



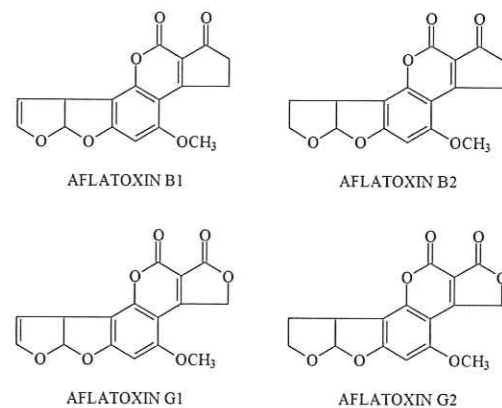
# TOTAL AFLATOXINS ELISA (5121AFT1p)

## General

Aflatoxins are extremely toxic compounds produced by the moulds *Aspergillus flavus*, *A. parviticus* and *A. nomius*. Aflatoxins cause cancer, mainly of the liver but also of the gut, lungs and breasts. Among 18 different types of aflatoxins were identified. However, the main members of these are the aflatoxins B<sub>1</sub>, B<sub>2</sub>, G<sub>1</sub> and G<sub>2</sub>. Aflatoxin M<sub>1</sub> and M<sub>2</sub> are the metabolites of B<sub>1</sub> and B<sub>2</sub>, respectively and are only excreted in the milk from animals that have consumed feed contaminated with aflatoxins.

## Kit characteristics

- **Microtitre plate:**  
12 x 8 break 4 wells
- **Antibody cross-reactions:**
  - Aflatoxin B<sub>1</sub> 100%
  - Aflatoxin B<sub>2</sub> 30%
  - Aflatoxin G<sub>1</sub> 65%
  - Aflatoxin G<sub>2</sub> 10%
  - Aflatoxin M<sub>1</sub> 50%
- **Antibody**  
anti-Aflatoxin antibody; lyophilised
- **Conjugate**  
Aflatoxin-HRPO stabilized
- **Standard range (ready to use):**  
0, 0.03, 0.06, 0.125, 0.25, 0.5 and 1.0 ng/ml
- **Shelf life**  
Maximum 12 months



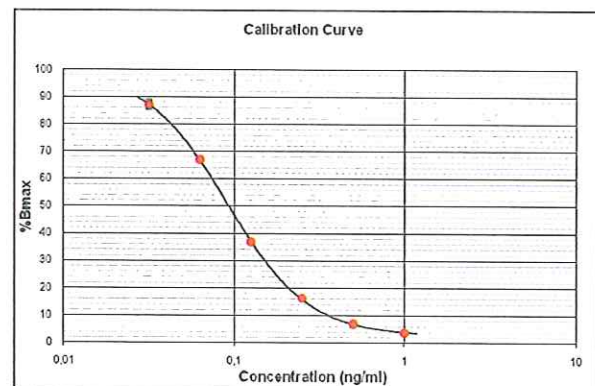
Chemical structures aflatoxins

## Assay procedure

The microtitre plate is precoated with rabbit antibodies to mouse IgG. In one incubation step, specific antibodies (mouse anti-Aflatoxin), enzyme labelled Aflatoxin (enzyme conjugate) and Aflatoxin B<sub>1</sub> standards or sample are added to the precoated wells. After an incubation time of one hour, the non-bound (enzyme labelled) reagents are removed in a washing step. The amount of bound enzyme conjugate is visualised by the addition of chromogen substrate. Stop the reaction and measure photometrically at 450.

## Assay characteristics

Matrix	LOD (ppb)	Recovery Rate %
Wheat	0.462	--
Maize		102
Peanut		79
Animal Feed		110



LOD (Limit of Detection) and Recovery data; Validation according SANCO/1085/2000

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