

Instructions for use InviRapid® Casein Allergen Ag Test

INVITEK
diagnostics

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REF 6022001102

Σ 20 tests

2 °C 30 °C

RUO

1. Intended use

InviRapid® Casein Allergen Ag Test is an immuno-chromatographic test for the detection of casein 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. InviRapid® Casein Allergen Ag Test can be used to validate and verify allergen cleaning regimes in manufacturing and analytical environmental. This test is also suitable for quality control in food processing plants specifically with inbound goods, processing stages and final product.

- Detection limit: 2 ppm casein, from bovine milk.
- Specificity: No cross-reaction with almond, buckwheat, egg, soy, gluten or peanut. Cross-reacts with brown rice and kidney beans.

2. Kit contents

COMPONENTS	QUANTITY
Rapid test strip	20 pouches
Buffer	85 mL, 1 bottle
1.5 mL microcentrifuge tube	40 pcs
4 mL sample tube	20 pcs
Scoop	20 pcs
Dropper	20 pcs
Swabs	20 pcs
Tubes rack	2 pcs
Instruction manual	1 manual

3. Equipment and materials required (not provided)

- 200 µL and 1000 µL micropipette and tips
- Weighing scale
- Grinder or homogenizer
- Vortex mixer (if available)
- Clean water

4. Storage instructions

Reagents should be stored between 2 and 30 °C and may be used until the expiration date shown on the package label. It is not recommended the use of the kit after the expiry date stated on the box. Protect reagents from light exposure to prevent degradation. Do not freeze.

5. Preparation of samples

5.1 For liquid food/drinks:

- Measure 50 µL of sample into a 1.5 mL microcentrifuge tube with 450 µL buffer and mix well (**factor 10**).
- Measure 50 µL of sample prepared in a. into a 1.5 mL microcentrifuge tube with 450 µL buffer and mix well (**factor 100**).
- Measure 50 µL of sample prepared in b. into a 1.5 mL microcentrifuge tube with 450 µL buffer and mix well (**factor 1000**).

5.2 For solid food:

- Weigh 0.3 g of sample (finely grinded) into a 4 mL sample tube with the provided scoop.
- Add 3 mL buffer to the 4 mL sample tube (**factor 10**).
- Vortex/mix for 30 seconds.
- Leave sample mixture to settle for 1 minute.
- Transfer 500 µL (or 15 drops by dropper) of the sample mixture supernatant into a 1.5 mL microcentrifuge tube.
- Measure 50 µL of sample prepared in e. into a 1.5 mL microcentrifuge tube with 450 µL buffer and mix well (**factor 100**).
- Measure 50 µL of sample prepared in f. into a 1.5 mL microcentrifuge tube with 450 µL buffer and mix well (**factor 1000**).

5.3 Environmental swab test:

- Transfer 500 µL (or 15 drops by dropper) of buffer into a 1.5 mL microcentrifuge tube.
- Wet the cotton swab with clean water.
- Swab a sampling surface area of 100 cm² (recommended) with the pre-wetted cotton swab.
- Place the cotton swab in the 1.5 mL microcentrifuge tube making sure to immerse the cotton swab head in the buffer.
- Gently agitate the cotton swab in the buffer for at least 30 seconds.
- Remove the cotton swab from the 1.5 mL microcentrifuge tube and leave the tube to rest for 1 minute. No further dilution needed.

6. Test procedure

- The **factor 10** sample should be tested first, if negative only then the **factor 1000** samples should be tested. It is not necessary to test the **factor 100** sample.
- Open the aluminum pouch and take out the test strip. (please handle the colored sticker portion only and avoid contact with the reaction zone).
- Insert the test strip into the 1.5 mL microcentrifuge tube.

7. Results and sensitivity

Wait 15 minutes for the results. Please read the results immediately without further manipulation.

7.1 Result analysis:

- Positive result: either **factor 10** or **factor 1000** sample has two colored bands (C and T red test bands) visible within the reaction zone.
- Negative result: both **factor 10** and **factor 1000** sample have one colored band (C test band).
- Invalid result: no colored band is visible within the reaction zone; the test is considered invalid. Please retest with a new test strip.

