



**EuroProxima**  
Close to your analysis

## FUMONISIN ELISA (5121FUM)

### General

Fumonisin is a mycotoxin produced primarily by *Fusarium moulds* in corn. The fumonisins B1, B2, A1, A2 are structurally closely related and have been implicated as the causal agents in a variety of animal diseases. Moreover, these substances are epidemiologically linked to the high incidence of human oesophageal cancer in some regions in the world.

Fumonisin is a heat stable compound that survives under most conditions used during baking and frying.

The **Fumonisin ELISA** is a competitive enzyme immunoassay based on antibodies directed against fumonisin.

### Kit characteristics

#### **Microtiter plate:**

96 wells  
12 x 8 Breakapart

#### **Antibody cross-reactivity:**

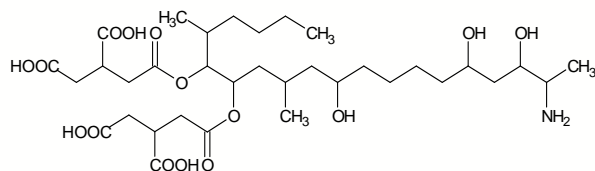
|              |      |
|--------------|------|
| Fumonisin B1 | 100% |
| Fumonisin B2 | 27%  |
| Fumonisin B3 | 76%  |

#### **Conjugate:**

Fumonisin-HRP stabilized

#### **Standard range (ready-to-use):**

0, 0.125, 0.25, 0.5, 1.0, 2.0 and 4.0 ng/ml



### Assay characteristics

#### **Matrices**

| Matrices | LOD (ppb) |
|----------|-----------|
| Corn     | 2         |
| Milk     | 1         |
| Honey    | 2         |
| Serum    | 2         |

#### **LOD (ppb)**

The Limit of detection (LOD) is calculated as:  $X_n + 3SD$  and is determined under optimal conditions.

#### **Sample preparation**

For corn, milk, honey and serum fast and efficient methods are included in the kit manual.

#### **Procedure**

Antibody, conjugate and standard/sample are pipetted into the wells and incubated for one hour at 37°C. After a washing procedure ready-to-use substrate is added and incubated for 30 minutes at 20°C - 25°C. The reaction is stopped and the absorbance is read in a spectrophotometer at 450 nm.

EuroProxima's user-friendly software converts the measured optical density into the concentration of the metabolite in the starting material.