

# Microcystins in Brackish Water or Seawater Sample Preparation for Microcystins-DM ELISA

## 1. Intended Use

For the preparation of brackish water or seawater samples for analysis in the Abraxis Microcystins-DM ELISA.

## 2. Sensitivity

0.165 ppb in brackish water or seawater

## 3. Materials and Reagents Required

4 mL glass vials with Teflon-lined caps

Micropipettes with disposable plastic tips

Vortex mixer

Timer

Microcystins-DM Seawater Sample Treatment Solution (PN 529913)

Abraxis Microcystins-DM ELISA Kit

## 4. Notes and Precautions

This procedure is intended for use with brackish water or seawater samples. Other matrices should be thoroughly validated before use with this procedure.

## 5. Procedure

- 5.1 Add 1 mL of brackish water or seawater sample to a clean, appropriately labeled 4 mL glass vial.
- 5.2 Add 100  $\mu$ L of Microcystins-DM Seawater Sample Treatment Solution. Vortex for 1 minute.
- 5.3 Incubate at room temperature for 30 minutes. The sample can then be analyzed using the Abraxis Microcystins-DM ELISA Kit.

## 6. Evaluation of Results

The Microcystins concentration in samples is determined by multiplying the ELISA results by a factor of 1.1. Samples showing a concentration lower than standard 1 (0.15 ppb) should be reported as containing < 0.165 ppb of Microcystins. Samples showing a higher concentration than standard 5 (5.0 ppb) can be reported as containing > 5.5 ppb of Microcystins or diluted further and re-analyzed to obtain an accurate quantitative result.

## 7. Performance Data

### *Recovery*

Samples containing various concentrations of seawater were spiked with Microcystin-LR, prepared as described above, and then analyzed using the Microcystins-DM Assay. Average recovery was 110.0%.

## 8. Assistance

For ordering or technical assistance contact:

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