8. Warnings and precautions for users

- InviRapid® products are for food testing, not for human diagnostics use.
- InviRapid® products contain non-toxic buffers. To maintain test accuracy, please keep bottle upright to prevent leakage.
- InviRapid® are designed as a one-use test. Please do not re-use test strip.
- InviRapid® are very sensitive to humidity, which could render the test strips useless. Please keep the test strips away from humidity.
- InviRapid® are designed for screening purposes only. If analysis of ingredients is required, please send the sample to your local laboratory for further analysis.
- To ensure test accuracy, please do not use expired test strips or omit weighing samples or operating by micropipettes.
- Airborne casein powder and dirty equipment can lead to casein 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.
- All samples require dilution with the buffer in this kit. Do not test the sample directly with the test strip.
- 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 coloring (e.g. soya sauce) will affect the results of the tests.
- Please complete the test procedure in 30 minutes to ensure optimum accuracy.

Quick Guide InviRapid® Casein Allergen Ag Test

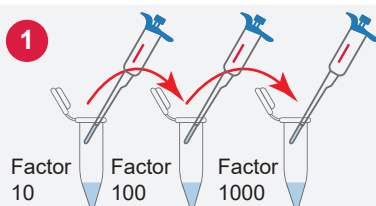
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A. Materials Needed

	Liquid Sample	Solid Sample	Environmental Swab Test
4 mL Sample Tube		•	
1.5 mL Microcentrifuge Tube	•	•	•
Micropipette or Droppers	•	•	•
Scoop		•	
Swab (Optional)			•

B. Preparation of Samples

Liquid Sample

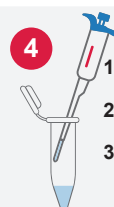
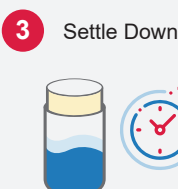
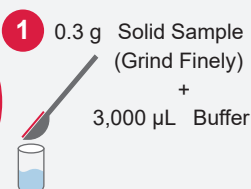


- Factor 10:** 50 µL Liquid Sample + 450 µL Buffer
- Factor 100:** 50 µL Prepared Sample (Factor 10) + 450 µL Buffer
- Factor 1000:** 50 µL Prepared Sample (Factor 100) + 450 µL Buffer

2 Vortex or Mix

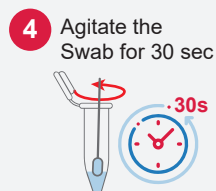
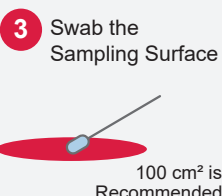
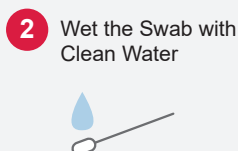
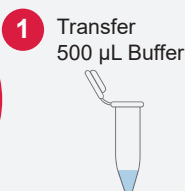


Solid Sample



- Factor 10:** Pipette 500 µL Sample Mixtures Supernatant to 1.5 mL Tube
- Factor 100:** 50 µL Prepared Sample (Factor 10) + 450 µL Buffer
- Factor 1000:** 50 µL Prepared Sample (Factor 100) + 450 µL Buffer

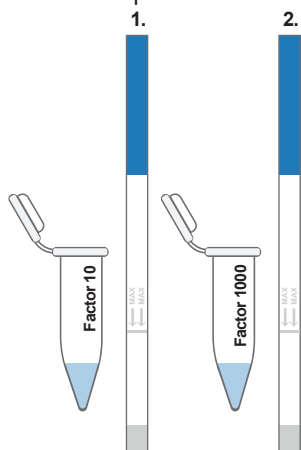
Environmental Test



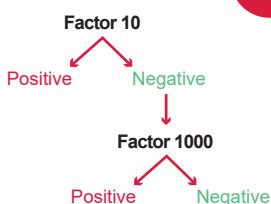
C. Strip Testing and Result Analysis

1 Remove Strips from Package

2 Insert Test Strips into Tubes



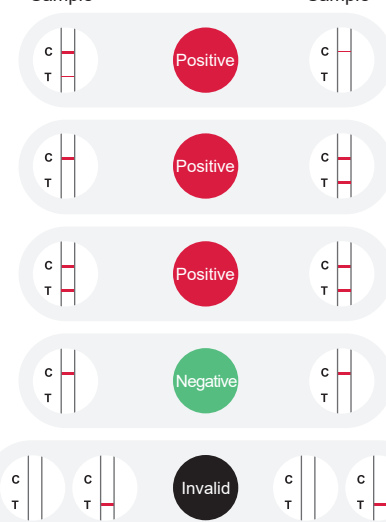
Do Not Allow Liquid Height to Exceed the Arrows



1. Factor 10 Sample

Results

2. Factor 1000 Sample



Positive result: two colored bands (the C and T red test bands) are visible within the reaction zone.

Negative result: one colored band (the C red test band) is visible within the reaction zone.

Invalid result: no colored band or only T red test band is visible within the reaction zone, the test is considered invalid.

