

AFLATOXIN M₁ FAST ELISA (5121AFMF)

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 fast 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, 6.25, 12.5, 25, 50, 100 and 200 pg/ml



Chemical structure of aflatoxin M1

Assay characteristics

Matrices	LOD (ppt)
Milk	5
Cheese	<10
Butter	<10

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

Sample preparation

For milk, cheese and butter 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 15 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.