# INGENASA

## **INGEZIM GLUTEN**

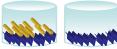
R.30.GLU.K2



**Ingezim gluten** is an immunoenzymatic assay which uses the <u>R5 monoclonal antibody</u> specific of Prolamins. **Limit of Detection: 3 ppm.** 



Plate coated with R5 Mab



Sample Addition



Washing



R5-PO Conjugate Addition







Substrate

POSITIVE NEGATIVE

#### TECHNICAL BASIS OF THE KIT

- Plates are supplied coated with a monoclonal antibody (MAb) specific for Gliadin, Secalin and Hordein. Samples are added to the wells and incubated.
- 2. If the sample contains the antigen, it will bind to the antibody specific for Gliadin coating the plates.
- 3. When MAb-PO specific of Gliadin is added, it will bind to the antigen of the sample.
- 4. Binding is detected by a colorimetric reaction after the addition of the substrate

#### **APLICATION**

The test has been designed for samples with a content of Gluten between 0 – 300 ppm

**Assay endorsed by the CODEX Alimentarius as Type I Method** for the determination of gluten in food samples

#### **EVALUATED BY THE "FOOD SAFETY SPANISH AGENCY"**

#### **SENSITIVITY**

#### 1-Using the European Standard.

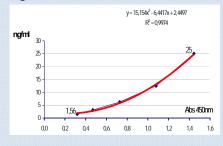
Five different dilutions of the European standard were made. The results obtained showed that the assay was able to detect **1,56ng/ml** of this standard. This value corresponds to an amount of **3ppm** of gluten in foods according to the next formula and supposing a sample dilution of 1/25.

#### $ppm = (C \times D \times 2 \times 40) / 1000$

- **C**: Concentration of the sample calculated from the calibration curve in ng/ml.
- D: Dilution factor of the sample (25, 50, 100, etc)
- 2: Factor applied to express the results in gluten concentration
- **40:** Dilution factor applied in the sample preparation (0,25g in 10 ml of extraction buffer).

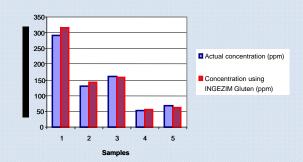
1000: Conversion from ng/ml to ppm

#### Regression curve



### 2- Evaluation of the assay using controlled samples of food.

Five samples of bread with predetermined amounts of gluten (ppm) were used. The results obtained are showed below



### SPECIFICITY

The specificity of the MAb used in the assay was determined by the immunoblotting technique. The MAb is able to detect specifically the prolamins of gluten present in WHEAT, RYE and BARLEY (gliadin, secalin and hordein respectively).

#### **COMPOSICIÓN DEL KIT**

- Microtritation plate of 96 well
- Vial with Positive Control
- Vial with Negative Control
- Control Point
- European Gliadin Standards (5)
- Vial with PO-Conjugate
- Bottle with Washing Solution
- Bottle with diluent
- Bottle with substrate (TMB) ready to use
- Bottle with stop solution
- Bottle with Extraction Solution







SELF LIFE: 12 months
Stored at 4°C



