Saxitoxin in Lobster Tomalley
Sample Preparation for Test Strips

1. Intended Use
For the detection of Saxitoxin in lobster tomalley.

2. Materials and Reagents Required
Strainer (#10 sieve)
Plastic tablecloth (for protecting work area)
Deionized or distilled water (for rinsing samples prior to homogenization)
Immersion blender or equivalent electronic blender
600 mL plastic beaker
Permanent marker
10% Bleach solution (for cleaning equipment between samples)
ABRAXIS® Saxitoxin (PSP) Shellfish Extraction Accessory Kit (PN 520047)
ABRAXIS® Saxitoxin (PSP) Strip Test for Water Kit (PN 520044 [5T]; 520045 [20T])

3. Notes and Precautions
This procedure is intended for use with lobster tomalley. Other matrices should be thoroughly validated before use with this procedure.

4. Sample Collection, Extraction and Preparation
4.1 Remove tomalley from the lobster
4.2 Transfer the tissue to a #10 sieve to drain the sample. Allow to drain for 5 minutes. Remove any remaining shell pieces and fragments and discard along with the drainage.
4.3 Transfer the sample to a 600 mL beaker and puree with the immersion blender or equivalent electronic blender for 1 minute or until the entire sample is homogenized.
4.4 Transfer the homogenized sample to a 50 mL conical tube until the sample fills up to the 10 mL gradation mark. Transfer the remaining sample to an appropriately labeled plastic container, and cap tightly. This homogenized sample can then be diluted and tested immediately, stored refrigerated (2-8°C) for up to 2 days, or frozen (-20°C) for long-term storage.
4.5 When ready to extract samples, use the gradations on the 50 mL conical tube containing the sample to fill the conical tube to the 20 mL gradation with ABRAXIS® Saxitoxin Extraction Solution (10 mL of Saxitoxin Extraction Solution in addition to the 10 mL sample).
4.6 Cap and shake well.
4.7 Filter the diluted sample extract through the filter provided into a clean, appropriately labeled plastic container or measuring cup.
4.8 When samples are to be analyzed
  4.8.1 Using a new graduated disposable pipette for each sample, draw the filtered extract to the 1 mL line (graduation mark slightly below bulb) and add 1 mL of filtered extract into Sample Dilution Bottle “A”. Cap, label bottle with sample number/ID and shake well.
  4.8.2 Using a new graduated disposable pipette, draw the diluted extract from Sample Dilution Bottle “A” to the 1 mL line (graduation mark slightly below bulb) and add to Sample Dilution Bottle “B”. Cap, label bottle with sample number/ID and shake well.
  4.8.3 Using a new graduated disposable pipette, draw the diluted extract from Sample Dilution Bottle “B” to the 1 mL line (graduation mark slightly below bulb) and add to Sample Dilution Bottle “C”. Cap, label bottle with sample number/ID and shake well.

4.8.4 Proceed immediately with Section E. Sample Preservation Procedure in the PSP (Saxitoxin) Strip Test insert (PN 520044/520045). Following analysis using the procedure described in the PSP (Saxitoxin) Strip Test insert, results for shellfish tissue should be evaluated as described below.

5. Evaluation of Results

For the ABRAXIS® Saxitoxin (PSP) Strip Test kit, lobster tomalley sample concentration is determined by comparison of the intensity of the test line to the intensity of the control line on the same test strip. Although control line intensity may vary, a visible control line must be present for results to be considered valid. Test strips with a test line, which is darker than, or of equal intensity to the control line indicates a result, which is below the limit of detection of the test. Test strips with a test line which is lighter than the control line indicates a result which is between 40 µg/100 g and 600 µg/100 g. Test strips with a very faint test line or no test line visible indicates a result which is > 600 µg/100 g. Results should be determined within 5-10 minutes after completion of the strip test procedure. Determination made using strips, which have dried for more or less than the required time, may be inaccurate, as line intensities may vary with drying time.

Control Line	***Test Line***	***Interpretation***
No control line present	No test line present	Invalid result
Control line present	Very faint or no test line present	>600 µg/100 g
Control line present	Moderate intensity test line present	Between 40 and 600 µg/100 g

6. For ordering or technical assistance contact

Gold Standard Diagnostics
124 Railroad Drive
Warminster, PA 18974
WEB: www.abraxiskits.com
Phone: (215) 357 3911
Fax: (215) 357 5232
Ordering: info.abraxis@us.goldstandarddiagnostics.com
Technical Support: support.abraxis@us.goldstandarddiagnostics.com

Date this Technical Bulletin is effective: 11MAR2022 Version: 01