

## Natural Toxins

### Veratox®

#### For Fumonisin 5/10



#### Intended Use

Veratox for Fumonisin 5/10 is used for the quantitative analysis of fumonisin in such commodities as corn, cornmeal and rice.

#### The Test

The test is a competitive direct ELISA that provides exact concentrations in parts per million (ppm). Free fumonisin in the sample and controls competes with enzyme-labeled toxin (conjugate) for the antibody binding sites. After a wash step, substrate reacts with the bound enzyme conjugate to produce blue color. A microwell reader is used to yield optical densities. Control optical densities form a standard curve and sample optical densities are plotted against the curve to calculate the exact concentration of fumonisin.

#### The Procedure

Samples must be extracted and diluted prior to testing.

1. Add 100  $\mu$ L conjugate to each mixing well.
2. Add 100  $\mu$ L controls and diluted samples to their respective wells.
3. Mix. Transfer 100  $\mu$ L to antibody wells. Incubate for 5 minutes.
4. Dump liquid from antibody wells and wash wells thoroughly with deionized water.
5. Tap out water on paper towel.
6. Transfer 100  $\mu$ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 minutes.
7. Transfer 100  $\mu$ L Red Stop from reagent boat to antibody wells.
8. Read results using a microwell reader with a 650 nm filter.

*See package insert for complete instructions*

#### Product Specifications

#### Results



- Lower limit of detection: 0.2 ppm  
 Range of quantitation: 0.5 ppm - 6 ppm  
 Controls provided: 0, 0.5, 1, 3 and 6 ppm  
 Testing time: 15 minutes  
 Antibody cross-reactivity: Total fumonisins (B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>)  
 Tests per kit: Up to 38

#### Materials Recommended But Not Provided

Available from Neogen\*

1. 70% ACS Grade methanol
2. Graduated cylinder
3. Sample collection cup or container with 125 mL capacity
4. Neogen filter syringe, Whatman #1 filter paper, or equivalent
5. Sample collection tubes
6. Agri-Grind grinder, or equivalent
7. Scale capable of weighing 5-25 grams
8. Microwell reader with a 650 nm filter
9. 100  $\mu$ L pipettor
10. 12-channel pipettor
11. Tips for 100  $\mu$ L and 12-channel pipettors
12. Microwell holder
13. Timer
14. Wash bottle
15. 2 reagent boats for 12-channel pipettor

Not available from Neogen

1. Paper towels or equivalent absorbent material
2. Plastic ½ gallon bucket for use as waste receptacle
3. Distilled or deionized water
4. Waterproof marker

#### Ordering Information

Prod.#	Product description
8835	Veratox for Fumonisin 5/10 with dilution
8873	Fumonisin 5/10 Dilution Bottles - 28 samples
8052	Mycotoxin Extraction Kit