# AlerTox® Sticks Fish

## Validation Report

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| **Cat No.** | KIT3038 (10 tests) |
| **Test Name** | AlerTox Sticks Fish |
| **Description** | Immunochromatographic rapid test for qualitative determination of fish antigen in foods, kitchen and production facilities |
| **Specificity and Sensitivity** | The LOD (limit of detection) of AlerTox Sticks Fish is 5 ppm of dried raw cod (Gadus morhua). In other fish species it may be detected only partially due to variability in the antigen content and level of homology with the cod antigen. Raw fish species that can be detected with the kit are: cod, scamp grouper, sea perch, pike, red grouper, seabass, mangrove snapper, pollock, zander, pangasius, carp, red snapper, turbot, anchovy and hake. The range of detection (ROD) is 5-1,000 ppm. Above this range, the test can present a hook effect. AlerTox Sticks Fish uses a combination of antibodies against tropomyosin, a major protein antigen found in striated muscle of bony fishes. The test also detects a related antigen of cartilaginous fishes (sharks and sturgeons), though with a significantly lower sensitivity. |
| **Storage** | Store at 10-30 °C (50-86 °F) |

| **Assay Procedure** |
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| Solid, liquid and surface samples: According to manual of use INS3020 |

| **Validation Protocol** |
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23 samples were analyzed separately to determine the correlation between AlerTox Sticks Fish and a commercially available ELISA against fish. The following data was obtained:

| | Sample | Brand | ELISA | AlerTox Sticks Fish |
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| 1 | XXL Frikadeller | Zimmermann | negative | negative |
| 2 | Beef jerky (dried meat) | Jack Links | negative | negative |
| 3 | Picnic Salami | TULIP | negative | negative |
| 4 | Beef Salami | Glocken-Beune | negative | negative |
| 5 | Chorizo *Pamplona* | ARGAL | negative | negative |
| 6 | Brennecke Bratwurst | Brennecke Harzer | negative | negative |
| 7 | Thuringer Mini Bratwurst | ZIMBO | negative | negative |
| 8 | Cod fillet (*Gadus morhua*) | Findus | positive | positive |
| 9 | Whole shrimps (*Pandalus borealis*) | Royal Greenland | positive | positive |
| 10 | Cooked blue clamps (*Mytilus edulis*) | Vilsund Blue | negative | negative |
| 11 | Antipasti di Mare | Esca | positive | positive |
| 12 | Shrimp Tom Yum noodles | MAMA | negative | negative |
| 13 | Salmon pastry | ABBA | positive | positive |
| 14 | Chicken soup | Nutrilett | negative | negative |
| 15 | Bolognese sauce | Barilla | negative | negative |
| 16 | Nachos Cheese tortilla chips | Poco Loco | negative | negative |
| 17 | Tortilla Chips Cheese | Santa Maria | negative | negative |
| 18 | Tuc Paprika crackers | LU | negative | negative |
| 19 | Tofu Vegetarian Sausage | POUTTU | negative | negative |
| 20 | Salmon stuffed olives (Brine only) | EUROLIVA | positive | negative |
| 21 | Salmon stuffed olives | EUROLIVA | positive | positive |
| 22 | Anchovy stuffed olives (Brine only) | EUROLIVA | positive | positive |
| 23 | Anchovy stuffed olives | EUROLIVA | positive | positive |

According to these results, the correlation between both techniques is 96 % in the samples tested.