



- Rapid Test Easy for **Egg** (ALFR-01)
- Rapid Test Easy for **Casein** (ALFR-02)
- Rapid Test Easy for **Gluten** (ALFR-03)
- Rapid Test Easy for **Soya** (ALFR-04)
- Rapid Test Easy for **Peanut** (ALFR-05)
- Rapid Test Easy for **Crustacean** (ALFR-06)
- Rapid Test Easy for **Buckwheat** (ALFR-07)

For the Quick Detection of Protein of Allergenic Ingredients in PBS and water.

10 tests

For Research or Laboratory Use Only.
Not for Use in Diagnostic Procedures.
Please read full descriptions in this manual before use.

Warnings

1. Store the kit at 2–30°C (35–86°F), and DO NOT FREEZE.
2. Do not use the kit after the expiration date indicated on the box.

1. Intended Use

Rapid Test Easy is intended for a quick detection of protein from allergenic ingredients on environmental surfaces (swab test) and in rinse water.

NOTE: For testing proteins of allergenic ingredients in food samples, use Rapid Test Pro II, Food Allergen ELISA or Food Allergen ELISA II.

2. Description of the Product

- A qualitative test in lateral flow immunoassay format for visual detection.
- A simple sample preparation procedure.
- Provide test results in 10 minutes.
- Available for the following solutions or solvents: phosphate buffered-saline (PBS) or water.
- Performance characteristics of each kit is shown below.

Table 1. Performance characteristics in Rapid Test Easy for Egg

Limit of detection	Surfaces (swab test): 5 µg Egg protein / 100 cm ² Rinse water: 0.5 µg/mL (0.5 ppm) Egg protein
Specificity	The polyclonal antibody reacts with Ovomucoid

Table 2. Performance characteristics in Rapid Test Easy for Casein

Limit of detection	Surfaces (swab test): 4 µg Casein / 100 cm ² Rinse water: 0.4 µg/mL (0.4 ppm) Casein 0.4 µg/mL Casein correspond to 0.5 µg/mL milk protein
Specificity	The polyclonal antibody reacts with Casein

Table 3. Performance characteristics in Rapid Test Easy for Gluten

Limit of detection	Surfaces (swab test): 4 µg Gluten / 100 cm ² Rinse water: 0.4 µg/mL (0.4 ppm) Gluten
Specificity	The polyclonal antibody reacts with Gliadin*

*Cross reacts to barley and rye

Table 4. Performance characteristics in Rapid Test Easy for Buckwheat

Limit of detection	Surfaces (swab test): 5 µg Buckwheat protein / 100 cm ² Rinse water: 0.5 µg/mL (0.5 ppm) Buckwheat protein
Specificity	The polyclonal antibody reacts with multiple buckwheat proteins

Table 5. Performance characteristics in Rapid Test Easy for Peanut

Limit of detection	Surfaces (swab test): 5 µg Peanut protein / 100 cm ² Rinse water: 0.5 µg/mL (0.5 ppm)
Specificity	The polyclonal antibody reacts with multiple peanut proteins

Table 6. Performance characteristics in Rapid Test Easy for Soya

Limit of detection	Surfaces (swab test): 5 µg Soya protein / 100 cm ² Rinse water: 0.5 µg/mL (0.5 ppm) Soya protein
Specificity	The polyclonal antibody reacts with β-conglycinin

Table 7. Performance characteristics in Rapid Test Easy for Crustacean

Limit of detection	Surfaces (swab test): 5 µg Crustacean protein / 100 cm ² Rinse water: 0.5 µg/mL (0.5 ppm) Crustacean protein
Specificity	The polyclonal antibody reacts with Tropomyosin

3. Kit Components

Component	Amount
Test stick	10 packs (1 stick/pack)
Swab kit (ST-25PBS*)	10 pcs

*ST-25PBS is manufactured by ELMEX LIMITED (URL: www.elmex.co.jp). It contains 10 mL of PBS per bottle.

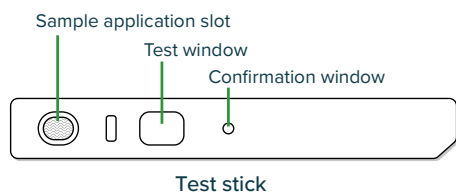
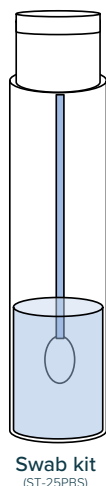


Fig 1. Components



4. Preparation of Test Solution and Test Procedure

PRECAUTIONS

- ✓ Make sure to avoid cross-contaminations via tubes, containers, pipettes, etc., and the use of disposable materials is recommended.
- ✓ Prior to use, place a **Test stick** to 20–30°C (68–86°F) and open the package just before use. A low-temperature test stick may not work properly. The test solution should be tested at room temperature (20–30°C/68–86°F).
- ✓ The presence of detergent, bleach or chlorine in test solution may affect assay results. It is recommended to check the influence before use.
- ✓ Do not touch a sample application slot and a test window of a **Test stick**.

(A) FOR SWAB TEST SAMPLE

1. Open a screw cap of **Swab kit**, and squeeze the swab bud to remove excess moisture.
2. Thoroughly wipe-off the specified surface area of 10 cm × 10 cm with the swab 1st pass zig-zagging in diagonal, and a 2nd pass zig-zagging in diagonal perpendicular to the first pass (Fig.2(a)).
3. Place the swab into the bottle, cap tightly and shake it vigorously. The resulting solution is referred to as **Test Solution** (Fig.2(b)).
4. Place a **Test stick** horizontally. Flip open the lid, invert and add 200 µL (4 drops) of **Test Solution** to the sample application slot by squeezing (Fig.2(c)).



Fig 2. Test steps
(a) Surface swabbing, (b) Sample preparation, (c) Application of test solution to Test Stick.

(B) FOR RINSE WATER SAMPLE

1. Collect rinse water and referred to as **Test Solution**.
2. Place a **Test stick** horizontally and add 200 µL (4 drops) of **Test Solution** to the sample application slot.

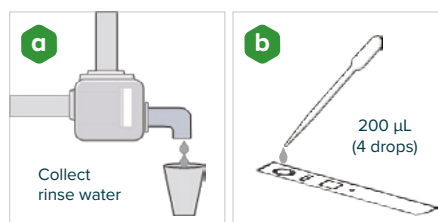


Fig 3. Test steps
(a) Sample preparation, (b) Application of test solution to Test Stick.

5. Results

1. Incubate the test stick for exactly 10 minutes at room temperature in a flat and horizontal surface.
2. Immediately interpret the results in a test window described below.

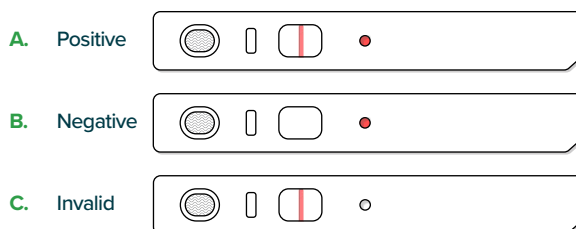


Fig 4. Interpretation of results

- Positive:** A red-purple line in a test window together with red colour in a confirmation window.
- Negative:** No line in a test window together with a red colour in a confirmation window.
- Invalid:** No colour in a confirmation window.

NOTE: If there is no colour in a confirmation window, retest with a new stick. Negative results will occur if **Test Solution** contains target protein less than detectable levels. False-negative results may occur depending on the condition of target protein. If false-negative results occur at high concentrations of target protein (hook effect), retest with a diluted **Test Solution**.

6. Warranty

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