

- Rapid Test Easy for Egg** (Cat.# M2241)
- Rapid Test Easy for Casein** (Cat.# M2242)
- Rapid Test Easy for Gluten** (Cat.# M2243)
- Rapid Test Easy for Buckwheat** (Cat.# M2244)
- Rapid Test Easy for Peanut** (Cat.# M2245)
- Rapid Test Easy for Soya** (Cat.# M2246)
- Rapid Test Easy for Crustacean** (Cat.# M2247)

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*

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Warnings

1. Store the kit at 2–8°C (35–46°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 Table1-4

Table1. 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 Ovomuroid

Table2. 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

Table3. 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

Table4. 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

Table5. 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) Peanut protein
Specificity	The polyclonal antibody reacts with multiple peanut proteins

Table6. 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

Table7. 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.

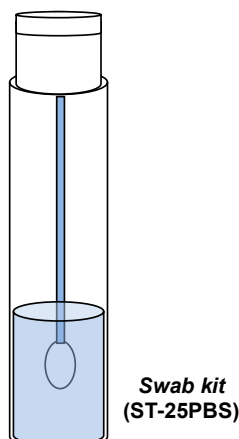
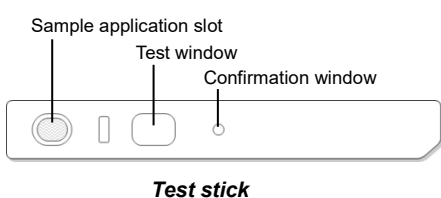


Fig1. Components

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)).

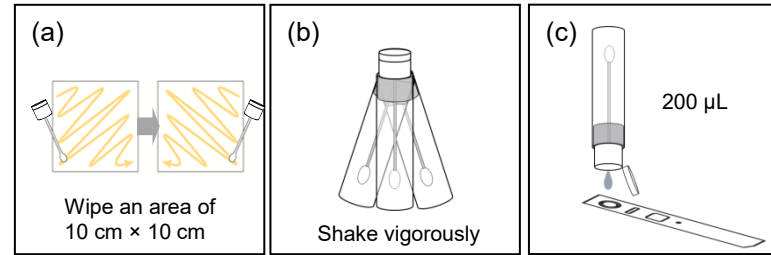


Fig2. Test steps

(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 of **Test Solution** to the sample application slot.

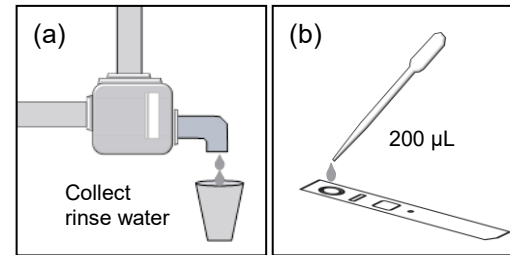


Fig3. Test steps

(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.

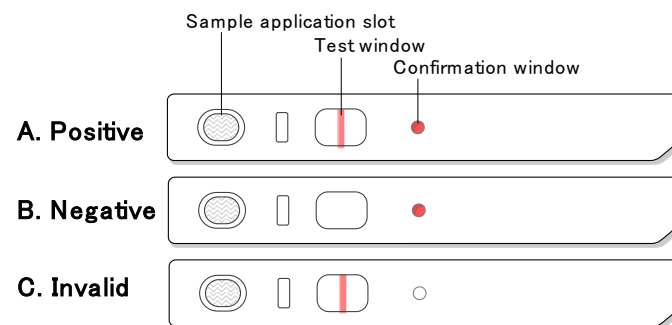


Fig4. Interpretation of results

- A) Positive: A red-purple line in a test window together with red color in a confirmation window.
- B) Negative: No line in a test window together with a red color in a confirmation window.
- C) Invalid: No color in a confirmation window.

NOTE: If there is no color 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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