

## Natural Toxins

### Veratox®

#### For Zearalenone



#### Intended Use

Veratox for Zearalenone is used for the quantitative analysis of zearalenone in such commodities as corn, wheat and barley.

#### 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.

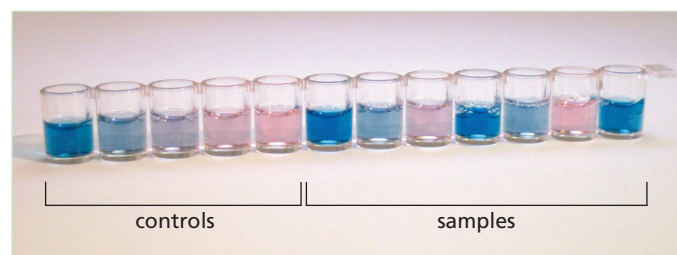
#### The Procedure

Samples must be extracted and diluted prior to testing.

1. Add 100  $\mu$ L conjugate to each mixing well.
2. Add 100  $\mu$ L controls and samples to mixing wells.
3. Mix. Transfer 100  $\mu$ 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. Transfer 100  $\mu$ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 5 minutes.
8. Transfer 100  $\mu$ 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: 5 ppb
- Range of quantitation: 25 ppb - 500 ppb
- Controls provided: 0, 25, 75, 150, and 500 ppb
- Testing time: 10 minutes
- Antibody cross-reactivity: Zearalenone 100%,  $\alpha$ -zearalenol 73%,  $\beta$ -zearalenol 23%, Zearalanone 63%  
 $\alpha$ -zearalanol 36%,  $\beta$ -zearalanol 15%
- 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. Sample tubes for dilution
9. Microwell reader with a 650 nm filter
10. 100  $\mu$ L pipettor
11. 12-channel pipettor
12. Tips for 100  $\mu$ L and 12-channel pipettor
13. Microwell holder
14. Timer
15. Wash bottle
16. 2 reagent boats for use with 12-channel pipettor

Not Available from Neogen

1. Paper towels or equivalent absorbent material
2. Plastic  $\frac{1}{2}$  gallon bucket for use as waste receptacle
3. Deionized or distilled water
4. Waterproof marker

#### Ordering Information

Prod.#	Product description
8110	Veratox for Zearalenone
8052	Mycotoxin Extraction Kit