

Natural Toxins

Agri-Screen®

For Fumonisin



Intended Use

Agri-Screen for Fumonisin is used for the screening analysis of fumonisin in such commodities as corn, cornmeal and rice.

The Test

The test is a competitive direct ELISA that provides a visible screening result against a known control toxin concentration. Free toxin in the sample and control 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. If the sample has less blue color than the control, it contains more toxin than the control.

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 control and sample to mixing wells. Mix.
3. Transfer 100 μ L to antibody wells. Incubate for 5 minutes.
4. Dump liquid from antibody wells.
5. Wash wells thoroughly with deionized water.
6. Tap out water on paper towel.
7. Add 100 μ L substrate to each well. Incubate 10 minutes.
8. Add 100 μ L Red Stop to each well.
9. Visually read results.

See package insert for complete instructions

Results



Product Specifications

| | |
|----------------------------|--|
| Control provided: | 5 ppm |
| Testing time: | 15 minutes |
| Antibody cross-reactivity: | Total fumonisins (B ₁ , B ₂ , B ₃) |
| Test per kit: | Up to 20 |

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. 100 μ L pipettor
9. Tips for 100 μ L pipettor
10. Microwell holder
11. Timer
12. Wash bottle

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

* See *Equipment and Accessories*, pages 104–108

Ordering Information

| Prod.# | Product description |
|--------|---|
| 8810 | Agri-Screen for Fumonisin with dilution |
| 8052 | Mycotoxin Extraction Kit |