

Microcystins Sample Filtration

1. Intended Use

For the filtration of lysed water samples prior to ELISA testing with the ABRAXIS[®] Microcystins-ADDA and ABRAXIS[®] Microcystins ADDA-SAES, ABRAXIS[®] Microcystins-DM, and ABRAXIS[®] Microcystins ELISA Tube Kits.

2. Safety Instructions

Discard samples according to local, state, and federal regulations.

3. Limitations, Possible Interferences

- Samples containing exceptionally high concentrations of algal bloom or very thick algal scums may require dilution (1:1 in deionized or distilled water) prior to filtration, as overly viscous samples may clog the filter. Diluted samples analyzed with the ABRAXIS[®] Microcystins-ADDA or ABRAXIS[®] Microcystins ADDA-SAES, ABRAXIS[®] Microcystins-DM, or ABRAXIS[®] Microcystins ELISA Tube kit must then have their ELISA results multiplied by 2 to account for this dilution.
- Glass fiber filters may be manufactured using a process that may cause interference that would result in inaccurate (falsely high) results. To avoid this potential bias in sample results, a total volume of at least 10 mL should be passed through the filter, with the first 5 mL of filtered sample being discarded and the second 5 mL collected for testing.

4. Warnings and Precautions

Avoid cross-contamination of water samples by using a new disposable syringe, filter, and glass vial for each sample.

Samples should be thoroughly shaken immediately prior to filtration to ensure uniform sample composition.

5. Sample Collection and Handling

Collect water samples in glass containers and test within 24 hours. If samples must be held for longer periods (up to 5 days), samples should be refrigerated. For longer storage periods, samples should be kept frozen.

6. Materials Required

Disposable syringes

Disposable syringe filters

Glass vials with Teflon-lined caps

Waste container

7. Procedure

- 7.1 Shake the lysed sample thoroughly. Using a new disposable syringe, draw the sample into the syringe to the 10 mL graduation line.
- 7.2 Place a new syringe filter on the tip of the syringe.
- 7.3 Depress the plunger until reaching the 5 mL graduation line, discarding the initial filtrate into the waste container.
- 7.4 Fully depress the plunger, filtering the remaining sample into a clean, appropriately labeled glass vial.
- 7.5 The sample is now ready for analysis using the ABRAXIS[®] Microcystins-ADDA (PN 520011), ABRAXIS[®] Microcystins ADDA-SAES (PN 520011-SAES), ABRAXIS[®] Microcystins-DM (PN 522015), ABRAXIS[®] Microcystins ELISA Tube (PN 520012) kits.

8. For ordering or technical assistance contact

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