

AlerTox® Sticks Casein

Validation Report

Cat No.	KIT3021 (10 tests) and KIT3022(25 tests)
Test Name	AlerTox Sticks Casein
Description	AlerTox Sticks Casein is based on a lateral flow immunoassay and uses antibodies specific to casein. The test is able to detect casein residues in a large variety of food matrices and also in environmental samples.
Specificity and Sensitivity	The assay is specific for casein and does not cross-react with nor recognizes other milk proteins such as Beta-Lactoglobulin. It can detect casein from cow, sheep and goat milk. The limit of detection is 2.5 ppm of casein.
Storage	Store at 2-25 °C (36-77 °F)

Assay Procedure

Solid, liquid and surface samples: According to manual of use INS3011

Validation Protocol

36 samples were analyzed separately to determine the correlation between AlerTox Sticks Casein and ELISA against casein. The following data was obtained:

	Sample	Brand	ELISA Test	AlerTox Sticks Casein
1	Infant soy formula	Nutriben	negative	negative
2	Earth almond (<i>Cyperus esculentus</i>) drink	n/a	positive	negative
3	Soy drink	Vivesoy	negative	negative

4	Almond drink	n/a	negative	negative
5	Soy drink – Strawberry flavor	n/a	negative	negative
6	Oat drink	n/a	negative	negative
7	Almond drink – Sugar free	n/a	negative	negative
8	Kamut drink	n/a	negative	negative
9	Rice flour	n/a	negative	negative
10	Corn starch / Maize starch	n/a	positive	positive
11	Roquefort (sheep milk blue cheese) sauce	n/a	positive	positive
12	Breakfast cornflakes	n/a	negative	negative
13	Rice cake	n/a	negative	Negative
14	Breakfast cereals for babies	Milupa	negative	Negative
15	Milk chocolate	Milka	positive	positive
16	Fresh cake – Yogurt flavor	Royal	positive	positive
17	Rice flakes cereals	n/a	negative	negative
18	Chowder	Knorr	negative	negative
19	Precooked white rice flour	n/a	negative	Negative
20	Gluten Free bread basic mix	Proceli	negative	Negative
21	Puffed breakfast cereals	Frosties Chocomax Kellogg's	positive	positive
22	Tacos	Old El Paso	negative	negative
23	Risotto with dry tomatoes	Gallo	negative	negative
24	Spice mix burritos	Old El Paso	negative	negative
25	Corn crackers	n/a	negative	negative
26	Milk Chocolate	Nestlé	positive	positive
27	Dark Chocolate 60%	Nestlé	negative	negative
28	Guacamole sauce	Old El Paso	negative	negative
29	Tortilla chips	Doritos Dippas	negative	negative
30	Nachos with salsa topping	Old El Paso	negative	negative
31	Cocoa powder	Nesquik, Nestlé	negative	negative
32	Chili crackers rice snack	Osaka	positive	positive

33	Extruded snacks	Cheetos, Matutano	positive	positive
34	Frankfurt Hot Dog	n/a	negative	negative
35	Spice mix powder for Guacamole	Old El Paso	negative	positive
36	Breakfast chocolate cereals	Kellogg's Choco Krispies	negative	negative

According to these results, the correlation between both techniques is 94% in the samples tested.

Validated Matrices

Baby food, biscuits, cereals, soy drinks, dehydrated food, baked products, chocolate cereals, chocolate, meat products, non-alcoholic drinks, sauces, cereal products, snacks, additives, prepared food.

Participation in Proficiency Test

AlerTox Sticks Casein was tested with FAPAS material 27240B (infant soy formula). The assigned result for the kit with more datapoints on this round was 25.9 mg/kg casein. AlerTox Sticks Casein yielded a positive result (>2.5 ppm) for this sample. Sample 27240A (infant soy formula) was negative with 89% consensus and AlerTox Sticks Soy yielded a negative (<2.5 ppm) result.