

# Colitag™ Water Solutions





## Total Coliform and *E. coli* Testing

### Clean Water Changes Everything — and it Starts With Reliable Testing.

For water testing laboratories that depend on reliable and fast results, NEOGEN® is a microbiology water expert offering total coliform and *E. coli* tests. Colitag™ provides water testing laboratories a quality and effective choice to protect the people and animals we care about.

### Industry-leading 16-hour Results

Colitag is the only enzyme substrate test with validated 16 hour read window for total coliform and *E. coli* determination — offering the fastest time to results.

### 16–48 Hour Testing Window

Colitag offers unrivaled flexibility with a 16–48 hour read window. This flexibility allows end users to choose the appropriate read-time for their workflow and doesn't require them to stock multiple read-time specific products to meet their needs.

### A Reliable Choice for Drinking Water Testing

Colitag detects as low as 1 CFU of total coliform and *E. coli* in a 100 mL water sample and is relied on by communities around the world to ensure safe drinking water.

## Product Specifications

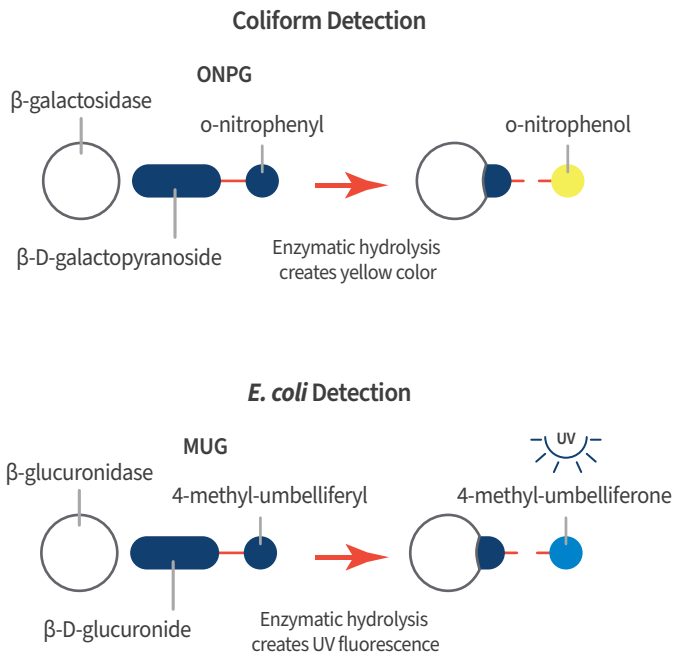
Sensitivity: 1 CFU in a 100 mL sample

Testing Time: 16–48 hours

Storage: 2–30°C

## How Does Colitag Work?

Colitag detects total coliforms and *E. coli* by identifying two enzymes,  $\beta$ -galactosidase, and  $\beta$ -glucuronidase, respectively. If total coliform bacteria are present in the sample,  $\beta$ -galactosidase, an enzyme produced by total coliform bacteria, will hydrolyze the chromogenic indicator ortho-nitrophenyl- $\beta$ -D-galactopyranoside (ONPG) to release a yellow-colored compound. If *E. coli* is present, the enzyme  $\beta$ -glucuronidase produced by *E. coli* cells, hydrolyzes the fluorogenic indicator 4-methylumbelliferyl- $\beta$ -D-glucuronide (MUG) to release a compound that fluoresces when exposed to ultraviolet light. *E. coli* possesses both enzymes, so the sample will have both yellow color and exhibit fluorescence when *E. coli* is present.



The sample will have both yellow color and exhibit fluorescence when *E. coli* is present.

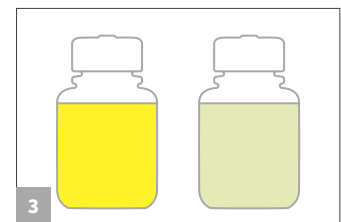
## P/A Method



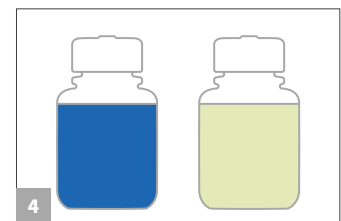
Add Colitag media to 100 mL water sample.



Incubate for 16–48 hours at  $35 \pm 0.5^\circ\text{C}$ .



Visually check the sample for yellow color, if the sample is equal or more yellow than the Comparator, it is positive for coliforms.



Visually check fluorescence using a UV lamp (365 nm). If the sample fluoresces, it is positive for *E. coli*.



## Ordering Information

### Item # Product Description:

9850 Colitag Water Test System, 20 pack

9851 Colitag Water Test System, 100 pack

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9859 Colitag Sample Container w/Sodium TS, 100 pack

9859P Colitag Sample Container w/Powdered Sodium TS, 100 pack

9856 Colitag Sample Container w/o Sodium TS, 100 pack

9855N Colitag Sample Container w/o Sodium TS, FlipTop, 100 pack

9855 Colitag Sample Container w/Sodium TS, FlipTop, 100 pack

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9857 Colitag Comparator, P/A, 100 mL

S2-COLITAG-QCKIT Colitag QC Testing Kit

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## Approvals

EPA approved for determination of total coliforms and *E. coli* in drinking water at 40 CFR 141.852(a)(5)

EPA approved for determining *E. coli* under the Ground Water Rule

FDA approved for dairy source waters

FDA inclusion in agricultural water

