



EuroProxima
Close to your analysis

DEOXYNIVALENOL ELISA (5121DON)

General

Deoxynivalenol (DON; Vomitoxin) belongs to the group of trichothecenes produced essentially by a broad range of *Fusarium* moulds. These fungi typically develop during prolonged cool, wet growing and harvest seasons to produce *Fusarium* head blight in cereal crop. Significant concentrations of DON are frequently detected in wheat, barley, corn and oats, while lower levels are usually found in rye, sorghum and rice.

The **Deoxynivalenol ELISA** is a competitive enzyme immunoassay based on antibodies directed against deoxynivalenol.

Kit characteristics

Microtiter plate:

96 wells
12 x 8 Breakapart

Antibody cross-reactivity:

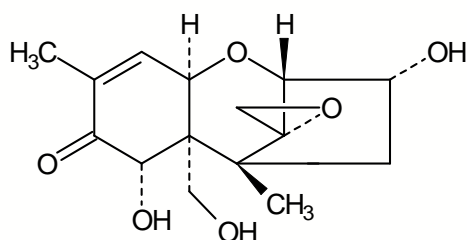
Deoxynivalenol	100%
3-Acetyl – DON	96%
15-Acetyl – DON	<0.1%
Nivalenol	40%
Other mycotoxins	<0.1%

Conjugate:

DON-HRP stabilized

Standard range (ready-to-use):

0, 0.3, 0.6, 1.25, 2.5, 5 and 10 ng/ml



Chemical structure of deoxynivalenol

Assay characteristics

Matrices	LOD (ppb)
Cereals	1.5
Feed and food	30
Beer	1.5
Silage	50

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

Sample preparation

For cereals, feed and food, beer and silage 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 2°C - 8°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.