Food Allergens

NOJCK GROUP OF COMPANIES

Veratox®

For Peanut Allergen



Intended Use

Veratox for Peanut Allergen is used for the quantitative analysis of peanut 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 peanut residue is extracted from samples with a buffered salt solution (PBS) by shaking in a heated water bath, followed by centrifugation or filtration. Extracted peanut 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 peanut 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 peanut residue.

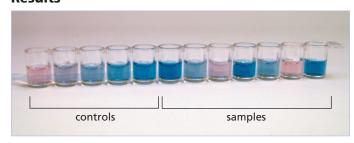
The Procedure

Samples must be extracted prior to testing.

- 1. Add 150 μ L controls and samples to transfer wells.
- 2. Transfer $100 \, \mu L$ to the antibody wells. Incubate for $10 \, \text{minutes}$.
- 3. Dump liquid from antibody wells.
- 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 μL substrate from reagent boat to antibody wells using 12-channel pipettor. Incubate for 10 minutes.
- 8. Transfer 100 µL 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 peanut

Testing time: 30 minutes
Tests per kit: Up to 38

Approvals: AOAC-RI #030403

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 ± 0.1 g
- 5. Microwell reader with a 650 nm filter
- 6. 50-200 μL 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

- Shaker water bath capable of maintaining 60 ± 1°C 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
8430	Veratox for Peanut Allergen
8429	Allergen Extraction Kit - 20 samples