AFLATOXIN M1 SENSITIVE ELISA (5121AFMS)

General

Aflatoxins are produced by *Aspergillus* moulds. Aflatoxin M1 is the hydroxylated metabolite of aflatoxin B1 and can be found in milk obtained from livestock that have ingested contaminated feed. The main sources of aflatoxins in feeds are peanut meal, maize and cottonseed meal.
For aflatoxin M1 maximum tolerance levels (MLs) are established legally in Europe.
For milk and milk products the ML is set at 0.05 ppb. Infant milk and follow-on milk have a ML of 0.025 ppb.

The **Aflatoxin M1 sensitive ELISA** is a competitive enzyme immunoassay based on antibodies directed against aflatoxin M1.

Kit characteristics

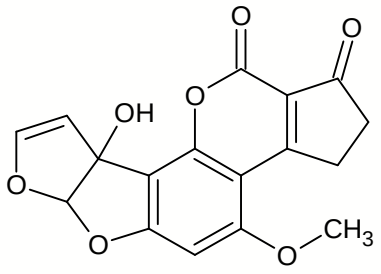
***Microtiter plate*:**
96 Wells
12 x 8 Breakapart

***Antibody cross-reactivity*:**

Aflatoxin M1	100%
Aflatoxin M2	70%

***Conjugate*:**
Aflatoxin M1-HRP stabilized

***Standard range (ready-to-use)*:**
0, 5, 10, 20, 40, 80 pg/ml



Chemical structure of aflatoxin M1

Assay characteristics

Matrices	***LOD (ppt)***
Milk	2.3
Cheese	3.6
Butter	2.6

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

Sample preparation
For milk, milk powder, cheese and butter fast and efficient extraction methods are included in the kit manual.

Procedure
Antibody, conjugate and standard/sample are pipetted into the wells and incubated for one hour 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.