

**ENVIROLOGIX Inc. - Environmental & Food Monitoring Kits - Natural Toxins**

**MICROCYSTIN - QuantiPlate™ Plate Kit (ELISA Kit)**

**● Intended use**

The Envirologix QuantiPlate™ Microcystin Kit Is Designed For The Quantitative Laboratory Detection Of Microcystin Toxin In Surface Water Samples, With An Assay Quantitation Range From 0.16 To 2.5 Parts Per Billion (Ppb). (See The Appendix At The End Of The Package Insert Describing An Alternate Assay Protocol With A Quantitation Range From 0.05 To 0.83 Ppb.)

**● General**

The EnviroLogix QuantiPlate Microcystin Kit is a competitive Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, Microcystin toxin in the sample competes with enzyme (horseradish peroxidase) labeled Microcystin for a limited number of antibody binding sites on the inside surface of the test wells. After a simple wash step, the outcome of the competition is visualized with a color development step. As with all competitive immunoassays, sample concentration is inversely proportional to color development.

*Darker color = Lower concentration*

*Lighter color = Higher concentration*

The EnviroLogix Microcystin Plate Kit can be used in the following testing applications:

- Early Warning Of Bloom Formation And Water Quality Degradation.
- Ground And Surface Water Screening And Monitoring.
- Ensure Guidance Levels Are Not Exceeded In Drinking Water, Surface Water, And Algae Based Food Supplements.
- Quality Control Testing Of Raw Material And Finished Algae Based Products.

| Materials Provided:   | Materials Required But Not Provided:   |
|---|--|
| <ul style="list-style-type: none"> <li>- 12 x Strips of 8 Antibody-Coated Wells each, in plate frame.</li> <li>- 1 x Vial of Negative Control.</li> <li>- 1 x Vial of 0.16 ppb Microcystin LR Calibrator.</li> <li>- 1 x Vial of 0.6 ppb Microcystin LR Calibrator.</li> <li>- 1 x Vial of 2.5 ppb Microcystin LR Calibrator.</li> <li>- 1 x Bottle of Assay Diluent.</li> <li>- 1 x Bottle of Microcystin-Enzyme Conjugate.</li> <li>- 1 x Packet of Wash Solution Salts.</li> <li>- 1 x Bottle of Substrate.</li> <li>- 1 x Bottle of Stop Solution.</li> </ul> | <ul style="list-style-type: none"> <li>- Disposable Tip Adjustable Air-Displacement pipetter which will measure 20 µL, 100 µL and 125 µL.</li> <li>- Marking Pen (indelible).</li> <li>- Tape or Parafilm.</li> <li>- Timer (30 minutes).</li> <li>- Distilled Water for preparing Wash Solution.</li> <li>- Glassware for storing Wash Solution.</li> <li>- Wash Bottle for washing strips with Wash Solution.</li> <li>- Microtiter Plate Reader or strip reader.</li> <li>- Microtiter Plate Washer (optional).</li> <li>- Twelve-Channel Pipette that will measure 20 µL, 100 µL and 125 µL (optional).</li> <li>- Racked Dilution Tubes for loading samples into the plate with a 12-channel pipette (optional).</li> <li>- Orbital Plate Shaker (optional).</li> </ul> |

**Kit Specifications:**

|                       |  |
|-----------------------|--|
| Plate Format:         | - 96 Well.                                 |
| Time Requirement:     | - 2 h 10 min.                              |
| Detection Limit:      | - 0.147 ppb.                               |
| Quantification Limit: | - 0.175 ppb.                               |
| Cross Reaction:       | - Microcystin LR (0.15 ppb).               |
| (Limit Of Detection)  | - Microcystin LA (0.24 ppb).               |
|                       | - Microcystin RR (0.27 ppb).               |
|                       | - Microcystin YR (0.44 ppb).               |
|                       | - Nodularin (0.21 ppb).                    |
| Measurement:          | - Microtiter Plate Reader or strip reader. |
| Product ID #:         | - EP022.                                   |

