

Natural Toxins

Veratox®

For DON 5/5



Intended Use

Veratox for DON 5/5 is used for the quantitative analysis of DON in grain and grain products, such as wheat, wheat flour, wheat midds, wheat bran, corn, cornmeal, corn screenings, barley, malted barley and oats.

The Test

The test is a competitive direct ELISA that provides exact concentrations in parts per million (ppm). Free DON in the samples and controls competes with enzyme-labeled DON (conjugate) for the antibody binding sites. After a wash step, substrate reacts with the bound conjugate to produce blue color. A microwell reader is used to yield optical densities. Control optical densities form the standard curve, and sample optical densities are plotted against the curve to calculate the exact concentration of DON.

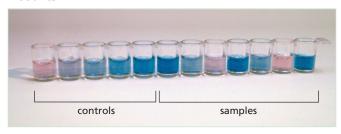
The Procedure

Samples must be extracted prior to testing.

- 1. Add 100 μL conjugate to each mixing well.
- 2. Add 100 μL controls and samples to mixing wells.
- 3. Mix. Transfer 100 μL 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.
- Transfer 100 µL substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 5 minutes.
- 8. Transfer 100 µL 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: 0.1 ppm Range of quantitation: 0.25–2ppm

Controls provided: 0, 0.25, 0.5, 1, 2ppm

Testing time: 10 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
Approvals: USDA/GIPSA

Materials Recommended But Not Provided

Available from Neogen*

- 1. Graduated cylinder
- 2. Sample collection cup, or container with 250 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 10-50 grams
- 7. Microwell reader with a 650 nm filter
- 8. 100 μL pipettor
- 9. 12-channel pipettor
- 10. Tips for 100 μL and 12-channel pipettors
- 11. Microwell holder
- 12. Timer
- 13. Wash bottle
- 14. 2 reagent boats for 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. Distilled or deionized water
- 4. Waterproof marker

Ordering Information

Prod.# Product description
8331NE Veratox for DON 5/5
8052 Mycotoxin Extraction Kit