EuroProxima

AHD ELISA (5091AHD)

General

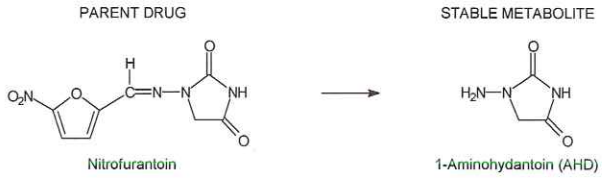
The nitrofurans are a group of synthetic broad-spectrum antibiotics, which have been widely and effectively used for the prevention and treatment of gastrointestinal infections caused by *E. coli*, *Salmonella spp.* and other bacteria. Moreover, nitrofurans have been employed as growth promoters in livestock.
The four major nitrofurans are furazolidone, furaltadone, nitrofurantoin and nitrofurazone. They have been banned in the EU for use as veterinary drugs, due to their toxic an suspected carcinogenic and mutagenic properties (Commission Regulation 1442/95). In 2003 a definitive MRPL (Minimum Required Performance Limit) was set at 1 ng/g (ppb) in the EU for all four of the above mentioned nitrofurans in poultry and aquaculture products (Commission Decision 2003/181/EC).
Nitrofuran parent molecules are rapidly metabolised in animal tissue to persistent protein-bound residues. AHD is the resistant metabolite of the parent compound nitrofurantoin.

Kit characteristics

- ***Microtiter plate:***
  12 x 8 break 4 wells
- ***Antibody cross-reactivity:***

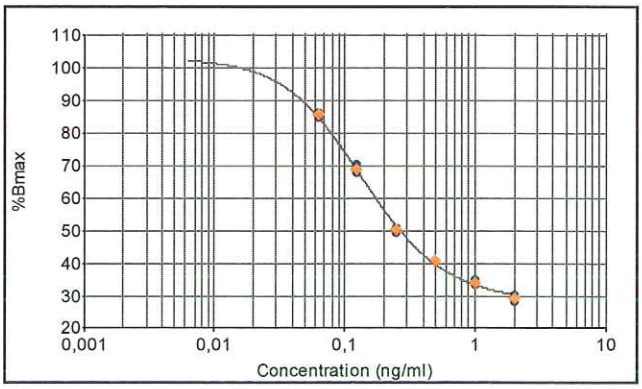
AHD	100%
AMOZ	< 0.01%
AOZ	< 0.01%
SEM	< 0.01%

- ***Conjugate:***
  AHD-HRP stabilized
- ***Standard range (ready-to-use):***
  0, 0.0625, 0.125, 0.25, 0.5, 1.0 and 2.0 ng AHD-NP/ml



Assay procedure

Derivated AHD (standard or sample) and AHD-HRP are added to the wells that are pre-coated with a specific antibody to AHD. After incubation of 30 minutes at RT (20°C - 25°C), the wells are washed. Substrate/chromogen solution is then added and incubated for 15 minutes at RT. The reaction is stopped by the addition of sulfuric acid and the absorbance is measured photometrically at 450 nm.



Assay characteristics

Matrix	LOD (ng/g:ppb)
Tissue (muscle, liver)	0.2
Shrimps	0.2
Egg (powder)	0.2
Milk	0.2
Urine	0.2

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