

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

#### 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

ABRAXIS® Microcystins-DM Seawater Sample Treatment Solution (PN 529913) ABRAXIS® Microcystins-DM ELISA Kit (PN 522015)

#### 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 µL of ABRAXIS® 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. For ordering or technical assistance contact:

Gold Standard Diagnostics

Phone: (215) 357 3911

Fax: (215) 357 5232

Horsham, PA 19044

Ordering: info.abraxis@us.goldstandarddiagnostics.com

WEB: www.abraxiskits.com

Technical Support: support.abraxis@us.goldstandarddiagnostics.com

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