

Food Allergens

Veratox®

For Mustard Allergen



Intended Use

Veratox for Mustard Allergen is used for the quantitative analysis of mustard proteins in food products such as spices, sauces, dressings, meats and clean-in-place rinses.

The Test

The Veratox Mustard Allergen Test is a Sandwich Enzyme-Linked Immunosorbent Assay (S-ELISA). Mustard protein residue is extracted from samples with a Tris-EDTA solution by shaking in a heated water bath, followed by centrifugation or filtration. Extracted mustard protein is sampled and added to antibody-coated wells (capture antibody) where it binds to the antibody during an incubation. Any unbound mustard protein is washed away and a second antibody (detector antibody), which is enzyme labeled, is added. The detector antibody binds to the already bound mustard protein. After a second wash, substrate is added. Color develops as a result of the presence of bound detector antibody. Red Stop reagent is added and the color of the resulting solution is observed. The test is read in a microwell reader to yield optical densities. The optical densities of the controls form a standard curve, and the sample optical densities are plotted against the curve to calculate the exact concentration of mustard, expressed as ppm mustard.

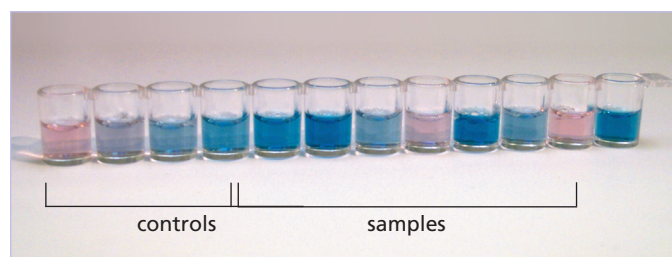
The Procedure

Samples must be extracted prior to testing.

1. Add 150 μ L controls and samples to transfer wells.
2. Transfer 100 μ L to the antibody wells. Incubate for 10 minutes.
3. Dump liquid from antibody wells.
4. Wash wells thoroughly with wash buffer. Tap out liquid on paper towel.
5. Transfer 100 μ L conjugate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 minutes.
6. Repeat steps 3-4 by dumping out the liquid, thoroughly washing the wells, and tapping dry.
7. Transfer 100 μ L substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 minutes.
8. Transfer 100 μ L Red Stop from reagent boat to antibody wells.
9. Read results in a microwell reader.

See package insert for complete instructions

Results



Product Specifications

Range of quantitation:	2.5 ppm–25 ppm
Controls provided:	0, 2.5, 5, 10 and 25 ppm mustard
Testing time:	30 minutes
Tests per kit:	Up to 38

Materials Recommended But Not Provided

Available from Neogen*

1. Allergen Extraction Kit - 250 mL bottles
2. Whatman #4 filters or equivalent
3. Filter funnel, 65 mm
4. Graduated cylinder capable of measuring 125 mL
5. Scale capable of weighing 5 \pm 0.1 g
6. Microwell reader with a 650 nm filter
7. Pipettor, 50-200 μ L adjustable
8. Pipettor, 12-channel
9. Tips for adjustable and 12-channel pipettors
10. Timer
11. Microwell holder
12. Wash bottle
13. 3 reagent boats for use with 12-channel pipettor
14. Bottle, 1 L to prepare washing solution
15. Bottle, 1 L heat safe to prepare extract solution

Not available from Neogen

1. Shaker water bath capable of maintaining 60 \pm 1°C with clamps to hold 250 mL extraction bottles
2. Centrifuge (optional)
3. Paper towels or equivalent absorbent material
4. Distilled or deionized water
5. Waterproof marker

Ordering Information

Prod#.	Product description
8400	Veratox for Mustard Allergen
8429	Allergen Extraction Kit - 20 samples