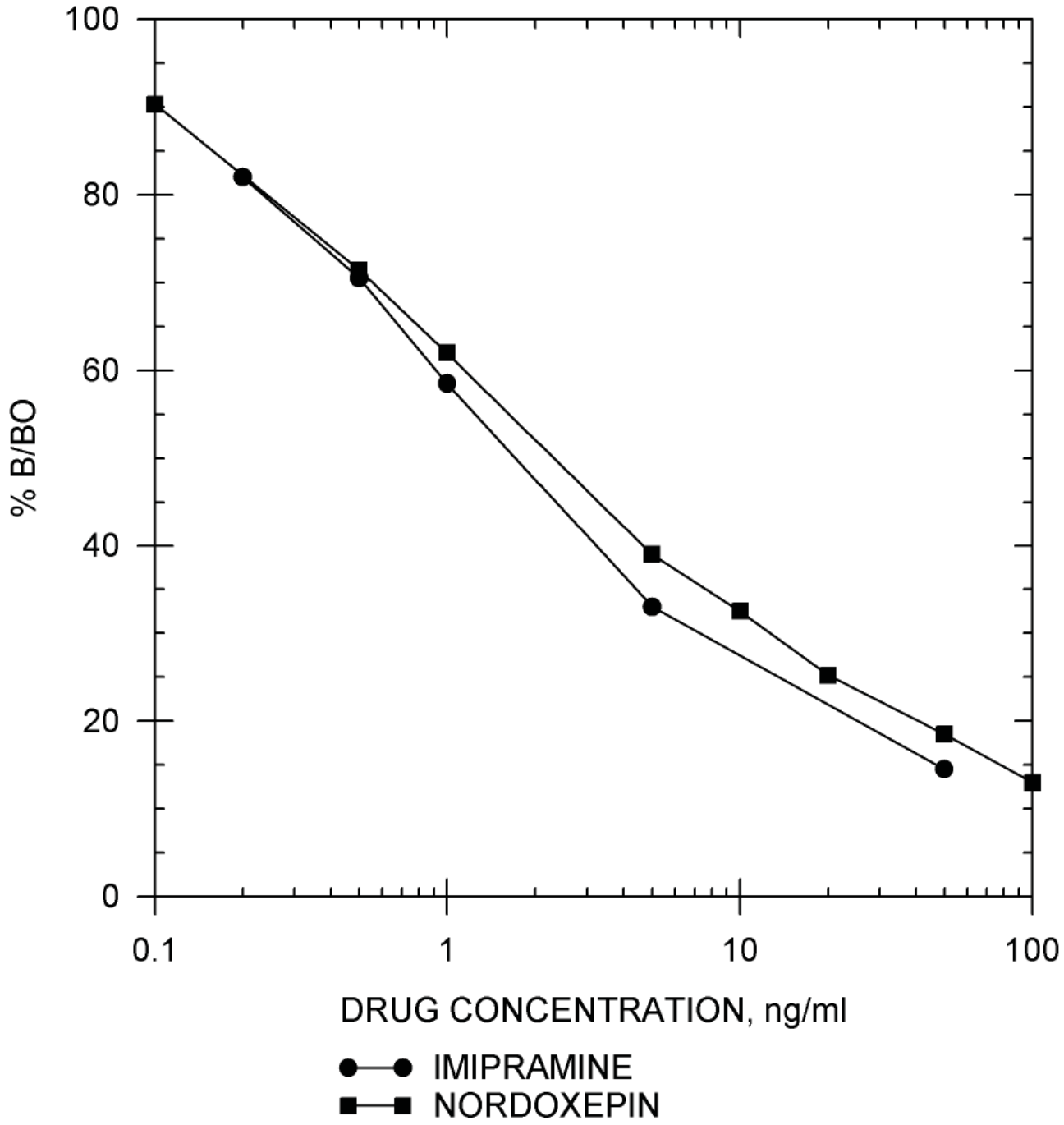


Cyclobenzaprine



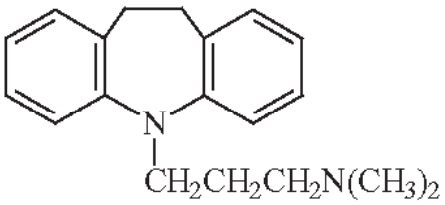


TRICYCLICS STANDARD CURVES

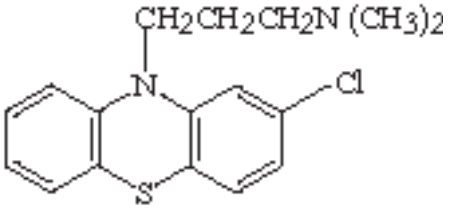


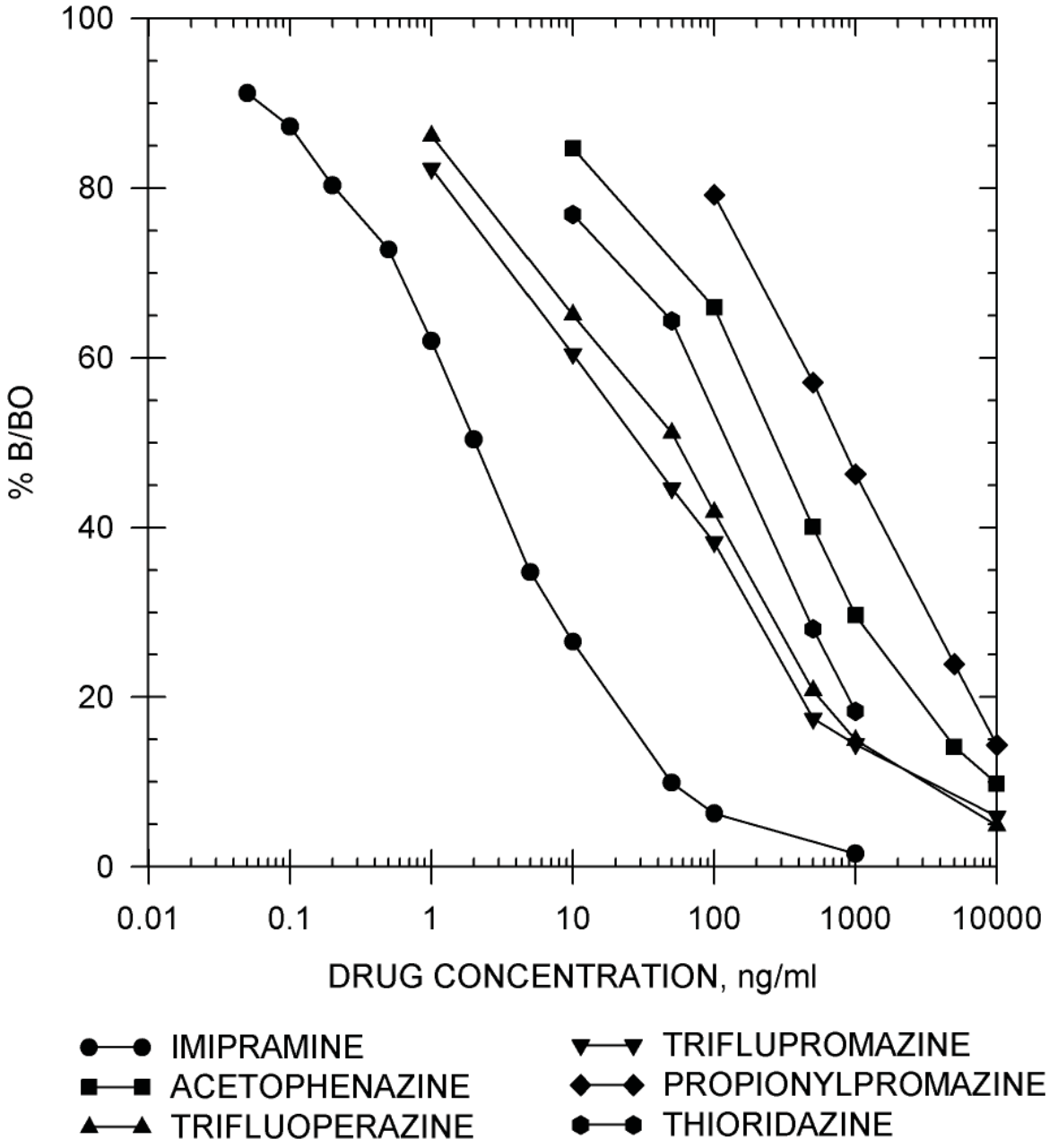
TRICYCLICS STANDARD CURVES

Imipramine



Chlorpromazine

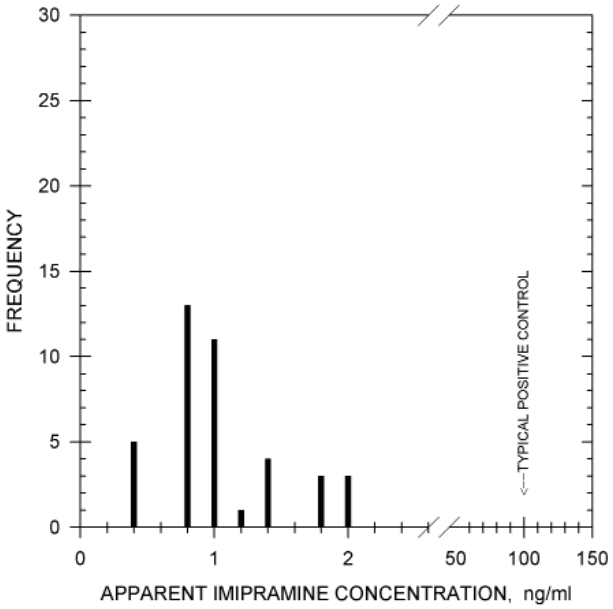




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race equine urine samples, diluted 1:4, has shown no background levels above 2.00 ng/ml.

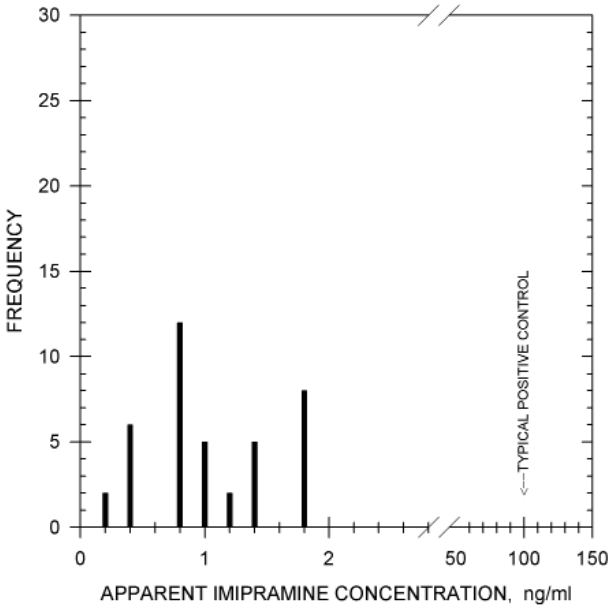
Sample Treatment: A dilution of 1:4 (i.e. 1 part sample to 4 parts EIA buffer) is recommended to reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:2, has shown no background levels above 1.8 ng/ml.

Sample Treatment: A dilution of 1:2 (i.e. 1 part sample to 2 parts EIA buffer) is recommended to reduce natural backgrounds.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10 μg/ml.

Amitriptyline	815%
Doxepin	394%
Cyclobenzaprine	347%
Nortriptyline	284%
Dothiepin	203%
Clomipramine	179%
Imipramine	100%
Trimipramine	85%
Protriptyline	84%
Desipramine	63%
Nordoxepin	47%
Perphenazine	27%
Chlorpromazine	23%
Prochlorperazine	11%
Triflupromazine	7.5%
Promazine	6.7%
Maprotiline	6.1%
Fluphenazine	5.7%
Trifluoperazine	5.1%
Clozapine	3.4%
Thioridazine	2.4%
Cyproheptadine	1.3%
Acetophenazine	0.7%
Thiethylperazine	0.7%
Amoxapine	0.5%
Acepromazine	0.4%
Propionylpromazine	0.3%
Mesoridazine	0.09%
Olanzapine	0.05%
