

# DETERMINACIÓN DE FLUOROQUINOLONAS EN TEJIDO ANIMAL MEDIANTE CROMATOGRFÍA LÍQUIDA ACOPLADA A ESPECTROMETRÍA DE MASAS

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## DETERMINATION OF FLUOROQUINOLONES IN ANIMAL TISSUE BY LIQUID CHROMATOGRAPHY COUPLED WITH MASS SPECTROMETRY

### Abstract

An efficient multiresidue method for determination of fluoroquinolone antibiotics in animal tissue has been developed. Six fluoroquinolone corresponding to acid and basic quinolone were analyzed in fortified animal tissue (shrimp, fish, chicken, turkey, etc) at levels of 10–200 ngg<sup>-1</sup> by Liquid Chromatography Spectrometry Mass. Recoveries for Ciprofloxacin, Sarafloxacin, Enrofloxacin, Danofloxacin, Oxolinic Acid and Flumequine were generally in the range from 93-108%. The limits of detection were 5,0 ngg<sup>-1</sup> for each quinolone in animal tissue. The method was found to be applicable to the analysis of different animal tissue, with limits of quantitation ranging from 10ngg<sup>-1</sup>. Inter-laboratory Proficiency test participation (turkey muscle) has let to evaluate the hardness of the method. Z-score of -0,35 was obtained for Enrofloxacin. For the others quinolones the value was reported as less than limit of quantitation, which was confirmed by the Organizer in his final report.

**Keywords:** Mass Spectrometry, Fluoroquinolone, Proficiency test, Z-score.

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