

Agitest™ Food Allergen Rapid Test Strip Instruction Manual – ALMOND

1. Brief Information

Agitest™ ALMOND Food Allergen Rapid Test is an immunochromatographic test for the detection of almond in food. All reagents required for the test are included in the test kit. Results are interpreted visually. This test is suitable for the detection of unknown ingredient or ambiguous labeling in processed food. Agitest™ ALMOND Food Allergen Rapid Test can be used with Agitest™ Environmental Swab Kit (product no: SR00013220) to validate and verify allergen cleaning regimes in manufacturing and analytical environmental. This test is also suitable for food quality control in food processing plants specifically with inbound goods, processing stages and final product.

*Detection limit:

0.1 ppm almond protein isolation.

*Specificity:

No cross-reaction with seafood, casein, soy, gluten, buckwheat, peanut or egg.

2. Reagents provided

Each test kit contains

2.1 Rapid test strip	20 pouches
2.2 Buffer	65 mL, 1 bottle
2.3 Instruction manual	1 manual

3. Equipment/ materials required (Not provided)

- 3.1 20 – 200 µL and 1,000 µL Pipetmans.
- 3.2 1.5 mL micro centrifugal tubes.
- 3.3 15 mL centrifugal tubes.
- 3.4 Accurate weighing scale.
- 3.5 Grinder or homogenizer.
- 3.6 Timer.
- 3.7 Vortex mixer (if available).
- 3.8 Agitest™ Environmental Swab Kit (Product Number: SR00013220) (20 pieces).
- 3.9 Clean water.

4. Storage instructions

- 4.1 Store the test kit between 2 to 30 degrees Celsius.
- 4.2 Keep away from direct sunlight.
- 4.3 Do not freeze.

5. Warnings and precautions for users

- 5.1 Agitest™ products are for food testing and In Vitro diagnostic use only, not for human use.
- 5.2 Agitest™ products contain non-toxic buffers. To

maintain test accuracy, please keep bottle upright to prevent leakage.

- 5.3 Agitest™ Rapid Tests are designed as a one-use test. Please do not re-use test strip.
- 5.4 Agitest™ Rapid Tests are very sensitive to humidity, which could render the test strips useless. Please keep the test strips away from humidity.
- 5.5 Agitest™ Rapid Tests are designed for screening purposes only. If analysis of ingredients is required, please send the sample to your local laboratory for further analysis.
- 5.6 To ensure test accuracy, please do not use expired test strips.
- 5.7 Airborne almond powder and dirty equipment can lead to almond contamination of the test strip and affect the results. In order to avoid cross-contamination during the operation, please clean equipment and surfaces with 75% ethanol before operating and wear gloves while performing the test to ensure detection accuracy.
- 5.8 All samples require dilution with the Buffer in this kit. Do not test the sample directly with the test strip.
- 5.9 Highly concentrated samples and food samples containing high level of polyphenols (e.g. coffee, tea, wine, chocolate etc.), high fat volume (e.g. peanut butter, oil etc.) or heavy food colouring (e.g. soya sauce) will affect the results of the tests.
- 5.10 If the sample is too viscous or concentrated, it is recommended to increase the dilution factor of the sample with the Buffer in this kit before testing.
- 5.11 Please complete the test procedure in 30 minutes.

6. Test procedure

6.1 Preparation of samples

6.1.1 For liquid food/ drinks:

Measure 50 µL of sample with 450 µL Buffer into a 1.5 mL centrifugal tube and mix well (the dilution factor here is 1/10).

6.1.2 For solid food:

6.1.2.1 Weigh 0.3 g of sample (grind finely) with 3,000 µL Buffer into a 15 mL centrifugal tube (the dilution factor here is 1/10).

6.1.2.2 Vortex/ mix for 30 seconds.

6.1.2.3 Leave sample mixture to settle for 1 minute.

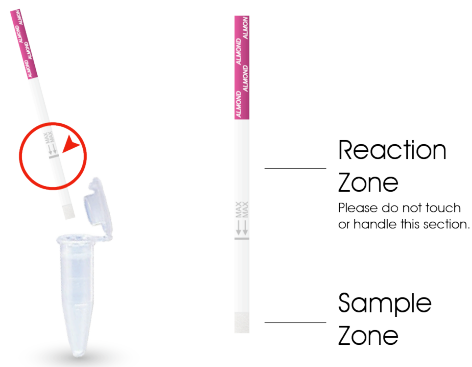
6.1.2.4 Measure 500 µL of the sample mixture supernatant into a 1.5 mL centrifugal tube.

6.1.3 Environmental swab test

- 6.1.3.1 Transfer 500 µL of Buffer into an unused 1.5 mL centrifuge tube.
- 6.1.3.2 Wet the cotton swab in the Agitest™ Environmental Swab Kit with clean water.
- 6.1.3.3 Swab the sample with the pre-wetted cotton swab. (A sampling surface area of 100 cm² is recommended.)
- 6.1.3.4 Place the cotton swab in the 1.5 mL tube making sure to immerse the cotton swab head in the buffer.
- 6.1.3.5 Gently agitate the cotton swab in the buffer for at least 30 seconds. (Please avoid spilling the buffer.)
- 6.1.3.6 Remove the cotton swab from the 1.5 mL tube and leave the tube to rest for 1 minute.

6.2 Test implementation

- 6.2.1 Open the alu-pouch and take out the test strip. (Please handle the coloured sticker portion only and avoid contact with the reaction zone).
- 6.2.2 Insert the test strip into the 1.5 mL centrifugal tube.



****Note: Do not allow liquid height to exceed the arrows****

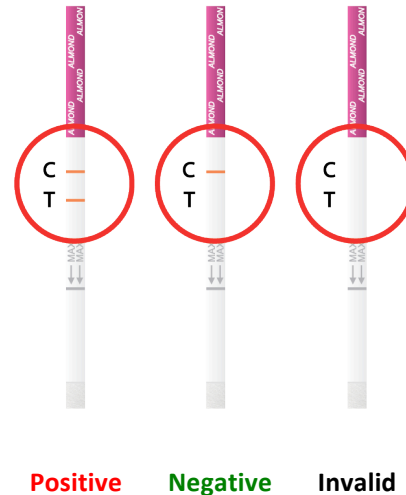
7. Results and sensitivity

- 7.1 Wait 15 minutes for the results. Please read the results immediately without further manipulation.
- 7.2 Result analysis
 - 7.2.1 **Positive result: two coloured bands** (the C and T red test bands) are visible within the reaction zone.
 - 7.2.2 **Negative result: one coloured band** (the C red test band) is visible within the reaction zone.
 - 7.2.3 **Invalid result: no coloured band** is visible within the reaction zone, the test is considered invalid.

*Please check the following:

- A. If the test strip packaging is damaged.
- B. If the test strip is damp.
- C. If the sample is too viscous or too concentrated. (See 6.1.1.C)

Please retest with a new test strip.



*NOTE:

- Please read test results within 30 minutes to ensure optimum accuracy.
- “Hook effect”: Highly concentrated samples overload the test strip and weak band(s) will be visible.

7.3 Sensitivity calculation

- 7.3.1 Sample after dilution, a dilution factor will need to be considered.
- 7.3.2 If the sample is further diluted, a dilution factor will need to be considered.