



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Almond Traces by ELISA

Method Number: NQA-00.8328

Scope of Application: Cookies, crackers, chocolate bars, ice cream, beverages, cereals, and environmental swabs

Description: This method is based on the use of a Veratox commercial almond traces detection kit available from Neogen, MI. Almond proteins are extracted from the sample with a buffered salt solution (PBS) and an extraction additive. Almond proteins are detected by a sandwich ELISA, using antibodies specific to almond proteins. The almond proteins present in the sample will bind to the immobilized capture antibodies. An enzyme-linked detector antibody attaches to the bound almond protein residue and the addition of a substrate causes a blue coloration to develop when in the presence of the enzyme-linked detector antibody. Addition of stop solution changes the color from blue to light pink when the almond antigen concentration is low, to purple/blue when there are detectable antigen amounts and remains dark blue if the antigen concentration falls outside the calibration curve. The color intensity is measured using a spectrophotometer.

Sample Weight Required: 50 g

Analytical Platform: Plate reader spectrophotometer

Special Information: Original container needed.

Method reports a quantitative result for testing of food products as described in method scope and reports a qualitative result for environmental swabs as "detected" or "not detected".

Results are expressed as total almond. To express results as protein, multiply the total almond result by 0.21. Almonds contain 21% protein. *

Kit used, Neogen Veratox Almond (700002574), has identified cross-reactivity and/or interference as apple seed, sunflower seed, the pit/stone/seed of common Prunus genus foods such as apricot, cherries (including Mahaleb cherry), nectarines, peaches and plums. Interferences have been identified with the seed/stone/pit but have not been observed with the seedless fruit flesh.



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*Source: USDA National Nutrient Database for Standard Reference,
#12061 – Nuts, almonds, whole, raw.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification/ Theoretical Limit of Detection	Reproducibility
Almond	Almond	mg/kg	2.5	15%
Almond	Almond_Swabs	µg	0.5	N/A