

GlutenTox[®] Pro

Quick test for the detection of gluten in food, beverages, oral hygiene products and on surfaces

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Biomedal  DIAGNOSTICS

1. Product Description

GlutenTox[®] Pro is a rapid and user-friendly immunochromatographic test for the detection of gluten in food and beverages with different composition and processing level, from raw materials to processed food.

GlutenTox[®] Pro can also be used for detecting the presence of gluten in oral hygiene products, such as toothpaste and mouthwash, which is useful since these products may be ingested. In addition **GlutenTox[®] Pro** can be used to control the cleanliness of food production zones through surface analysis a prerequisite to prevent the risk of cross-contamination in the final product.

This rapid test are specially useful in routine monitoring of gluten to ensure that products comply with a program of Hazard Analysis and Critical Control Points (HACCP), and to ensure proper labeling. They also allow quick decisions and corrective actions in case there is any risk of contamination along the production chain.

GlutenTox[®] Pro is based on an anti-gliadin-33mer mouse monoclonal antibody (G12) that is specific to the toxic fraction of gluten (33-mer peptide) and reacts to prolamins of wheat (gliadin), barley (hordein), rye (secalin), and oat (avenin).

2. Sensitivity/Specificity

- Detection limit of the assay 5 ppm of gluten in samples (detection limit of the strip - 15 ng/mL of gliadin).
- Specific to prolamins of wheat (gliadin), barley (hordein), rye (secalin) and oat (avenin).
- Does not cross react with soy, rice or corn.

3. Kit components

- GlutenTox[®] Pro sticks (x25) in a tube.
- Plastic pipettes (x50).
- Disposable plastic spoons (x25).
- Extraction bottles with yellow cap (x25).
- Dilution bottles with blue cap (x25).
- Instructions leaflet.

4. Storage/Stability

To obtain optimal test performance, the product must be stored in its original packaging between 2°C and 30°C and used before expiration date. The tube with the sticks should not be opened until its time of use. All components of the kit are fully disposable in ordinary trash.

5. Precautions and Safety

- To avoid contaminations that interfere with the analysis, the use of non-powdered disposable gloves is recommended. If you do not have disposable gloves, wash your hands thoroughly before the test.
- Once the **GlutenTox[®] Pro** stick has been removed taken out from the tube, it must be used as soon as possible under strict clean conditions. Close the tube afterwards.
- Do not use any material from the kit after the expiry date.
- Do not drink any solution (liquid) from the kit (the extraction solution contains alcohol [ethanol]).
- Keep out of reach of children.

6. Applications

- For semi-quantification of gluten in food, beverages and other consumer products, including personal care and cosmetic products.
- For quality control of gluten free food.
- To trace gluten contamination in food and working surfaces.
- For safety regulation according to HACCP, IFS and BRC programs.

7. Validation

To ensure the test's ability to analyze all types of food (of diverse nature) and other samples such as cosmetics and personal care products, different commercial samples have been tested. After analyzing the samples with GlutenTox® Pro in all types of matrices tested (see Table 1) the results were satisfactory and consistent with the gluten found with the official method, which demonstrates the applicability of test on a broad range of samples.

Table 1. Samples tested for validation of GlutenTox® Pro.

Group	Tested samples
Flour and semolina	Corn flour, precooked corn flour, corn semolina, rice flour, wheat flour, buckwheat flour
Milk products	Cow milk, milk with soluble fiber, milk with cereals, natural or flavored yogurt, cheese spread, shredded cheese blend
Baked and cereal products	Toast, bread stick, biscuits (rich tea), chocolate cookies, Madeleine, cake, cornflakes, pastas, corn pancakes, rice cakes, spelt cake, snacks
Meat products	Minced turkey, minced chicken, turkey sausage, chicken nuggets, pork sausages, chorizo
Fishery products	Cod and hake
Vegetables	Lettuce mix, fried vegetables
Broth, soups, creams and dry mixes	Vegetable broth, chicken rice soup, dehydrated vegetable soup, stock cubes, vegetable soup, peanut butter
Sauces, dressing, spices and condiments	Yogurt salad dressing, ketchup, soy sauce, salad dressing, garlic powder, paprika powder, cooking cream
Sugars	Glucose syrup, powdered sugar
Prepared meals and dishes	Meatballs in sauce with peas, Meat Ravioli in Egg Dough, bean stew
Fatty foods	Olive oil, sunflower oil, butter, margarine, cream
Acidic foods	Tomato sauce, wine vinegar, apple cider vinegar, lemon juice
Beverages	Water, milk, fruit juices, beer, soy drinks, rice drinks, oat drinks, soft drinks
Oral hygiene products	Toothpaste, mouthwash

7. References

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