

Natural Toxins

Veratox®

For Aflatoxin HS



Intended Use

Veratox for Aflatoxin HS (High Sensitivity) is used for the quantitative analysis of lower levels 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.

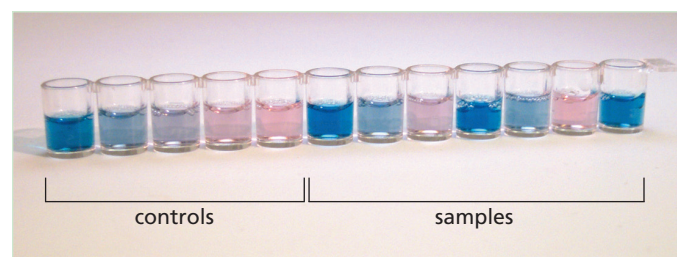
The Procedure

Samples must be extracted prior to testing.

1. Add 100 μ L conjugate to mixing wells.
2. Add 100 μ L controls and samples to mixing wells.
3. Mix. Transfer 100 μ L to the antibody wells. Incubate for 10 minutes.
4. Dump liquid from antibody wells.
5. Wash wells thoroughly with deionized water.
6. Tap out water on paper towel.
7. Transfer 100 μ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 minutes.
8. Transfer 100 μ 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: 0.5 ppb
- Range of quantitation: 1 ppb - 8 ppb
- Controls provided: 0, 1, 2, 4 and 8 ppb
- Testing time: 20 minutes
- Antibody cross-reactivity: Total aflatoxins (B₁, B₂, G₁, G₂)
- 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 cups, 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 pipettor
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

Ordering Information

Prod.#	Product description
8031	Veratox for Aflatoxin HS
8052	Mycotoxin Extraction Kit