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### Ouestions? Call 800/234-5333

#### **CUSTOMER SERVICE**

Neogen Customer Assistance and Technical Service can be reached between 8 a.m. and 6 p.m. Eastern time by calling 800/234-5333 or 517/372-9200 and asking for a Neogen sales representative or Technical Services. Assistance is available on a 24-hour basis by calling 800/234-5333. Training on this product, and all Neogen test kits, is available.

#### **MSDS INFORMATION AVAILABLE**

Material safety data sheets (MSDS) are available for this test kit, and all of Neogen's Food Safety test kits, at www.neogen.com, or by calling Neogen at 800/234-5333 or 517/372-9200.

#### WARRANTY

Neogen Corporation makes no warranty of any kind, either expressed or implied, except that the materials from which its products are made are of standard quality. If any materials are defective, Neogen will provide a replacement product. Buyer assumes all risk and liability resulting from the use of this product. There is no warranty of merchantability of this product, or of the fitness of the product for any purpose. Neogen shall not be liable for any damages, including special or consequential damage, or expense arising directly or indirectly from the use of this product.

## **TESTING KITS AVAILABLE FROM NEOGEN**

#### **Natural Toxins**

• Aflatoxin, DON, Ochratoxin, Zearalenone, T-2/HT-2 Toxins, Fumonisin, Histamine

#### **Foodborne Bacteria**

 E. coli 0157:H7, Salmonella, Listeria, Listeria monocytogenes, Campylobacter, Staphylococcus aureus

#### Sanitation

 ATP, Yeast and Mold, Total Plate Count, Generic E. coli and Total Coliforms, Protein Residues

#### **Food Allergens**

 Almonds, Crustaceans, Eggs, Gliadin, Hazelnut, Lupine, Milk, Mustard, Peanuts, Sesame. Sov. Walnut

## **Genetic Modification**

CP4 (Roundup Ready®)

## **Ruminant By-products**

· Meat and Bone Meal, Feed



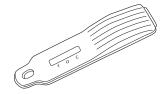
620 Lesher Place, Lansing, MI 48912 800/234-5333 (USA/Canada) or 517/372-9200 • fax: 517/372-2006 e-mail: foodsafety@neogen.com • www.neogen.com

# Read instructions carefully before starting test



### INTRODUCTION AND INTENDED USE

The Reveal® 3-D Egg Test is uniquely designed with 3 lines of detection and can be used virtually anywhere to screen environmental swabs and rinses for the presence of significant levels of egg white protein. The test's 3-D technology ensures greater reliability with screening than ever before.



The Reveal 3-D Egg Test is intended for use ONLY in an industrial food manufacturing/ preparation context or for food labelling enforcement testing. Because of the problems of adequately sampling and extracting eggs, it is NOT SUITABLE for the testing of foods to be consumed in the home or in a restaurant by allergic individuals. The test detects significant (low parts per million; ppm) levels of egg content in rinses and environmental swabs.

### **DETECTION LIMIT**

The test uses highly specific antibodies to detect hen's egg Ovomucoid (Gal d 1), a relatively heat-stable, allergenic protein purified from egg white. The test is highly sensitive and specific designed to screen for low parts per million (ppm) levels of egg white protein content from various surfaces using the provided environmental swabs or from rinses.

Utilizing the environmental swabs supplied, levels of 20  $\mu g/100~cm^2$  of whole egg protein extract can be detected.

When analyzing rinses, egg residues are detectable at a level of 5-10 ppm. The presence of cleaners and sanitizers can affect LOD in rinses.

#### TEST PERFORMANCE

The Reveal 3-D Egg Test has undergone rigorous validation to evaluate the specificity, sensitivity, robustness and intra- and inter-batch variability of the test method on rinses and environmental swabs. A Customer Validation Report is available on request.

#### **SAMPLE COMPATIBILITY**

The Reveal 3-D Egg Test is designed to detect egg white protein on environmental surfaces and in rinses. While every effort has been made to validate as many variables as possible, there are some that are not suitable for testing.

The validation of certain food ingredients may be applicable for the Reveal 3-D test format. However, it is recommended that a more broadly inclusive test method, like Alert or Veratox Egg, be used for food ingredients. Existing commodity validations should be revalidated when suppliers or the manufacturing process has been changed. Please contact your Neogen representative or distributor for additional details.

## **REAGENTS AND MATERIALS**

Each Reveal 3-D Egg Test kit contains the following:

- An instruction leaflet
- 2. A sealed foil pouch, containing 10 purple Reveal 3-D Egg Test devices
- 3. Ten sachets containing Extraction Solution Type 3
- 4. Ten sample tubes and caps
- 5. Ten individually packaged, sterile swabs with break off tips

#### SAMPLING TECHNIQUE

## 1. Clean-in-Place Rinse Water

As only a small sample of material is required for the Reveal 3-D Egg Test, it is important to test a representative portion of liquid.

