

# Veratox®

## For Aflatoxin



### Intended Use

Veratox for Aflatoxin is used for the quantitative analysis of aflatoxin in such commodities as corn, cornmeal, corn gluten meal, corn/soy blend, wheat, rice, milo, soy, whole cottonseed, cottonseed meal, raw peanuts, peanut butter and mixed feeds.

### The Test

The test is a competitive direct ELISA that provides exact concentrations in parts per billion (ppb). Free toxin 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 toxin.

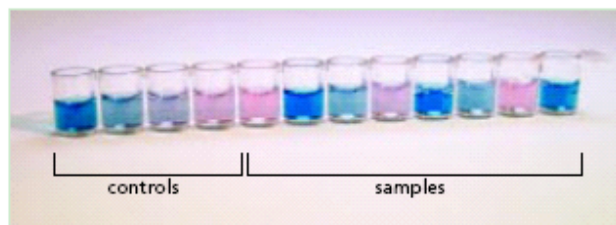
### The Procedure

Samples must be extracted prior to testing.

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

See package insert for complete instructions

### Results



### Product Specifications

- Lower limit of detection: 2 ppb  
Range of quantitation: 5 ppb - 50 ppb  
Controls provided: 0, 5, 15 and 50 ppb  
Testing time: 5 minutes  
Antibody cross-reactivity: Total aflatoxins (B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, G<sub>2</sub>)  
Tests per kit: Up to 40

### 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 use with 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. Deionized or distilled water
4. Waterproof marker

\* See *Equipment and Accessories*, pages 72-74

### Ordering Information

Prod#.	Product description
8030	Veratox for Aflatoxin
8052	Mycotoxin Extraction Kit