

Veratox®

For Aflatoxin Single Test (AST)



Intended Use

Veratox for Aflatoxin AST (Aflatoxin Single Test) is used for the quantitative analysis of aflatoxin in such commodities as corn, commmeal, 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). Aflatoxin is extracted from ground sample with a methanol solution by blending and filtering. Extracted toxin in the filtrate is sampled and mixed with enzyme-labeled toxin (conjugate). The mixed solution is transferred to the antibody-coated wells, where free toxin and conjugate compete for binding sites. After a wash step, substrate is added. Color develops in the presence of bound conjugate. After red stopping reagent is added, sample and 20 ppb control absorbance readings are compared with a pre-generated standard curve. Sample results are then calculated.

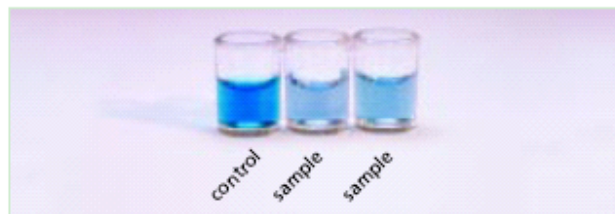
The Procedure

Samples must be extracted prior to testing.

1. Add 100 μ L conjugate to mixing wells.
2. Add 100 μ L 20 ppb control to the first well.
3. Add 100 μ L of the first sample to the second and the third well.
4. Mix. Transfer 100 μ L to antibody wells. Incubate for 5 minutes.
5. Dump liquid from antibody wells.
6. Wash wells thoroughly with deionized water.
7. Tap out water on paper towel.
8. Transfer 100 μ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 5 minutes.
9. Transfer 100 μ L Red Stop from reagent boat to antibody wells.
10. Read results using a microwell reader with a 650 nm filter.

See package insert for complete instructions

Results



Product Specifications

Lower limit of detection:	5 ppb
Range of quantitation:	5 ppb - 320 ppb
Control provided:	20 ppb
Testing time:	10 minutes
Antibody cross-reactivity:	Total aflatoxins (B ₁ , B ₂ , G ₁ , G ₂)
Tests per kit:	16
Approvals:	USDA/GIPSA #94-101

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 syringes, 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

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

Ordering Information

Prod#	Product description
8041	Veratox for Aflatoxin AST
8052	Mycotoxin Extraction Kit