Nefopam	0.03%
Thiothexene	0.02%
Hydroxyzine	0.01%
Trazodone	0.01%

Acetaminophen	<0.01%
Aspirin	<0.01%
Carprofen	<0.01%
Chlordiazepoxide	<0.01%
Cotinine	<0.01%
Dextromethorphan	<0.01%
Dizoclipine	<0.01%
Erythromycin	<0.01%
Etodolac	<0.01%
Fenoprofen	<0.01%
Gemfibrozil	<0.01%
Gentisic Acid	<0.01%
Glipizide	<0.01%
Glutethimide	<0.01%
Ibuprofen	<0.01%
Inolin	<0.01%
Lidocaine	<0.01%
Meperidine	<0.01%
Metaclopramide	<0.01%
Methadone	<0.01%
Methaqualone	<0.01%
Nalorphine	<0.01%
Naproxen	<0.01%
Nialamide	<0.01%
Penicillin G-Potassium	<0.01%
Penicillin G-Procaine	<0.01%
Phencyclidine	<0.01%
Primadone	<0.01%
Procainamide	<0.01%
Procaine	<0.01%
Quinidine	<0.01%
Quinine	<0.01%
Theophylline	<0.01%
Tranylcypromine	<0.01%

ENHANCED KIT
ZOMEPIRAC

Product #109610
& 109615 (5 Kit Bulk)

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Zomepirac	0.2 ng/ml
Tolmetin	7 ng/ml
Ketorolac	57 ng/ml
Ketoprofen	389 ng/ml

I-50 in Equine Urine (Diluted 1:19)		**I-50 in Canine Urine (Diluted 1:19)**	
Zomepirac	4.1 ng/ml	Zomepirac	3.1 ng/ml
Tolmetin	38 ng/ml	Tolmetin	63 ng/ml
Ketorolac	402 ng/ml	Ketorolac	638 ng/ml
Ketoprofen	7745 ng/ml	Ketoprofen	6441 ng/ml
I-50 in Equine Plasma (Diluted 1:1)		**I-50 in Equine Serum**	
Zomepirac	0.7 ng/ml	Zomepirac	0.6 ng/ml
Tolmetin	10 ng/ml	Tolmetin	4 ng/ml
Ketorolac	19 ng/ml	Ketorolac	114 ng/ml
Ketoprofen	6000 ng/ml	Ketoprofen	3217 ng/ml

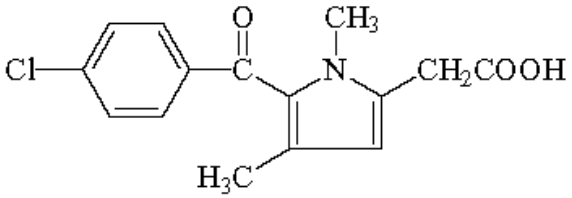
Precision:

