

AlerTox[®] Sticks Mustard Seeds

Validation Report

Cat No.	KIT3040 (10 tests)
Test Name	AlerTox Sticks Mustard Seeds
Description	Immunochromatographic rapid test for qualitative determination of mustard seeds antigen in foods, kitchen and production facilities
Specificity and Sensitivity	The LOD (limit of detection) of AlerTox Sticks Mustard Seeds is 2 ppm of raw, unprocessed mustard seeds protein. The range of detection (ROD) is 2-1,000 ppm. Above this range, the test can present a hook effect. AlerTox Sticks Mustard Seeds uses a unique combination of monoclonal antibodies against a major mustard seed antigen, the legumin-like 11S seed storage protein (cruciferin, CRU4), known as allergen Sin a 2. AlerTox Sticks Mustard Seeds detects the antigens of all mustard varieties, including wasabi. AlerTox Sticks Mustard Seeds is highly cross-reactive with seeds of species of the cruciferous family (broccoli, Brussels sprouts, cabbage, cauliflower, horseradish, radish, rutabaga, turnip). The test is non-reactive to the edible parts (leaves and roots) of other species of the cruciferous family as well as rapeseed/canola oil.
Storage	Store at 10-30 °C (50-86 °F)

Assay Procedure

Solid, liquid and surface samples: According to manual of use INS3021.

Validation Protocol

15 samples were analyzed separately to determine the correlation between AlerTox Sticks Mustard Seeds and a commercially available ELISA against mustard. The following data was obtained:

	Sample	Brand	AlerTox® Sticks Mustard Seeds	ELISA test
1	Mustard grain	Kühne	positive	positive
2	Mustard powder	Allori	positive	positive
3	Broccoli	Metro	negative	negative
4	Brussels sprouts	Metro	negative	negative
5	Roasted almonds	Good Food	negative	negative
6	Roasted hazelnuts	Good Food	negative	negative
7	Ground paprika	Kotanyi	negative	negative
8	Nutmeg	Kotanyi	negative	negative
9	White beans	Bonduelle	negative	negative
10	Original rye	Finn Crisp	negative	negative
11	Wheat flour	Molino Grassi	negative	negative
12	Curry	n/a	positive	positive
13	Ground mustard	BioArtesa	positive	positive
14	Brown mustard seeds	Schani	positive	positive
15	Mustard sauce	Prima	positive	positive

According to these results, the correlation between both techniques is 100% in the samples analyzed.