

Ceftiofur, HRP conjugate

Cat.No:DAG1052

Lot. No. (See product label)

PRODUCT INFORMATION

Storage	Can be stored at 2-8°C for up to 3 months and at -20°C for longer term storage.
Antigen Description	Cephalosporins are a sub-class of β -lactam antibiotics that are classified in generations, with later generations having expanded spectra against aerobic Gram-negative bacilli. Ceftiofur is a third generation cephalosporin antibiotic developed exclusively for veterinary use. It has been approved worldwide for treatment of respiratory disease in swine, cattle, sheep, goats and horses, and has also been approved for foot rot and mastitis in cattle. Ceftiofur has also been approved in various countries for early mortality infections in day-old chicks and turkey poults. It is bactericidal in vitro, and inhibits cell wall synthesis. Ceftiofur is rapidly converted to both free and protein bound metabolites when administered by intramuscular injection, and the free metabolites retain antimicrobial activity. Ceftiofur has been reported to have more complex metabolism than other cephalosporins, due to the cleavage of its thioester bond to yield desfuroylceftiofur and furoic acid. Ceftiofur is used extensively in veterinary medicine and its use in food producing animals could result in potentially harmful concentrations in tissue, organs and milk. The potential risk is reduced by withdrawal of the drug for a fixed period before slaughter, although residual levels may remain.
conjugate	HRP
Source	Antimicrobial Drugs
Form	concentrate
Characteristic	Each conjugate comprises antigen covalently bound to horseradish peroxide and is suitable as a tracer in immunoassay development

Background

Introduction	Ceftiofur is an antibiotic of the cephalosporin type (third generation), licensed for use in veterinary medicine. It was first described in 1987. It is marketed by pharmaceutical company Pfizer as Excenel. It is resistant to the antibiotic resistance enzyme beta-lactamase, and has activity against Gram-positive and Gram-negative bacteria. E. coli strains resistant to ceftiofur have been reported.
Keywords	Ceftiofur; Ceftiofur Free Acid; 5-Thia-1-azabicyclo4.2.0oct-2-ene-2-carboxylic acid, 7-(2Z)-(2-amino-4-thiazolyl)(methoxyimino)acetyl amino-3-(2-furanylcarbonyl)thiomethyl-8-oxo-, (6R,7R)-; Ceftiofur Hydrochloride And Sodium