

Natural Toxins

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, milled 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.

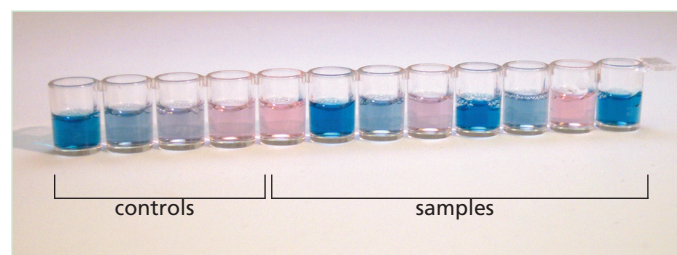
The Procedure

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 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 μ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 3 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: 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 (B₁, B₂, G₁, G₂)
- Tests per kit: Up to 40
- Approvals: USDA/GIPSA 2005-102

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 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
8030	Veratox for Aflatoxin
8052	Mycotoxin Extraction Kit