



EuroProxima
Close to your analysis

ZEARALENONE ELISA (5121ZON)

General

Zearalenone is a mycotoxin produced by a wide variety of *Fusarium* species which may occur on cereals such as wheat, barley, corn, but also on bananas, bean leaves, flax and groundnuts.

Zearalenone is an oestrogenic compound which is also known as F-2 toxin. It causes vulvovaginitis and other oestrogenic responses in swine. In addition to swine, rats and chickens have been shown to be susceptible to the toxic effects of zearalenone.

This ELISA test can be used to detect both zearalenone and its main metabolites α -zearalenol and β -zearalenol.

The **Zearalenone ELISA** is a competitive enzyme immunoassay based on antibodies directed against zearalenone.

Kit characteristics

Microtiter plate:

96 wells
12 x 8 Breakapart

Antibody cross-reactivity:

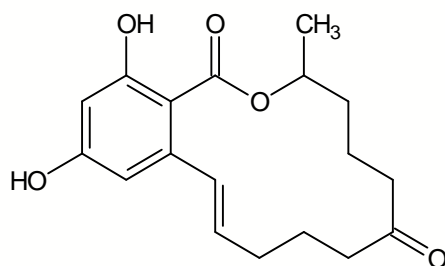
Zearalenone (F ₂ -mycotoxin)	100%
α -Zearalenol	75%
β -Zearalenol	30%
Zeranol (α -zearalanol)	150%
Taleranol (β -zearalanol)	60%
Zearalanone	190%
Other steroids tested	< 0.01%

Conjugate:

Zearalenone-HRP stabilized

Standard range (ready-to-use):

0, 0.125, 0.25, 0.5, 1.0, 5.0 and 10.0 ng/ml



Chemical structure of zearalenone

Assay characteristics

Matrices

Cereals	12.5
Milk	0.625
Milk powder	0.5
Serum	1.25

LOD (ppb)

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

Sample preparation

For cereals, milk, milk powder 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 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.