

Natural Toxins

Veratox®

For Fumonisin High Sensitivity (HS)



Intended Use

Veratox for Fumonisin High Sensitivity (HS) 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 billion (ppb). 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.

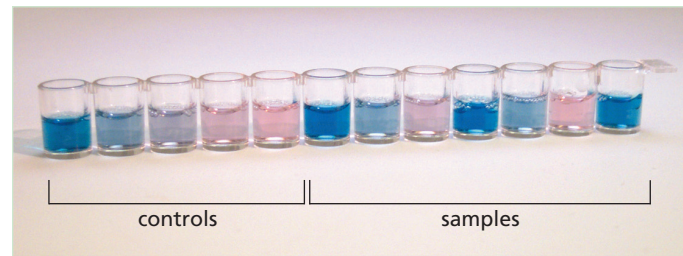
The Procedure

Samples must be extracted and diluted prior to testing.

1. Add 100 μ L conjugate to each mixing well.
2. Add 100 μ L controls and diluted samples to their respective wells.
3. Mix. Transfer 100 μ 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 μ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 minutes.
7. Transfer 100 μ 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

Results



Product Specifications

- Lower limit of detection: 50 ppb
- Range of quantitation: 50-600 ppb
- Controls provided: 0, 50, 100, 300 and 600 ppb
- Testing time: 15 minutes
- Antibody cross-reactivity: Total fumonisins (B₁, B₂, B₃)
- 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 μ L pipettor
10. 12-channel pipettor
11. Tips for 100 μ 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
8832	Veratox for Fumonisin High Sensitivity
8052	Mycotoxin Extraction Kit