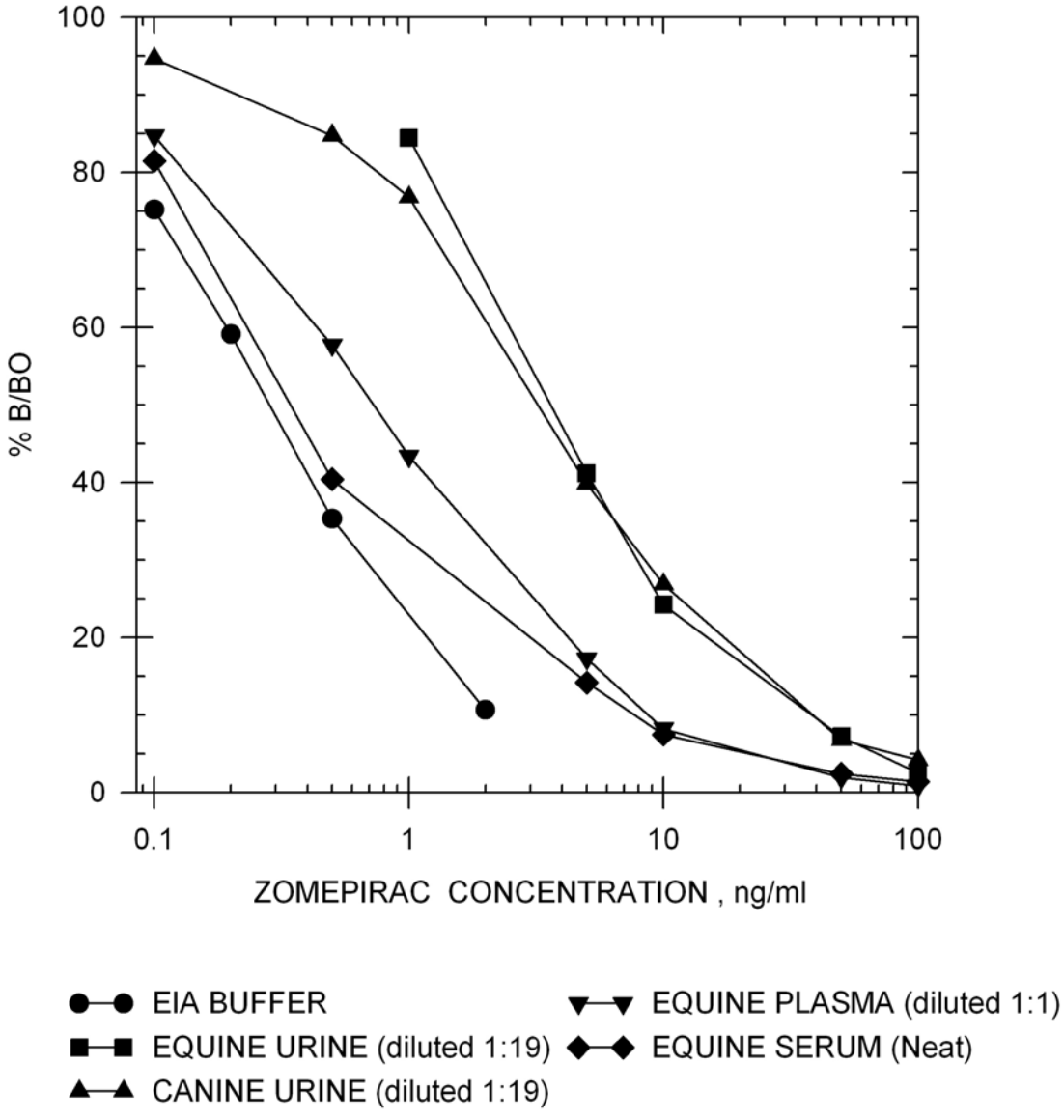
Intra-Assay	5.34%
Inter-Assay	5.56%

Note: Measuring wavelength was 650 nm.

