

## Natural Toxins

### Veratox®

#### For DON High Sensitivity (HS)



#### Intended Use

Veratox for DON High Sensitivity (HS) is used for the quantitative analysis of lower levels of deoxynivalenol (DON) in wheat, barley, and processed cereal.

#### 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.

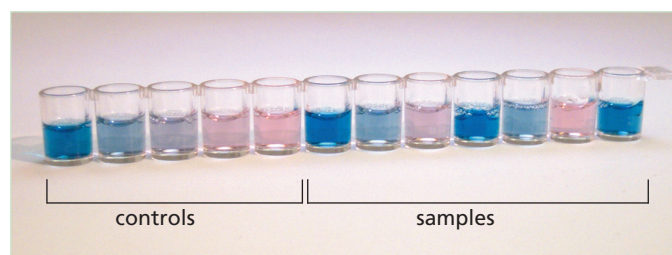
#### The Procedure

Samples must be extracted prior to testing.

1. Add 100  $\mu$ L conjugate to mixing wells.
2. Add 100  $\mu$ L controls and samples to mixing wells.
3. Mix. Transfer 100  $\mu$ 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  $\mu$ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 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: 25 ppb
- Range of quantitation: 25-250 ppb
- Controls provided: 0, 25, 50, 100 and 250 ppb
- Testing time: 20 minutes
- Antibody cross-reactivity: DON 100%. Also cross-reactive with 3-acetyl DON but does not bind to other trichothecenes.
- Tests per kit: Up to 38

#### Materials Recommended But Not Provided

Available from Neogen\*

1. Graduated cylinder
2. Container with 125 mL capacity
3. Neogen filter syringe, Whatman #1 filter paper, or equivalent
4. Sample collection tubes
5. Agri-Grind grinder, or equivalent
6. Scale capable of weighing 5-50 grams
7. Microwell reader with a 650 nm filter
8. 12-channel pipettor
9. 100  $\mu$ L pipettor
10. Tips for 12-channel and 100  $\mu$ L pipettors
11. Microwell holder
12. Timer
13. Wash bottle
14. 2 reagent boats for use with 12-channel pipettor

Not Available from Neogen

1. Deionized or distilled water
2. Paper towels, or equivalent absorbent material
3. Plastic bucket for use as waste receptacle
4. Waterproof marker

#### Ordering Information

| Prod.# | Product description      |
|--------|--------------------------|
| 8332   | Veratox for DON HS       |
| 8052   | Mycotoxin Extraction Kit |