



EuroProxima
Close to your analysis

AFLATOXIN B1 ELISA (5121AFB)

General

Aflatoxins (Aflatoxins B₁, B₂, G₁, G₂) 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 ppb. For baby and infant food, the ML for aflatoxin B₁ is set at 0.1ppb.

The **Aflatoxin B1 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:

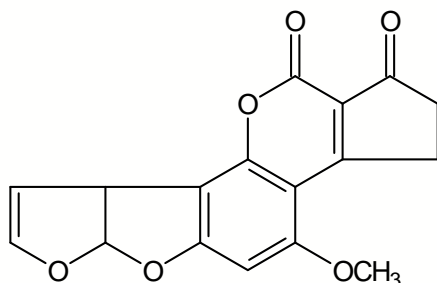
Aflatoxin B1	100%
Aflatoxin B2	20%
Aflatoxin G1	17%
Aflatoxin G2	4%

Conjugate:

Aflatoxin-HRP stabilized

Standard range (ready-to-use):

0, 0.0157, 0.0313, 0.0625, 0.125, 0.25, 0.5 ng/ml



Chemical structure of aflatoxin B1

Assay characteristics

Matrices	LOD (ppb)
Cereals	0.5
Rice	0.4
Egg	0.2
Nuts	0.75
Honey	0.2
Mashed fruits	0.6
Edible oils	0.2
Feed	1.0

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

Sample preparation

For cereals, rice, egg, nuts, honey, mashed fruits, edible oils and feed 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.