ZOMEPIRAC STANDARD CURVES

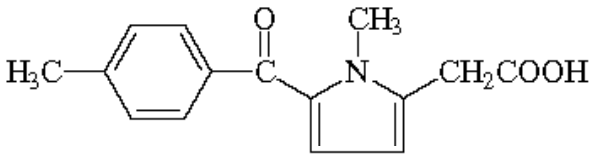
Zomepirac

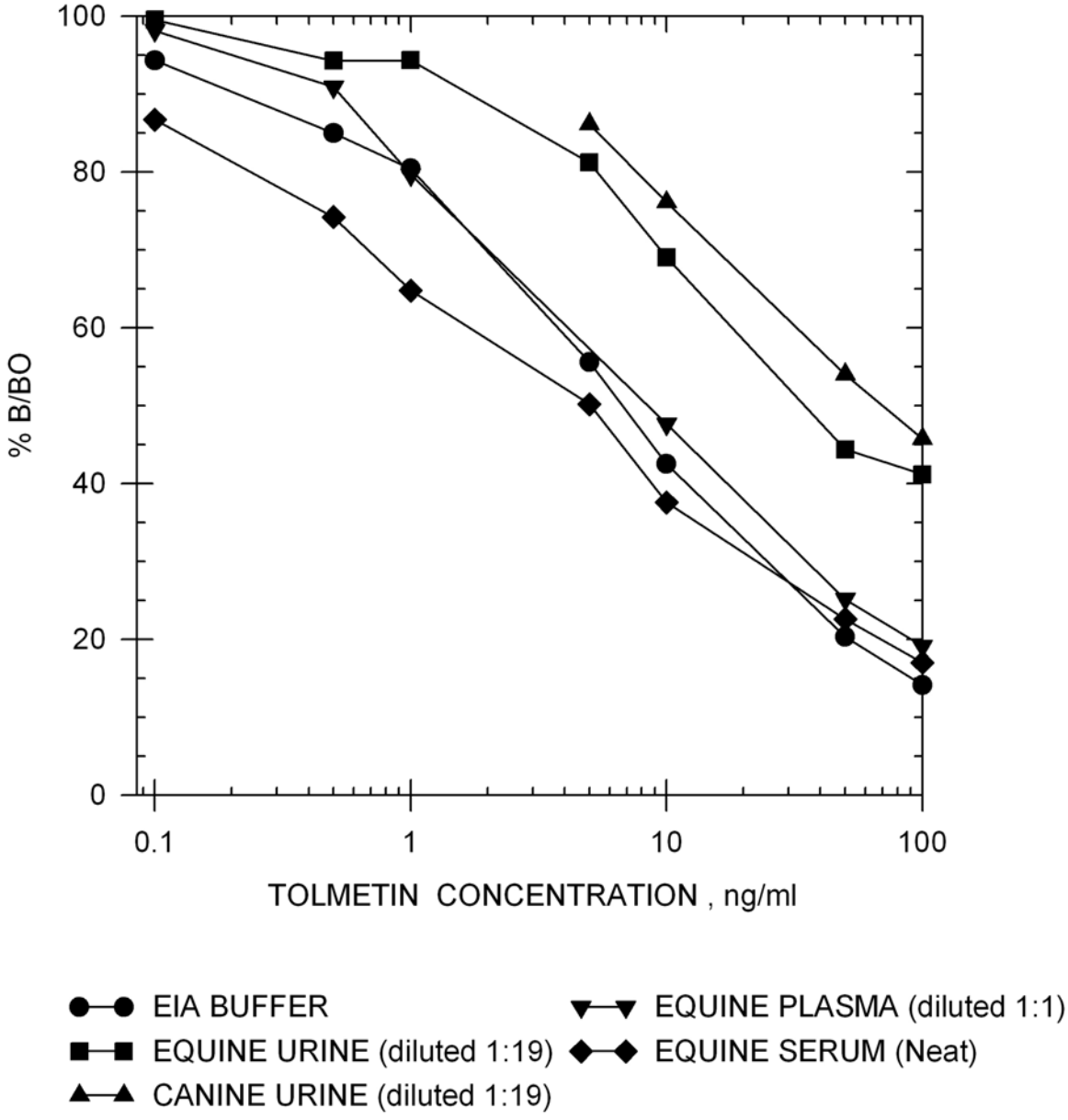




ZOMEPIRAC STANDARD CURVES

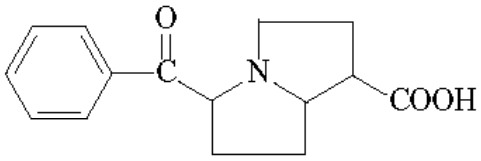
Tolmetin

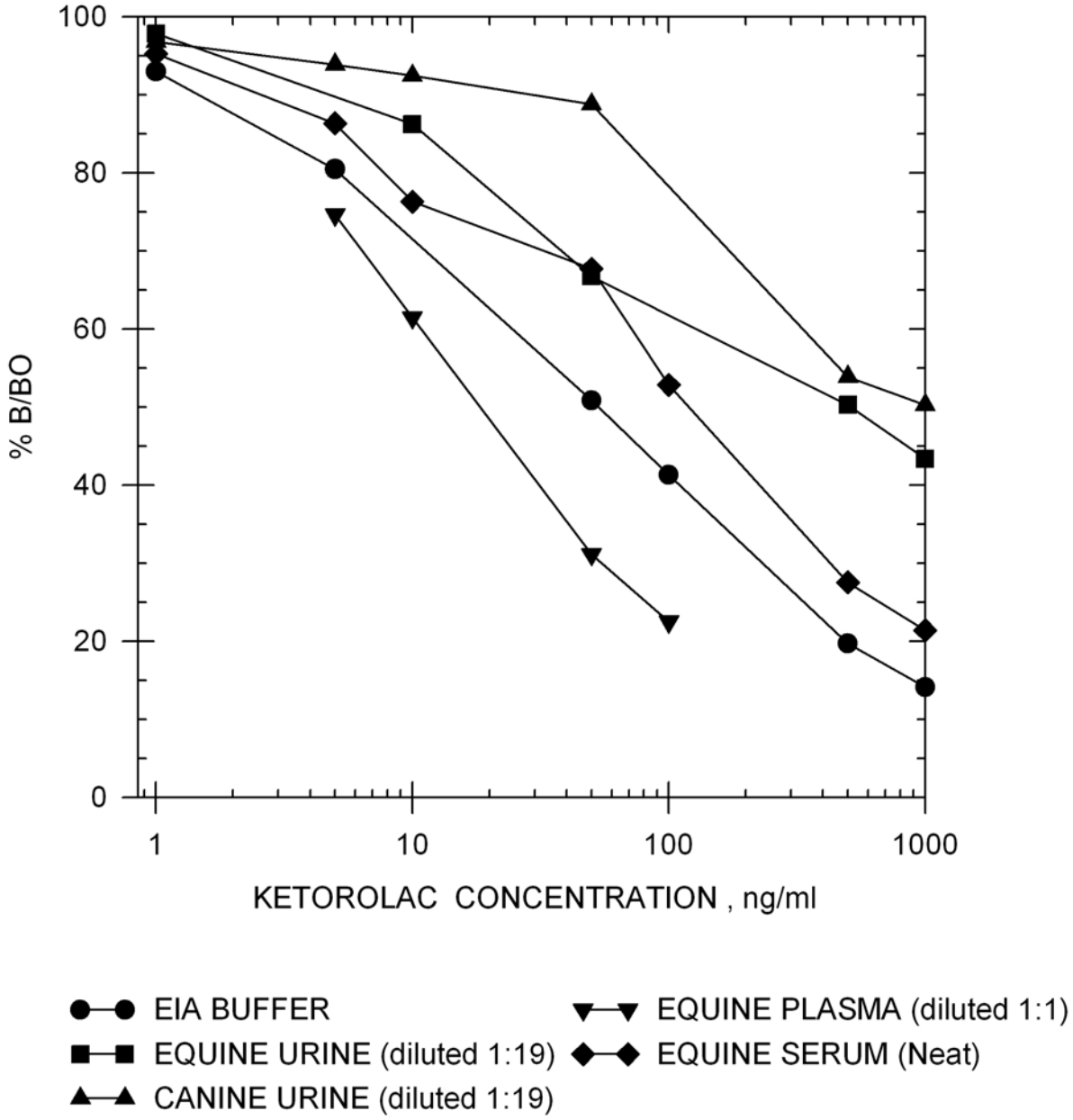




ZOMEPIRAC STANDARD CURVES

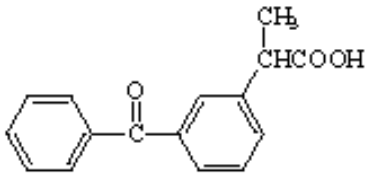
Ketorolac

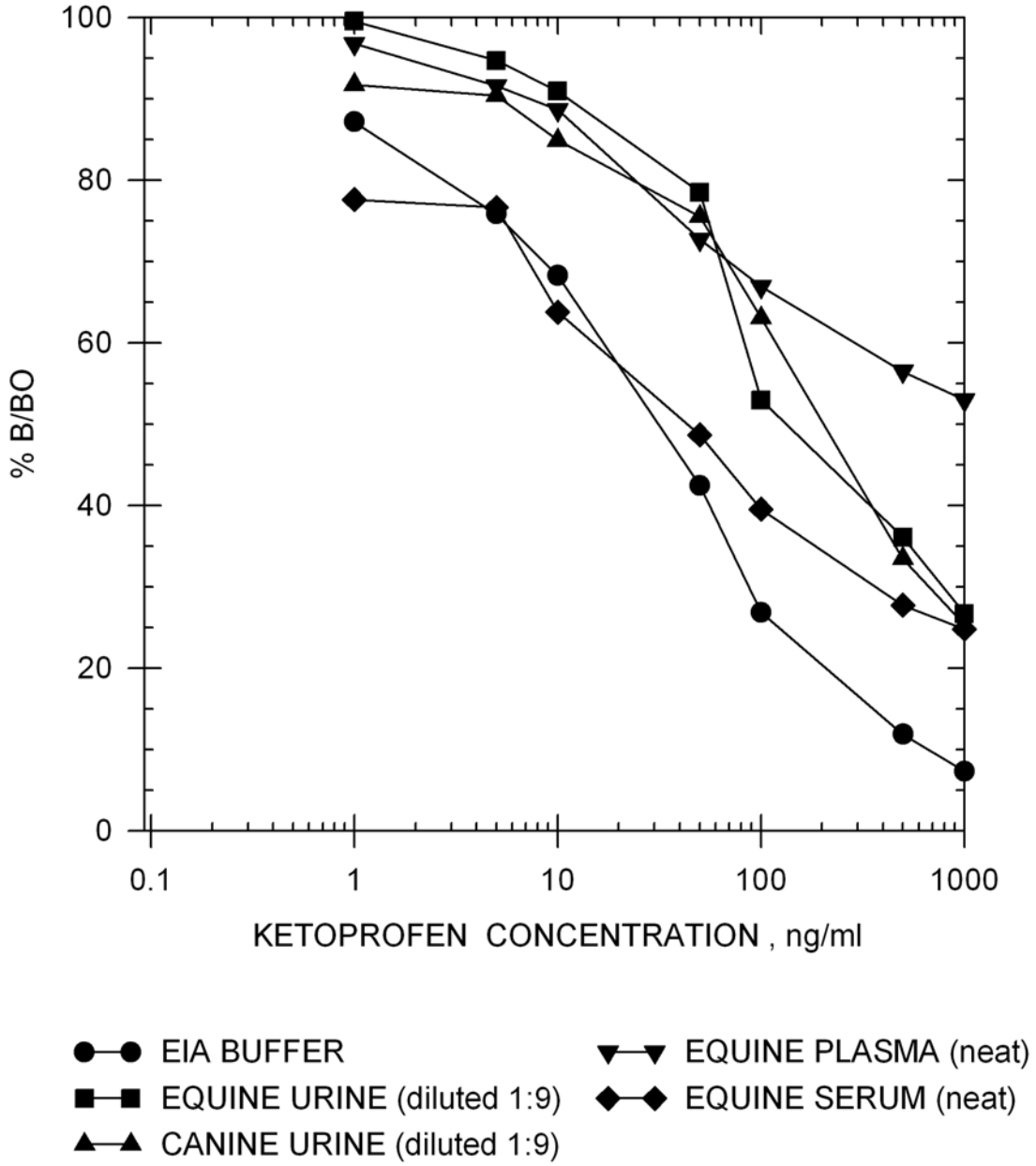




ZOMEPIRAC STANDARD CURVES

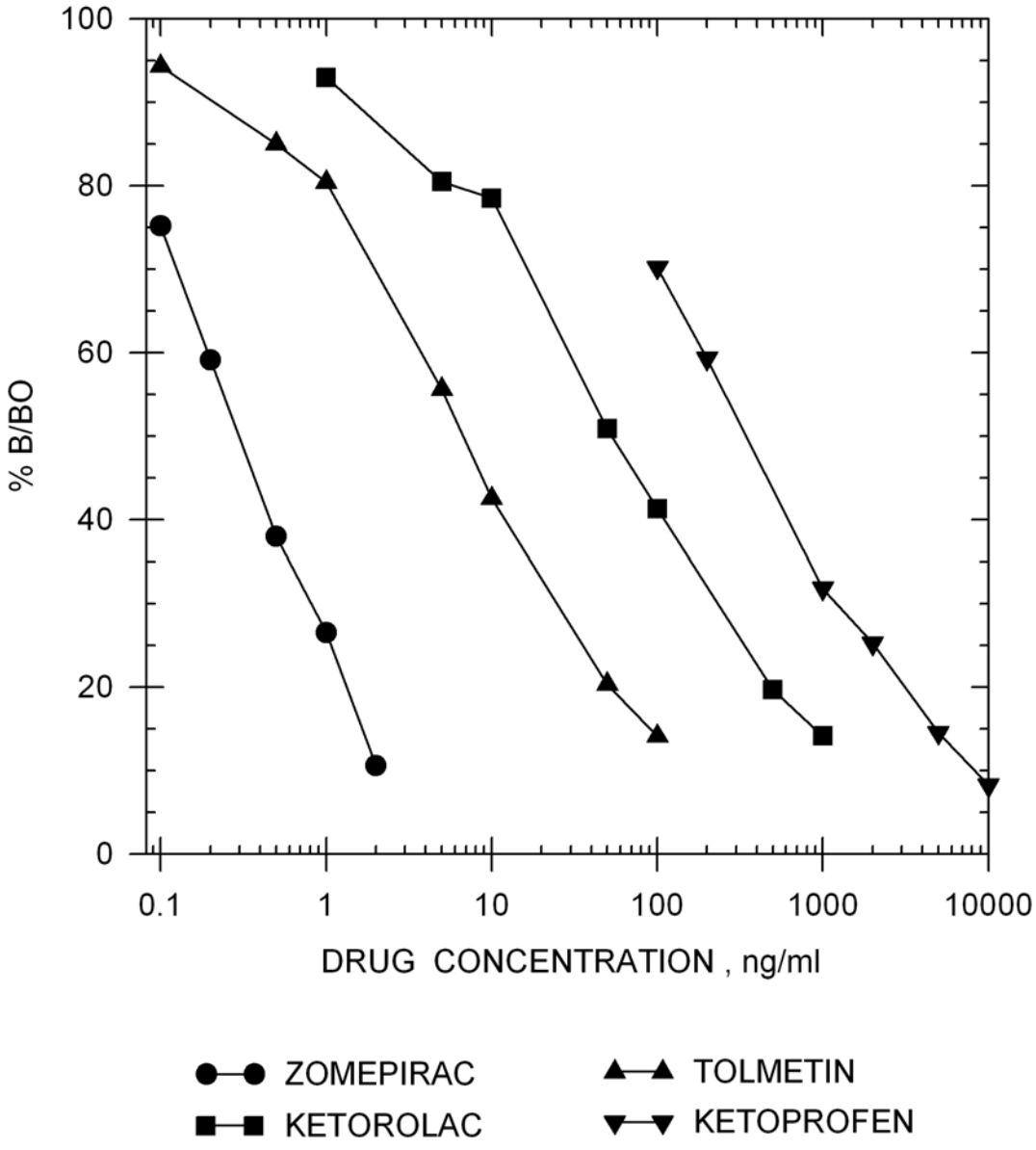
Ketoprofen





ZOMEPIRAC STANDARD CURVES

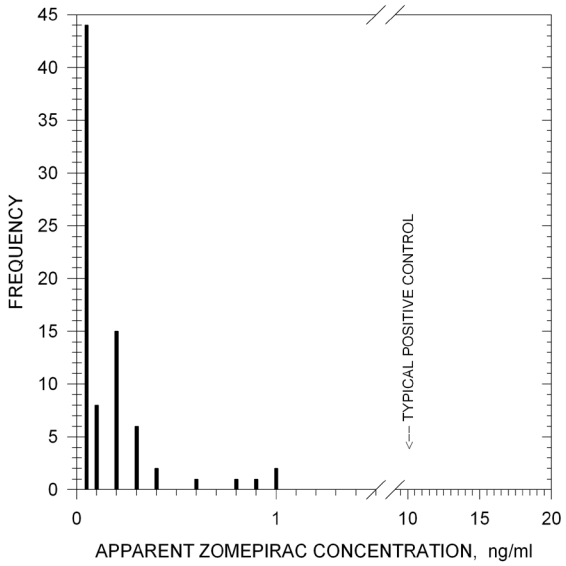
Drug Standard Curve Comparison in EIA Buffer



TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 80 post-race equine urine samples, diluted 1:19, has shown background levels below 0.4 ng/ml for 75 of the 80 samples evaluated.

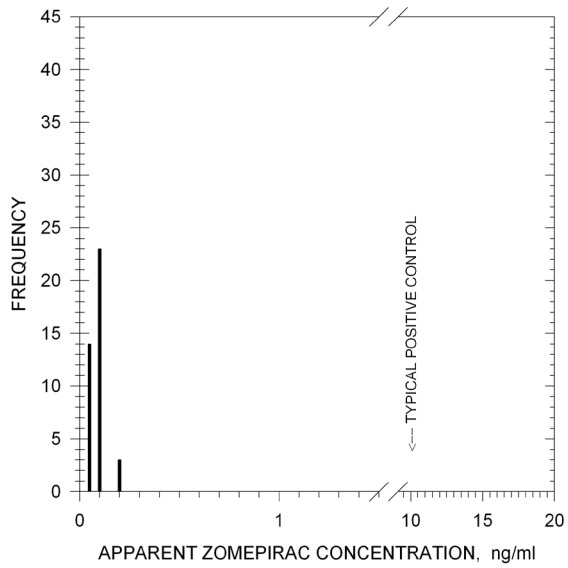
Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) will reduce natural backgrounds.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 40 post-race canine urine samples, diluted 1:19, has shown no background levels above 0.05 ng/ml.

Sample Treatment: A dilution of 1:19 (i.e. 1 part urine to 19 parts EIA buffer) will reduce natural backgrounds.

