

Technical Datasheet

Analysis Name: Determination of Fluoroquinolones by ELISA

method

Method Number: LIBR 073

Scope Application: This instruction describes a method for

determination of fluoroquinolones antibiotics by ELISA method.

Description: The test is a competitive enzyme

immunoassay performed on a microtiter plate. The wells are coated with sheep antibodies anti-rabbit IgG. Fluoroquinolone standards or sample solutions, horseradish peroxidase labelled with norfloxacin (norfloxacin-HRPO) and rabbit polyclonal anti-fluoroquinolone antibodies are added.

The antibodies are bound by the

immobilised sheep antibodies anti-rabbit

IgG and simultaneously the free

fluoroquinolones and norfloxacin-HPRO

compete for binding to the anti-

fluoroquinolones antibody. After incubation, any unbound molecule is removed in a washing step. The bound enzyme activity is determined by adding a chromogenic substrate. The enzyme converts the colourless chromogen into a coloured (blue) product. The addition of a stop reagent leads to a colour change from blue to yellow. The absorbance is measured with a microplate reader at 450 nm. The colour intensity is inversely proportional to the

intensity is inversely proportional to the fluoroquinolone concentration in the sample.

Sample Weight Required: 100 g

Method Reference:

Analytical Platform: ELISA

Special Information: Method not accredited.

Analyte Reported	Alias	Unit of Measure	Typical Limit of Quantification	Uncertainty
Fluoroquinolones	-	μg/kg	3.0	< 34 %