



**EuroProxima**  
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## AFLATOXIN B1 sensitive ELISA (5121AFBS)

### General

Aflatoxins (Aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub>, G<sub>2</sub>) are a group of structurally related toxic and carcinogenic compounds produced by *Aspergillus* moulds. For aflatoxins maximum levels (MLs) are established legally in Europe. Depending on the products used for animal feed or direct human consumption the MLs vary from 50 to 2 µg/kg (ppb). For baby and infant food, the ML for aflatoxin B<sub>1</sub> is set at 0.1 µg/kg (0.1 ppb).

To comply with these last mentioned strict regulations, EuroProxima offers a sensitive ELISA test with extreme low LOD values.

The **Aflatoxin B1 sensitive ELISA** is a competitive enzyme immunoassay based on antibodies directed against anti-aflatoxin B1.

### Kit characteristics

#### **Microtiter plate:**

96 wells  
12 x 8 Breakapart

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

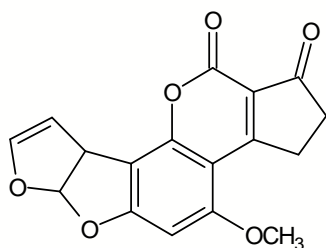
Aflatoxin B1	100%
Aflatoxin B2	20%
Aflatoxin G1	17%
Aflatoxin G2	4%

#### **Conjugate**

Aflatoxin B1-HRP stabilized

#### **Standard range**

0, 6.25, 12.5, 25, 50, 100 pg/ml



Chemical structure of aflatoxin B1

### Assay characteristics

#### **Matrices**

Baby / Infant food  
Cereals  
Nuts  
Liver  
Red pepper  
Feed  
Serum

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

0.03  
0.03  
0.05  
0.05  
0.5  
2.5  
0.03

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

#### **Sample preparation**

For baby Infant food, cereals, nuts, liver, red pepper, feed 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 30 minutes at 20°C - 25°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.