

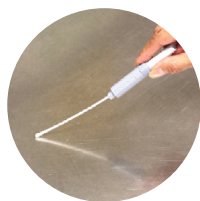
FLASH® RT Allergen Indicator Total Protein Test

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.

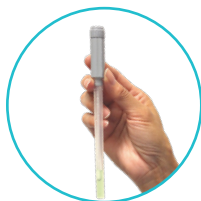
Monitoring adequate removal after cleaning allows for immediate corrective action and reduces the potential risk for cross-contamination of product and food safety incidents, especially during change-overs.

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 µg of total protein within 10 minutes.



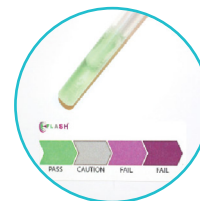
SWAB

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



ACTIVATE

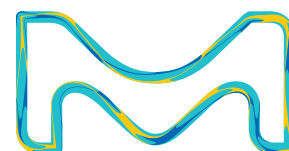
Activate swab, shake for 5 seconds,
and Incubate for 10 minutes
at Room Temperature



READ

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

To find out more, visit:
[SigmaAldrich.com](https://www.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 µg 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.



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)

Food Sample	At Room Temp (µg)
Milk Powder	13
Sesame flour	15
Raw Ground Turkey	15
Soy Flour	16
Peanut Butter	17
Egg Powder	17
Sesame paste (Tahini)	18
Raw Fish (Cod)	18
Roasted Almonds	21
Raw Shrimp	24
Raw Ground Beef	26
Gluten Flour	30

To place an order or receive technical assistance
In the U.S. and Canada, call toll-free 1-800-245-0113
For other countries across Europe and the world, please visit: [SigmaAldrich.com/offices](https://www.sigmaldrich.com/offices)
For Technical Service, please visit: [SigmaAldrich.com/techservice](https://www.sigmaldrich.com/techservice)

Merck KGaA
Frankfurter Strasse 250,
64293 Darmstadt, Germany
[SigmaAldrich.com](https://www.sigmaldrich.com)