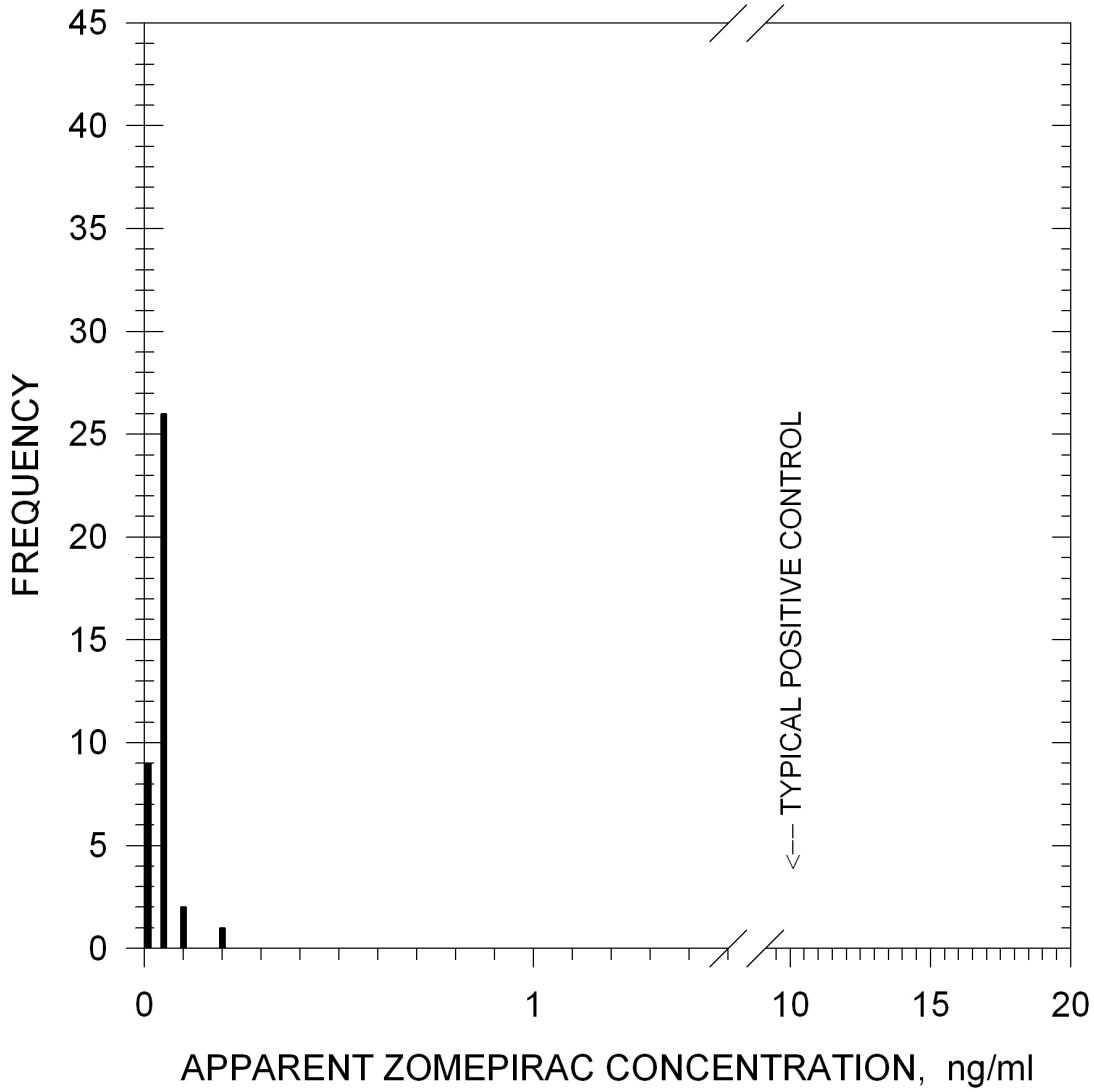


ADDITIONAL BACKGROUND LEVELS

Backgrounds: Analysis of 39 post-race equine plasma samples, diluted 1:1, has shown no background levels above 0.17 ng/ml.

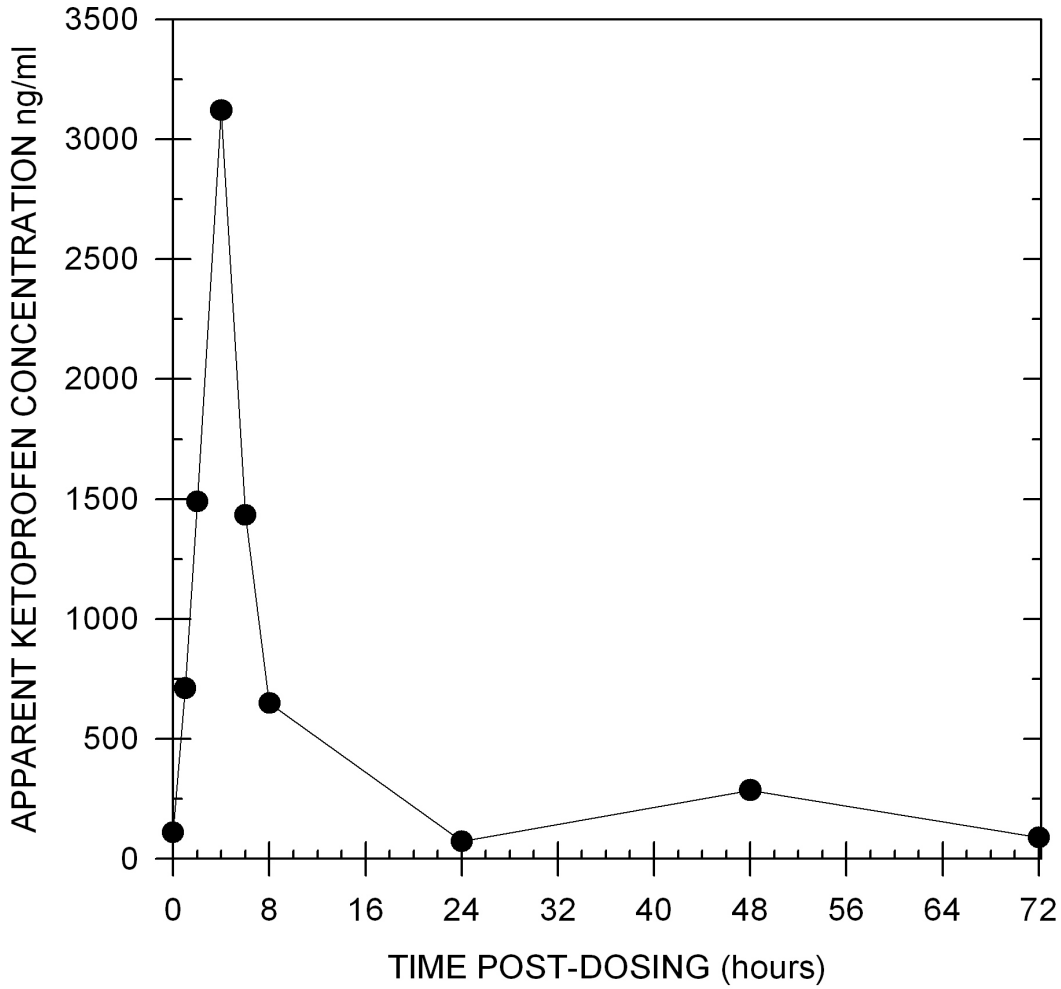
Sample Treatment: A small dilution (i.e. 1 part urine to 1 part EIA Buffer) may be necessary.

Note: Serum samples have not been evaluated. Follow the same guidelines set forth for plasma samples.



TYPICAL DURATION OF DETECTION

Duration of Detection: After administration of 200 mg of Ketoprofen orally by to one horse, the presence of this drug was detected for at least 8 hours in equine urine. Samples were diluted 1:19 with EIA buffer before testing according to the recommended sample treatment.



CROSS-REACTIVITY DATA

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/ml.

