## Millipore®

Preparation, Separation, Filtration & Monitoring Products



# FLASH® RT Allergen Indicator Total Protein Test

Validation and Application of FLASH® RT Rapid Protein Detection Test

FLASH® RT is a rapid total protein detection test which serves as verification for adequate removal of proteinaceous matter, including allergens, on manufacturing surfaces.

Monitoring adequate removal after cleaning allows for immediate corrective action and reduces the potential risk for cross-contamination of product and food safety incidents, especially during change-overs.

FLASH® RT is a self-contained sampling device containing a pre-moistened tip and all necessary reagents. It is designed for use at room temperature and can detect as little as 20  $\mu g$  of total protein within 10 minutes.



SWAB

Sample a 4 x 4 in (10 x 10 cm) surface



**ACTIVATE** 

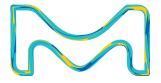
Activate swab, shake for 5 seconds, and Incubate for 10 minutes at Room Temperature



**READ** 

Use chart to interpret result (Pass, Caution or Fail)

To find out more, visit: SigmaAldrich.com



#### **Sensitivity Validation & Performance**

In an in-house study, FLASH® RT was tested against common allergenic proteins from the Food Safety and Inspection Service's (FSIS) "Big 9", as well as against total proteins such as raw ground beef and raw ground turkey. Refer to **Table 1** for study results, which indicate the approximate food amounts where tests began showing a positive (Fail) result. The detection limit of 20  $\mu g$  was determined through the use of a positive control solution.

#### **Results Interpretation**

FLASH® RT is a qualitative visual test interpreted via color change. All tests are initially green to start. The solution will remain green if no protein is detected. The solution will turn an increasing shade of purple with increasing amounts of protein detected.

| 1 | PASS | CAUTION | FAIL | FAIL |
|---|------|---------|------|------|
| 4 |      | / /     | · /  | · /  |

If the solution turns grey, trace amounts of protein are detectable. The surface should be re-cleaned and then re-tested per SSOP's before proceeding.

### Table 1 – FLASH® RT Detection of Total Protein in Foods (µg)

| At Room Temp (μg) |
|-------------------|
| 13                |
| 15                |
| 15                |
| 16                |
| 17                |
| 17                |
| 18                |
| 18                |
| 21                |
| 24                |
| 26                |
| 30                |
|                   |

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