



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


Manufactured by:

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Warnings

- Store the kit at 2–30°C (35–86°F), and DO NOT FREEZE.
- 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 are shown in Table1-7.

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 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 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 (0.4 µg/mL Gluten correspond to 0.5 µg/mL wheat protein)
Specificity	The 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 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) Peanut protein
Specificity	The 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 antibody reacts with β-conglycinin

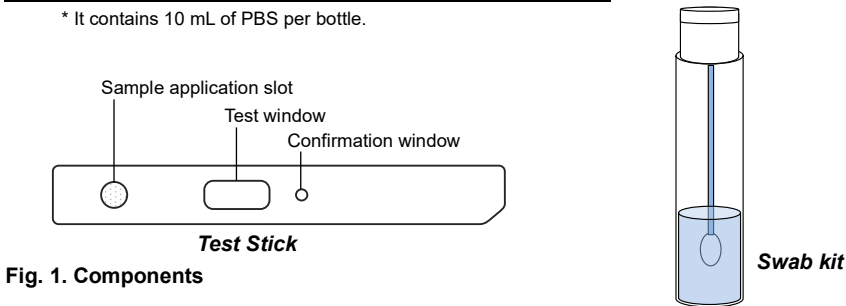
Table 7. Performance characteristics in Rapid Test Easy for Crustacean

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 antibody reacts with Tropomyosin

3. Kit Components

Component	Amount
Test Stick	10 packs (1 stick/pack)
Swab kit *	10 bottles

* It contains 10 mL of PBS per bottle.



The diagram shows two components of the kit. On the left is a 'Test Stick', which is a rectangular strip with three distinct regions labeled: 'Sample application slot' (a circle), 'Test window' (a rectangle), and 'Confirmation window' (a small circle). On the right is a 'Swab kit', which is a cylindrical bottle containing a blue liquid and a long, thin white swab stick with a circular head.

4. Preparation of Test Solution and Test Procedure

Precautions

- ✓ Make sure to avoid cross-contaminations via tubes, containers, pipettes, etc. The use of disposable materials is recommended.
- ✓ Prior to use, adjust the temperature of a **Test Stick** to 20–30°C (68–86°F) and open the package just before use. At low-temperature the **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.
- ✓ Neither touch the sample application slot nor the test window of a **Test Stick**.

(A) For swab test sample

- Open a screw cap of **Swab kit**, and squeeze the swab bud to remove excess moisture.
- Thoroughly wipe across (zigzagging) the specified surface area of 10 cm × 10 cm with the swab 1st pass in diagonal, and a 2nd pass in diagonal perpendicular to the 1st pass (Fig. 2 (a)).
- Place the swab into the bottle, cap tightly and shake it vigorously, not in a vertical direction. The resulting solution is referred to as **Test Solution** (Fig. 2 (b)).
- 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)).

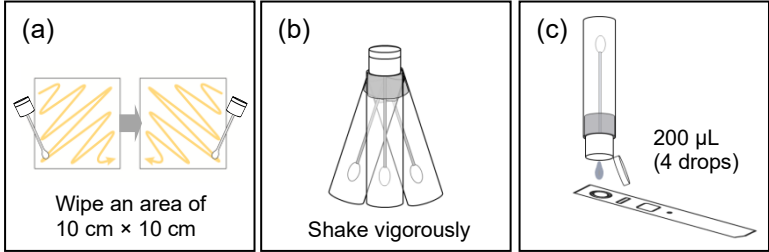


Figure 2 illustrates the three steps for a swab test sample. (a) 'Wipe an area of 10 cm × 10 cm': A diagram shows a rectangular area being wiped with a swab in a zigzag pattern. (b) 'Shake vigorously': A diagram shows a bottle being shaken with a swab inside. (c) 'Application of Test Solution to a Test Stick': A diagram shows a test stick being inverted to add liquid from a bottle into its sample application slot.

Fig. 2. Test steps for swab test sample

(a) Surface swabbing, (b) Sample preparation, (c) Application of **Test Solution** to a **Test Stick**

(B) For rinse water sample

- Collect rinse water and referred to as **Test Solution** (Fig. 3 (a)).
- Place a **Test Stick** horizontally and add 200 µL of **Test Solution** to the sample application slot (Fig. 3 (b)).

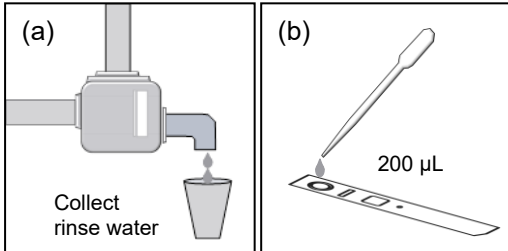


Figure 3 illustrates the two steps for a rinse water sample. (a) 'Collect rinse water': A diagram shows water being collected from a faucet into a cup. (b) 'Application of Test Solution to a Test Stick': A diagram shows a test stick being inverted to add liquid from a cup into its sample application slot.

Fig. 3. Test steps for rinse water sample

(a) Sample preparation, (b) Application of **Test Solution** to a **Test Stick**

5. Results

- Incubate the **Test Stick** for exactly 10 minutes at room temperature in a flat and horizontal surface.
- Immediately interpret the results in a test window described below.

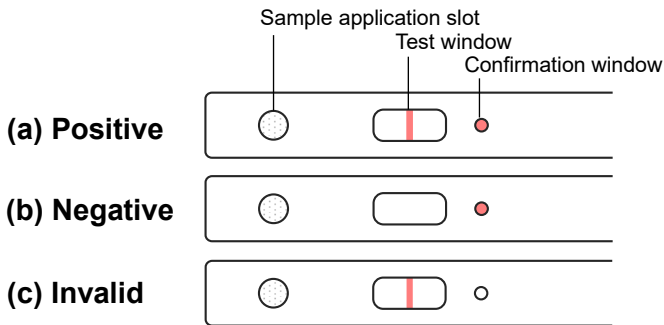


Figure 4 shows three possible test results. (a) 'Positive': A red line is visible in the test window, and a red dot is visible in the confirmation window. (b) 'Negative': No line is visible in the test window, and a red dot is visible in the confirmation window. (c) 'Invalid': No line is visible in the test window, and no dot is visible in the confirmation window.

Fig. 4. Interpretation of results

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

NOTE: If there is no color in a confirmation window, retest with a new **Test Stick**.

False-negative results may occur depending on the condition of the target protein.

If false-negative results occur at high concentrations of the target protein (hook effect), retest with a diluted **Test Solution**.

6. Warranties

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