

Caffeine in Brackish Water or Seawater Sample Preparation

1. Intended Use

For the preparation of brackish water or seawater samples for analysis in the ABRAXIS[®] Caffeine ELISA.

2. Sensitivity

1.75 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
ABRAXIS[®] Caffeine ELISA Kit (PN 515575)

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 900 μ L of Caffeine Sample Diluent (provided in the Caffeine ELISA Kit) to a clean, appropriately labeled 4 mL glass vial.
- 5.2 Add 100 μ L of brackish water or seawater sample to the vial.
- 5.3 Vortex thoroughly.
- 5.4 Analyze diluted sample using the ABRAXIS[®] Caffeine ELISA Kit.

6. Evaluation of Results

The Caffeine concentration in samples is determined by multiplying the ELISA results by a factor of 10. Samples showing a concentration lower than standard 1 (0.175 ppb) should be reported as containing < 1.75 ppb of Caffeine. Samples showing a higher concentration than standard 5 (5.0 ppb) should be reported as containing > 50 ppb of Caffeine or diluted further and re-analyzed to obtain an accurate quantitative result.

7. Performance Data

Recovery

Seawater samples were spiked with various amounts of Caffeine, prepared as described above, and then analyzed using the ABRAXIS[®] Caffeine ELISA Kit. Average recovery was 103%.

8. For ordering or technical assistance contact:

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