## 2. Environmental Swabbing

The swabs supplied are intended to be used for the collection of environmental samples from which the presence of egg white protein can be tested. This method can be used to validate the adequacy of cleaning and/or to identify problem areas e.g. unwanted build-up of egg in processing equipment.

## 3. Food Samples

Contact your Neogen representative or distributor for additional details.

## **PRECAUTIONS**

- For environmental testing in an industrial food manufacturing / preparation, or labelling enforcement context only.
- 2. Do not use any part of the test beyond the expiry date.
- 3. Do not open the foil pouch until just before use.
- 4. Always store the kit between 2-8°C (35-46°F); avoid freezing.
- 5. Ensure the foil bag is tightly sealed after removal of a device.

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#### TEST STORAGE / SAMPLE STABILITY

Store the Reveal 3-D Egg Test kit between 2–8°C (35–46°F) and use within the expiry date stated on the outer label. Extracted samples should be used within 3 hours of extraction.

#### LIMITATIONS

A negative test from a surface or rinse cannot exclude the possibility that the food contains egg white protein, since it may be distributed unevenly on the surface or rinse and may be below the detection limit of the test with that specific sample.

The Reveal 3-D Egg Test is a qualitative test and should only be used as a preliminary screen for the presence of egg white protein. The validity of results obtained with the test should preferably be viewed in conjunction with data from a quantitative assay.

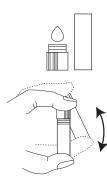
## **RINSE SAMPLING**

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Remove the following and allow to equilibrate at room temperature before use (20-30 minutes out of refrigerator):

- 1 x sample tube
- 1 x "Type 3" buffer sachet
- 1 x Reveal 3-D Egg Test device (in foil pouch)
- 1. Carefully tear/cut off the top of the clear "Type 3" buffer sachet and add the entire contents to the sample tube.
- Add the 0.25 mL (250 µL) sample to the sample tube. If a pipette
  is unavailable, 0.25 mL may be crudely estimated by half-filling
  a white sample tube cap. Note: Test results will be less accurate.
- 3. Secure the white cap and shake for one minute.

### PROCEED TO SAMPLE TESTING

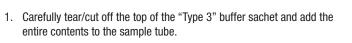


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## **SWAB SAMPLING**

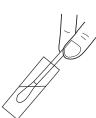
Remove the following and allow to equilibrate at room temperature before use (20–30 minutes out of refrigerator):

- 1 x sample tube
- 1 x "Type 3" buffer sachet
- 1 x Reveal 3-D Egg Test device (in foil pouch)
- 1 x sterile swab



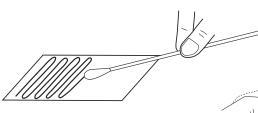


Gather the sample with the swab, using one of the following methods:



For dry surfaces: Remove a sterile swab from the packaging and wet with extraction buffer in the sample tube. Swab a 10 x 10 cm area by using a crosshatch technique revolving the swab on the surface. Repeat this swabbing procedure using movements at right angles to those used in the first swabbing.

**For wet surfaces:** Remove a sterile swab from the packaging and swab a  $10 \times 10$  cm area by using a crosshatch technique revolving the swab on the surface. Repeat this swabbing procedure using movements at right angles to those used in the first swabbing. Do not moisten swab prior to use.

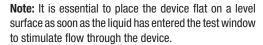


- Return the swab to the Extraction Buffer in the sample tube and carefully break off the viscose end at the pre-scored mark so that it remains in the tube.
- Secure the cap of the sample tube, taking care to ensure that the stem does not prevent the tube from being properly sealed. Shake for one minute.

## PROCEED TO SAMPLE TESTING

# **SAMPLE TESTING**

- Remove the lid and fill it with the liquid from the tube. Any froth should remain in the tube.
- Dip the head of the Reveal 3-D device into the liquid in the lid. Ensure that the cavity is saturated with the liquid.
- 3. Leave the cavity saturated until you see the liquid running in the test window.
- 4. Place device on a flat surface and allow test to develop for 5 minutes.





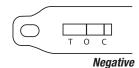


## **READING RESULTS**

Liquid will flow into the test window; read the result FIVE MINUTES after dipping. If distinct lines are NOT visible at positions 0 and C, refer to numbers 3 or 4 below.

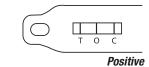
### 1. NEGATIVE Result

No line at position T (test): Level of Egg undetectable. (See LIMITATIONS section).



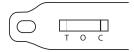
### 2. POSITIVE Result

Any intensity of line at position T (test): level of Egg above detection limit.



## 3. HIGH Results

No line is visible at position 0 (overload) and a line is faintly visible or absent at position T: sample is OVERLOADED with Egg.





#### 4. INVALID Results

If no line appears at position C (control), then the test may be invalid.

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