

Microbiology



Coliform/E.coli Test Kit

Clean water is essential for many parts of life including drinking, recreation, cooking and cleaning. It is therefore important to monitor the safety of that water.

The microbes that cause disease are often difficult to test for, so *Coliform* and *E.coli* are used as indicator organisms for general contamination and, in particular, faecal contamination.

For many types of water these bacterium should be present at zero Colony Forming Units (CFU) of *Coliforms* and *E.coli* per 100ml of water.

The Lovibond® system tests 100ml samples and indicates the presence of just one CFU/100ml.

A Mini Fluorescent lamp is required for the determination of *E.coli*.

The Lovibond® incubator is ideal for correct incubation of samples prior to reading.

Highlights

- Early identification of bacterial contamination
- Coliforms and E.coli in one test
- 100 ml sample volume
- Detects one CFU/100ml
- 2 year shelf-life at room temperature



Code	Article	Application
56B006659	EC Blue 100 (100ml x 80 bottles)	<i>E.Coli</i> / <i>Coliform</i>
56B006701	Mini fluorescent lamp	Required for <i>E.Coli</i> identification
56B000701	Incubator	Incubation period & temperature

Legionella – Early Warning Indicative Test

- *Legionella* results within 25 minutes (excluding filtration step)
- 18 months shelf-life at room temperature

The Lovibond® *Legionella* system detects *Legionella pneumophilla* serogroup 1, the most common causative agent of Legionnaires disease in humans. Infection is via inhalation of aerosols containing the bacteria which causes a pneumonia-like disease that can prove fatal, especially in immuno suppressed individuals.

Technical Features

The *Legionella* Test uses an immuno-chromatographic assay to detect the presence of cell surface antigens from *Legionella* bacteria in a sample. The presence of antigen causes the "Test Line" to turn red in colour. A "Control Line" is included which always turns red on successful completion of the test.

This test can provide a rapid indication of the presence of *Legionella pneumophila* serogroup 1, the most commonly recorded cause of Legionnaires Disease. This rapid test is a very useful addition to periodic laboratory culture tests for *Legionella*. It should not be used as the sole method for assessing the presence of *Legionella*.

If results with this rapid test indicate the presence of *Legionella*, then confirmation with a laboratory culture test is essential.



Negative result – only control line showing



Positive result

Bacteria detected	<i>Legionella pneumophila</i> serogroup 1
Detection method	Lateral flow immunochromatographic assay
Test volume	100 µL, exact volume disposable pipette provided
Specificity	Tested against a wide range of waterborne bacteria, including <i>Acinetobacter calcoaceticus</i> , <i>Aeromonas hydrophila</i> subsp. <i>Hydrophila</i> , <i>Bacillus subtilis</i> , <i>Burkholderia cepacia</i> , <i>Citrobacter freundii</i> , <i>Citrobacter koseri</i> , <i>Escherichia coli</i> , <i>Enterobacter cloacae</i> , <i>Klebsiella oxytoca</i> , <i>Pseudomonas aeruginosa</i> , <i>Pseudomonas fluorescens</i> , <i>Pseudomonas putida</i> , <i>Pseudomonas stutzeri</i> , <i>Ralstonia pickettii</i> , <i>Raoultella terrigena</i> , <i>Streptococcus pyrogenes</i> , <i>Yersinia ruckeri</i> . No cross reactions observed at concentrations <10 ⁹ CFU/sample. <i>Staphylococcus aureus</i> has been observed to cross react with the test at concentrations >10 ⁸ CFU/sample. <i>Legionella pneumophila</i> serogroups 4 & 7 cross reacts with the test at concentrations >10 ⁹ CFU/sample. The test does not react with any other <i>L. pneumophila</i> serogroup or <i>L. species</i> tested.
Sample parameters	pH 5-10
Sample temp	15-45°C (59-113°F)
Operating temp	15-40°C (59-104°F)
Operator time	~ 1 minute
Test development time	25 minutes
Shelf-life	18 months from manufacture when stored at room temperature (<30°C) in original packaging
Biocides	The product has been tested with a range of common biocides and biodispersants used in <i>Legionella</i> control, at their normal maximum operating concentration. Active ingredients tested include: glutaraldehyde, didecyl-dimethyl-ammonium chloride, isothazoles, dibromonitripropionamide, ionic and non-ionic surfactants. The test gives a false positive if used with polymeric biguanide.

Code	Article	Lower limit of detection	Description
56B006201	<i>Legionella</i> Domestic Kit	100 CFU/L (0.1 CFU/mL) (10 CFU/100 ml)	Contains the disposable items required to perform 5 tests – including filters and disposable pipettes. These tests are designed to be used in conjunction with the Field Filtration Kit.
56B006301	Filtration Kit	-	Vacuum pump and apparatus to filter 1L of water.