Zomepirac	100%
Tolmetin	3.1%
Ketorolac	0.4%
Ketoprofen	0.1%

Acepromazine	<0.01%	Lidocaine	<0.01%
Acetaminophen	<0.01%	Meclofenamic Acid	<0.01%
Acetylsalicylic Acid	<0.01%	Mefenamic Acid	<0.01%
E-amino-n-caproic Acid	<0.01%	Meperidine	<0.01%
Amitriptyline	<0.01%	Metaproterenol	<0.01%
Ascorbic Acid	<0.01%	Methadone	<0.01%
Benzoic Acid	<0.01%	Methaqualone	<0.01%
Caffeine	<0.01%	Methocarbamol	<0.01%
Carprofen	<0.01%	Methylene Blue	<0.01%
Chlordiazepoxide	<0.01%	Methylprednisolone	<0.01%
Chlorpromazine	<0.01%	Nabumetone	<0.01%
Clenbuterol	<0.01%	Nalorphine	<0.01%
Codeine	<0.01%	Naproxen	<0.01%
Cotinine	<0.01%	Niacinamide	<0.01%
Dexamethasone	<0.01%	Nicotine	<0.01%
Dextromethorphan	<0.01%	Niflumic Acid	<0.01%
Diclofenac	<0.01%	Nortriptyline	<0.01%
Diflunisal	<0.01%	Orphenadrine	<0.01%
Dimethyl Sulfoxide	<0.01%	Oxyphenbutazone	<0.01%
Dipyrone	<0.01%	PCP	<0.01%
Doxepin	<0.01%	Penicillin G-Potassium	<0.01%
Eltenac	<0.01%	Penicillin G-Procaine	<0.01%
Ephedrine	<0.01%	Pentoxifylline	<0.01%
Erythromycin	<0.01%	Phenothiazine	<0.01%
Ethyl p-amino-benzoate	<0.01%	Phenylbutazone	<0.01%
Etodolac	<0.01%	Polyethylene Glycol	<0.01%
Fenbufen	<0.01%	Prednisolone	<0.01%
Fenoprofen	<0.01%	Primadone	<0.01%
Flufenamic Acid	<0.01%	Procainamide	<0.01%
Flunixin	<0.01%	Procaine	<0.01%
Flurbiprofen	<0.01%	Promazine	<0.01%
Folic Acid	<0.01%	Pseudoephedrine	<0.01%
Folinic Acid	<0.01%	Pyrantel	<0.01%
Furosemide	<0.01%	Pyrilamine	<0.01%
Gemfibrozil	<0.01%	Pyrimethamine	<0.01%
Gentisic Acid	<0.01%	Quinidine	<0.01%
Glipizide	<0.01%	Quinine	<0.01%
L-Glutamic Acid	<0.01%	Salbutamol	<0.01%
Gluthethimide	<0.01%	Salicylamide	<0.01%
Glycopyrrolate	<0.01%	Salicylic Acid	<0.01%
Heparin	<0.01%	Sulindac	<0.01%
Hippuric Acid	<0.01%	Sulprofen	<0.01%
Hordenine	<0.01%	Theophylline	<0.01%
Hydrocortisone	<0.01%	Thiamine	<0.01%
Ibuprofen	<0.01%	Tiaprofenic Acid	<0.01%
Imipramine	<0.01%	Trimethoprim	<0.01%
Indoprofen	<0.01%	Trimpramine	<0.01%
Isoxsuprine	<0.01%	Uric Acid	<0.01%

ZOPICLONE/ESZOPICLONE (RTU) FORENSIC KIT

Product #133819 &133815

Forensic Use Only

TYPICAL DATA

Note: "Typical" data is a representation. Variances in data will occur.

SENSITIVITY

I-50 in EIA Buffer

Zopiclone	22 ng/mL
Eszopiclone	12 ng/mL

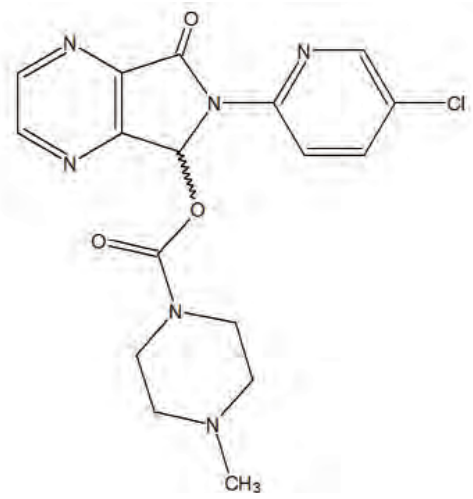
I-50 in Equine Urine (Diluted 1:19)		**I-50 in Canine Urine (Diluted 1:19)**	
Zopiclone	59.9 ng/mL	Zopiclone	112.9 ng/mL
Eszopiclone	80.1 ng/mL	Eszopiclone	82.7 ng/mL

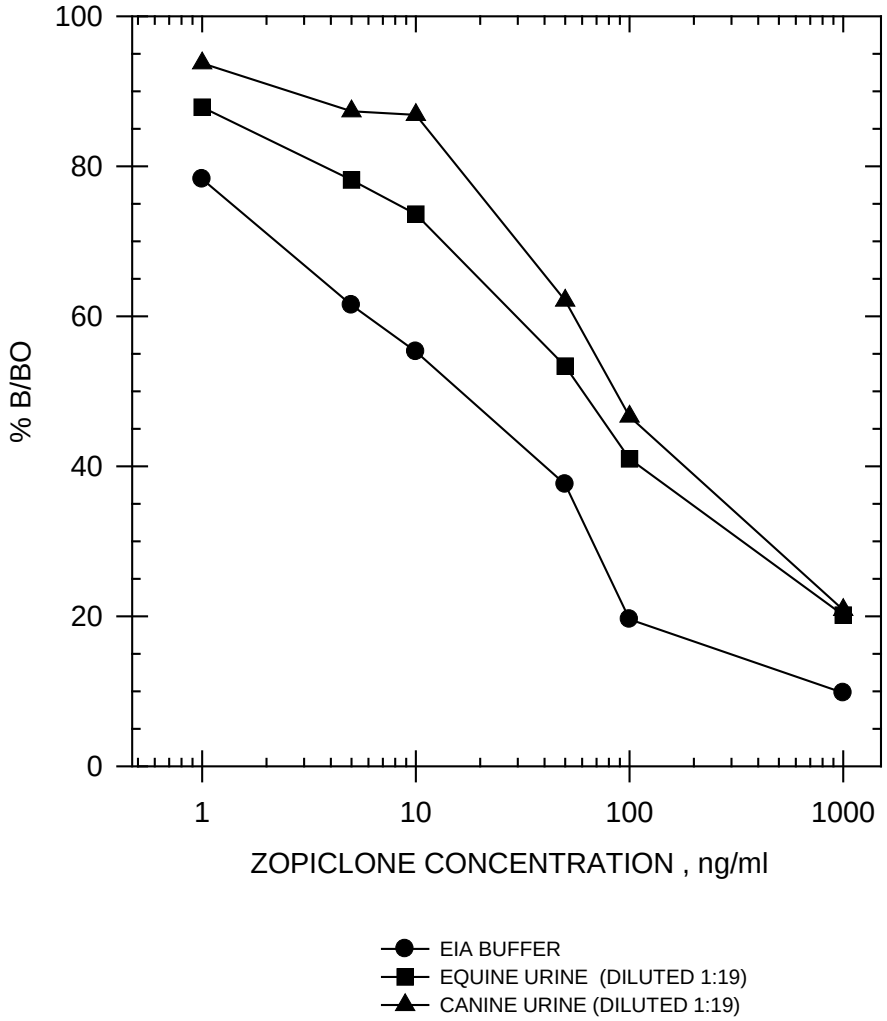
Precision:	Intra-assay	2.06%
	Inter-assay	3.28%

Note: Measuring wavelength was 650 nm**.**

ZOPICLONE/ESZOPICLONE STANDARD CURVES

Zopiclone Drug Standard Curve

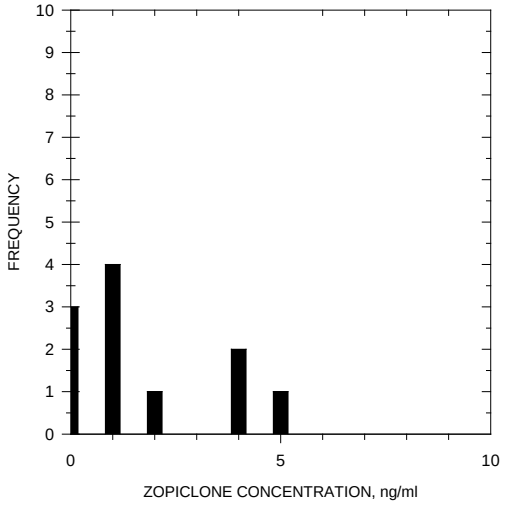




TYPICAL EQUINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race equine urine samples, diluted 1:19, has shown no background levels above 5.73ng/mL.

