

## Food Allergens

### Veratox®

#### For Hazelnut Allergen



#### Intended Use

Veratox for Hazelnut Allergen is used for the quantitative or qualitative analysis of hazelnut residues in food products such as cookies, crackers, chocolate bars, ice cream and cereals.

#### The Test

The test is a sandwich ELISA that provides exact concentrations in parts per million (ppm). Any present hazelnut residue is extracted from samples with a buffered salt solution (PBS) by shaking in a heated water bath, followed by centrifugation or filtration. Extracted hazelnut residue is sampled and added to antibody-coated wells (capture antibody). Any unbound residue is washed away and a second, enzyme-labeled antibody (detector antibody) is added. The detector antibody binds to the already bound hazelnut residue. After a second wash, the 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. 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 hazelnut residue.

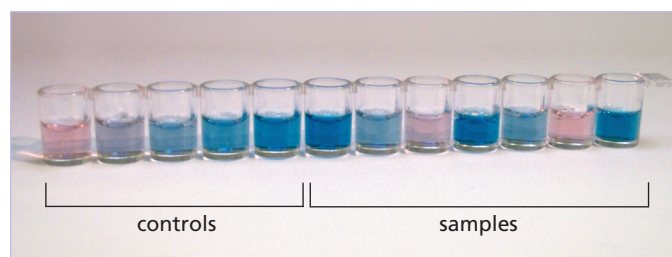
#### The Procedure

Samples must be extracted prior to testing.

1. Add 150  $\mu$ L controls and samples to transfer wells.
2. Transfer 100  $\mu$ 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  $\mu$ 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  $\mu$ 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 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 hazelnut
Testing time:	30 minutes
Tests per kit:	Up to 38

#### Materials Recommended But Not Provided

Available from Neogen\*

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

Not available from Neogen

1. Shaker water bath capable of maintaining  $60^{\circ}\text{C} \pm 1^{\circ}$  with clamps to hold 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
8420	Veratox for Hazelnut Allergen
8429	Allergen Extraction Kit - 20 samples
84325	Allergen Environmental Swabbing Kit - 100 samples