



NQAC

Nestlé Quality Assurance Center  
Dublin

# Technical Datasheet

**Analysis Name:** Egg Traces by ELISA

**Method Number:** NQA-00.8322

**Scope of Application:** Infant formula, tannin-containing products (i.e. coffee), nutritional products, finished food products, rinse water, environmental swabs

**Description:** Samples are homogenized and egg proteins are extracted at 60 °C with buffered salt solution (PBS) that contains an extraction additive. After centrifugation, egg proteins are detected by a sandwich ELISA, using antibodies specific to egg proteins. Sample extract, reference sample extract and standard solutions are added to the antibody-coated wells. The egg proteins present in the sample will bind to the immobilized capture antibodies during incubation. Unbound material is washed away. An enzyme-linked detector antibody is added, which attaches to the bound egg protein residue during incubation. After washing, the substrate is added, developing a blue coloration in the presence of the enzyme-linked detector antibody. Addition of stop solution changes the color from blue to light pink when the egg 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 at 650 nm. Color development is proportional to the amount of egg proteins in the sample.

**Sample Weight Required:** 50 g

**Analytical Platform:** Microplate Reader

**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 whole egg powder. To express results as protein, multiply the whole egg powder result by 0.4805. Whole egg powder contains 48.05% protein. \*

Kit used, Neogen Veratox Egg (700002575), has no identified cross-reactivity or interference.



NQAC

Nestlé Quality Assurance Center  
Dublin

\*Source: USDA National Nutrient Database for Standard Reference  
Release 28, #01133 - Egg, whole, dried.

<b>Analyte Reported</b>	<b>Alias</b>	<b>Unit of Measure</b>	<b>Limit of Quantification/ Theoretical Limit of Detection</b>	<b>Reproducibility</b>
Whole Egg Powder	Egg	mg/kg	2.5	20%
Whole Egg Powder	Egg Swabs	µg	0.5	N/A