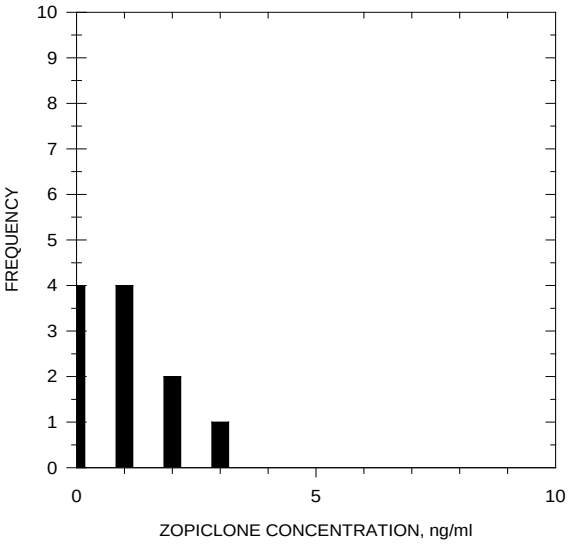
Sample Treatment: A dilution of 1:19 (i.e. 1 part to 19 parts EIA buffer) is recommended to reduce natural background.



TYPICAL CANINE URINE BACKGROUND LEVELS

Backgrounds: Analysis of 11 post-race canine urine samples, diluted 1:19, has shown no background levels above 3.21 ng/mL.

Sample Treatment: A dilution of 1:19 (i.e. 1 part to 19 parts EIA buffer) is recommended to reduce natural background.



CROSS-REACTIVITY DATA

Please reference the product insert for cross-reactivity data. Product insert is included with the kit or available upon request.

CROSS-REACTIVITY DATA USING ZOPICLONE AS REFERENCE

Acetaminophen	<0.02%	Methocarbamol	<0.02%
Acetopromazine	<0.02%	Methylene Blue	<0.02%
Acetylsalicylic Acid	<0.02%	Methylprednisolone	<0.02%
Amitryptyline	<0.02%	Nalorphine	<0.02%
Ascorbic Acid	<0.02%	Naproxen	<0.02%
Benzoic Acid	<0.02%	Niacinamide	<0.02%
Caffeine	<0.02%	Nicotine	<0.02%
Chlordiazepoxide	<0.02%	Nortriptyline	<0.02%
Chlorpromazine	<0.02%	Orphenadrine	<0.02%
Clenbuterol	<0.02%	Oxyphenbutazone	<0.02%
Codeine	<0.02%	PCP	<0.02%
Cotinine	<0.02%	Penicillin G-Potassium	<0.02%
Dexamethasone	<0.02%	Penicillin G-Procaine	<0.02%
Dextromethorphan	<0.02%	Pentoxifylline	<0.02%
Diclofenac	<0.02%	Phenothiazine	<0.02%
Dimethyl Sulfoxide	<0.02%	Phenylbutazone	<0.02%
Doxepin	<0.02%	Polyethylene glycol	<0.02%
ε-amino-n-carproic acid	<0.02%	Prednisolone	<0.02%
Ephedrine	<0.02%	Primadone	<0.02%
Erythromycin	<0.02%	Procaine	<0.02%
Ethyl p-amino benzoate	<0.02%	Procainamide	<0.02%
Fenoprofen	<0.02%	Promazine	<0.02%
Flunixin	<0.02%	Pseudophedrine	<0.02%
Folic Acid	<0.02%	Pyrantel	<0.02%
Folinic Acid	<0.02%	Pyrillamine	<0.02%
Furosemide	<0.02%	Pyrimethamine	<0.02%
Gemfibrozil	<0.02%	Quinidine	<0.02%
Gentisic Acid	<0.02%	Quinine	<0.02%
Glipizide	<0.02%	Salbutamol	<0.02%
Glutethimide	<0.02%	Salicylamide	<0.02%
Glycopyrrolate	<0.02%	Salicylic Acid	<0.02%
Heparin	<0.02%	Sodium Azide	<0.02%
Hippuric Acid	<0.02%	Theophylline	<0.02%
Hordenine	<0.02%	Thiamine	<0.02%
Hydrocortisone	<0.02%	Trimethoprim	<0.02%
Ibuprofen	<0.02%	Trimipramine	<0.02%
Imipramine	<0.02%	Uric Acid	<0.02%
Isoxuprine	<0.02%		
L-Glutamic Acid	<0.02%		
Lidocaine	<0.02%		
Meperidine	<0.02%		
Metaproterenol	<0.02%		
Methadone	<0.02%		
Methaqualone	<0.02%		

CROSS-REACTIVITY DATA USING ESZOPICLONE AS REFERENCE

See Appendix 7 for the cross-reactivity calculation description. The compounds that have cross-reactivity below 0.01% did not show any significant reaction up to 10μg/mL.

Eszopiclone	100%
Zopiclone	53.3%
Zopiclone-N-Oxide	13.3%
N-Desmethyl-Eszopiclone	123.3%
Zaleplon	<0.01%
Zolpidem	<0.01%
6-(5-Chloro-2-pyridyl)-6,7-dihydro-7-hydroxy-5H-pyrrolo[3,4b]pyrazin-5-one	0.09%

CROSS-REACTIVITY DATA USING ESZOPICLONE AS REFERENCE

Acetaminophen	<0.01%
Acetopromazine	<0.01%
Acetylsalicylic Acid	<0.01%
Amitryptyline	<0.01%
Ascorbic Acid	<0.01%
Benzoic Acid	<0.01%
Caffeine	<0.01%
Chlordiazepoxide	<0.01%
Chlorpromazine	<0.01%
Clenbuterol	<0.01%
Codeine	<0.01%
Cotinine	<0.01%
Dexamethasone	<0.01%
Dextromethorphan	<0.01%
Diclofenac	<0.01%
Dimethyl Sulfoxide	<0.01%
Doxepin	<0.01%
ε-amino-n-carproic acid	<0.01%
Ephedrine	<0.01%
Erythromycin	<0.01%
Ethyl p-amino benzoate	<0.01%
Fenoprofen	<0.01%
Flunixin	<0.01%
Folic Acid	<0.01%
Folinic Acid	<0.01%
Furosemide	<0.01%
Gemfibrozil	<0.01%
Gentisic Acid	<0.01%
Glipizide	<0.01%
Glutethimide	<0.01%
Glycopyrrolate	<0.01%
Heparin	<0.01%
Hippuric Acid	<0.01%
Hordenine	<0.01%
Hydrocortisone	<0.01%
Ibuprofen	<0.01%
Imipramine	<0.01%
Isoxuprine	<0.01%
L-Glutamic Acid	<0.01%
Lidocaine	<0.01%
Meperidine	<0.01%
Metaproterenol	<0.01%
Methadone	<0.01%
Methaqualone	<0.01%
Methocarbamol	<0.01%
Methylene Blue	<0.01%
Methylprednisolone	<0.01%
Nalorphine	<0.01%
Naproxen	<0.01%
Niacinamide	<0.01%
Nicotine	<0.01%
Nortriptyline	<0.01%
Orphenadrine	<0.01%
Oxyphenbutazone	<0.01%
PCP	<0.01%
Penicillin G-Potassium	<0.01%
Penicillin G-Procaine	<0.01%
Pentoxifylline	<0.01%
Phenothiazine	<0.01%
Phenylbutazone	<0.01%
Polyethylene glycol	<0.01%
Prednisolone	<0.01%
Primadone	<0.01%
Procaine	<0.01%
Procainamide	<0.01%
Promazine	<0.01%
Pseudophedrine	<0.01%
Pyrantel	<0.01%
Pyrillamine	<0.01%
Pyrimethamine	<0.01%
Quinidine	<0.01%
Quinine	<0.01%
Salbutamol	<0.01%
Salicylamide	<0.01%
Salicylic Acid	<0.01%
Sodium Azide	<0.01%
Theophylline	<0.01%
Thiamine	<0.01%
Trimethoprim	<0.01%
Trimipramine	<0.01%
Uric Acid	<0.01%