ENROFLOXACIN ELISA (5101ERFX)

General

Enrofloxacin is a synthetic antibiotic which acts by inhibition of bacterial DNA-gyrase. This antibiotic is administered to cattle, pigs, turkeys and chickens for the treatment of infections of the respiratory and alimentary tract. In Europe the MRL's for the sum of enrofloxacin and its active metabolite ciprofloxacin have been fixed at 100 µg/kg for muscle tissue and fat and up to 300 µg/kg for kidney and / or liver dependent of its species origin.
The antiserum used in the ELISA is specific for enrofloxacin and does not cross-react with any of the other fluoroquinolones tested. For detection of most Fluoroquinolones in one test we advise the generic Fluoroquinolones ELISAs (5101FLUQG and 5101FLUQGII).

The E**nrofloxacin ELISA** is a competitive enzyme immunoassay based on antibodies directed against enrofloxacin.

Kit characteristics

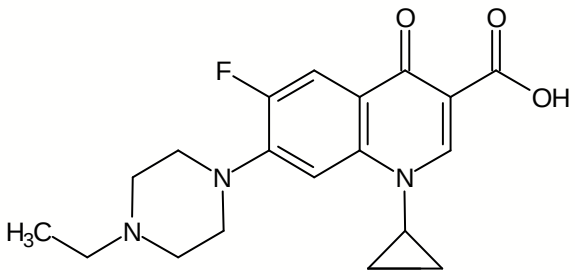
***Microtiter plate*:**
96 wells
12 x 8 Breakapart

***Antibody cross-reactivity*:**

Enrofloxacin	100%
All other fluoroquinolones tested	< 0.1%

Conjugate:
Enrofloxacin-HRP stabilized

Standard range (ready-to-use):
0, 0.313, 0.625, 1.25, 2.5, 5.0 and 10 ng/ml



Chemical structure of enrofloxacin

Assay characteristics

Matrices	***LOD (ppb)***
Milk	6
Serum	2.5
Tissue	4
Meat	7
Egg	9
Urine	7

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

Sample preparation
For milk, serum, tissue, meat, egg and urine 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 minutes 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.