AlerTox Sticks Casein

Direct immunochromatographic assay, for specific detection of casein in food and environmental samples

Ed.3 - October 2013

Cat. No.: KT-5772 / KT-5781

1. Kit components

Components	Units	
	KT-5772	KT-5781
Sealed tube containing casein assay strips	1 (25 sticks)	1 (10 sticks)
Bottle containing 60 mL of extraction solution, ready to use	3	1
Rapid disposable pipettes	25	10
Empty tubes for extraction procedure	25	10
Microtiter 8 wells strips for dispensing the extracted samples and running the assay	4	2
Microtiter Tray	1	1

2. Other needed materials not provided with the kit

- Pipette or syringe (for measuring 0.5 mL, 4.5 mL, and/or 5 mL).
- Grinder, mortar or any other manual or automatic homogenization system to crush the sample.
- Scale (precision 0.1 g).
- Vortex Agitator / Shaker (recommended, not required).

3. Storage conditions of the kit

All components should be stored between 4ºC and 25ºC (39.2ºF and 77ºC), always inside their original packaging until the time of use.

4. Test basis

The test is based on the technique of immunochromatography, a migration technique which uses specific antibodies to casein. It is able to detect casein residues in all food matrix and surfaces (there is a specific protocol for environmental samples. Please consult the supplier).

5. Detection limits

- AlerTox Casein Sticks are a qualitative assay. If interested in casein quantification (ppm), we recommend contacting your supplier.
- Considering the dilution of the sample in the provided extraction buffer, a sample should contain more than 2.5 ppm of casein to obtain a positive result.
- AlerTox Casein has been tested against a wide variety of different matrices. Contact your supplier to discuss any concerns you may have about your specific matrices.
- AlerTox Casein Sticks are specific for casein and do not cross react or recognize other milk proteins such as β-lactoglobulin. For AlerTox β-lactoglobulin, contact your supplier.

6. Precautions

- Read the instructions carefully.
- Bring all reagents to room temperature before use.
- Do not mix reagents from different kits or batches.
- Avoid contamination of reagents.
- Do not use kits after the expiration date.

7. Instructions

7.1 Sample preparation (*)

Solid samples:

1. Crush the sample to obtain a powder consistency as fine as possible. Use a mortar or a mechanical homogenizer.
2. Weigh 0.5 g of sample and place it into a provided tube. Add 5 mL of supplied extraction buffer.

Liquid samples:

1. Shake the sample to ensure it is homogeneous and that you are taking a representative part of it.
2. Take 0.5 ml of sample and place it into a provided tube. Add 4.5 ml of supplied extraction buffer.

3. Stir for 15-30 seconds using a vortex mixer or agitator to ensure homogenization. If you don´t have a vortex, you can shake vigorously by hand for two minutes.
4. In case of solid samples, allow the sample settle for a few minutes.
5. Add 10 drops of the supernatant to a clean, unused well (8 well strips provided). For samples with high fat content, avoid taking the fat layer of the supernatant.

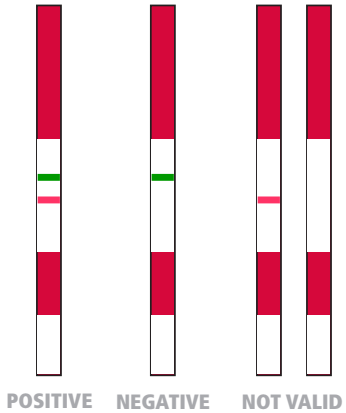
7.2. Test procedure

Open the tube containing the strips just before performing the assay and remove the needed test strips, then close the tube immediately.

Take the strips and put them vertically, one in each well containing the prepared samples, with the cotton side down in the well.

Keep there for 10 minutes. After 10 minutes, take the strips and put them on a flat a surface to read the results.

7.3. Reading and interpretation of the results



Positive: Two lines appear on the reading zone: a red line (positive) and a green line (control). The colour intensity of the red line may vary, but is not proportional to the β-lactoglobulin concentration of the sample. Any red line means a positive test.

Negative: Only the single green line appears on the reading zone.

Not valid: There are two possible situations: 1) no lines are shown on the reading zone; or 2) only one red line appears. Invalid results may be caused by damaged reagents or by an incorrect manipulation. In this case, the test should be repeated using a new strip.

We recommend to not consider any sample as negative until the 10 minutes have passed.

(*) NOTE: The larger the sample size, the more representative of the matrix the analysis will be, and therefore the more reliable. If you want to extract a larger sample, be sure to maintain the **1:10 relationship of sample:extraction buffer.**

8. Validated Matrices

Baby food, biscuits, cereals, soy drinks, lyophilized food, baked products, chocolate cookies, chocolate cereals, chocolate, meat products, alcoholic and non-alcoholic drinks, sauces, cereals products, snacks, drinks and soy food, medications.

Biomedal DIAGNOSTICS

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