

产品名称: 托拉菌素 A
 产品别名: Tulathromycin A

生物活性:																														
Description	<p>Tulathromycin A is a macrolide antibiotic. IC50 Value: 1 microg/ml (MIC90 for Pasteurella multocida) [2] Target: Antibacterial in vitro: Two highly pathogenic strains of M. bovis (with minimum inhibitory concentration values for tulathromycin of 1 and >64 microg/ml) were inoculated into 145 calves. Four days after inoculation, calves with clinical BRD were treated subcutaneously with saline or tulathromycin (2.5 mg/kg). Compared with saline, BRD-related withdrawals, peak rectal temperatures, and lung lesion scores were significantly lower for tulathromycin-treated calves (P < .01). Tulathromycin was highly effective in the treatment of BRD due to M. bovis in calves regardless of the minimum inhibitory concentration of the challenge strain (1 or >64 microg/ml) [1]. The lowest concentrations inhibiting the growth of 90% of isolates (MIC90) for tulathromycin were 2 microg/ml for Mannheimia (Pasteurella) haemolytica, 1 microg/ml for Pasteurella multocida (bovine), and 2 microg/ml for Pasteurella multocida (porcine) and ranged from 0.5 to 4 microg/ml for Histophilus somni (Haemophilus somnus) and from 4 to 16 microg/ml for Actinobacillus pleuropneumoniae [2]. in vivo: Each study randomly allocated 250 calves to receive tulathromycin at 2.5 mg/kg and 250 calves to receive either tilmicosin at 10 mg/kg (Colorado site) or florfenicol at 40 mg/kg (Idaho and Texas sites) on arrival at the feedlot. Calves were housed by treatment group in pens with 50 calves/pen [3]. The treatment groups were physiologic saline (n = 160) given SC at 0.02 ml/kg, tulathromycin (n = 320) given SC at 2.5 mg/kg, and tilmicosin (n = 320) given SC at 10 mg/kg [4]. Tulathromycin is a triamilide antimicrobial that has been approved for use in the treatment and prevention of bovine respiratory disease and the treatment of swine respiratory disease. Toxicity: No adverse events related to tulathromycin were reported [4]. Clinical trial:</p>																													
Solvent&Solubility	<p>In Vitro: DMSO : ≥ 45 mg/mL (55.83 mM) * "≥" means soluble, but saturation unknown.</p> <table border="1"> <thead> <tr> <th rowspan="2">Preparing</th> <th colspan="2">Solvent</th> <th colspan="3">Mass</th> </tr> <tr> <th colspan="2">Concentration</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>1 mM</td> <td>1.2406 mL</td> <td>6.2029 mL</td> <td>12.4057 mL</td> <td></td> </tr> <tr> <td>5 mM</td> <td>5 mM</td> <td>0.2481 mL</td> <td>1.2406 mL</td> <td>2.4811 mL</td> <td></td> </tr> <tr> <td>10 mM</td> <td>10 mM</td> <td>0.1241 mL</td> <td>0.6203 mL</td> <td>1.2406 mL</td> <td></td> </tr> </tbody> </table> <p>*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液。一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。 储备液的保存方式和期限: -80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。</p>	Preparing	Solvent		Mass			Concentration		1 mg	5 mg	10 mg	1 mM	1 mM	1.2406 mL	6.2029 mL	12.4057 mL		5 mM	5 mM	0.2481 mL	1.2406 mL	2.4811 mL		10 mM	10 mM	0.1241 mL	0.6203 mL	1.2406 mL	
Preparing	Solvent		Mass																											
	Concentration		1 mg	5 mg	10 mg																									
1 mM	1 mM	1.2406 mL	6.2029 mL	12.4057 mL																										
5 mM	5 mM	0.2481 mL	1.2406 mL	2.4811 mL																										
10 mM	10 mM	0.1241 mL	0.6203 mL	1.2406 mL																										
References	<p>[1]. Villarino N, et al. Pharmacokinetics of tulathromycin in healthy and neutropenic mice challenged intranasally with lipopolysaccharide from Escherichia coli. Antimicrob Agents Chemother. 2012 Aug;56(8):4078-4086. [2]. Godinho KS, et al. Efficacy of tulathromycin in the treatment of bovine respiratory disease associated with induced Mycoplasma bovis infections in young dairy calves. Vet Ther. 2005 Summer;6(2):96-112. [3]. Godinho KS, et al. Minimum inhibitory concentrations of tulathromycin against respiratory bacterial pathogens isolated from clinical cases in European cattle and swine and variability arising from changes in</p>																													

in vitro methodology. Vet Ther. 2005 Summer;6(2):113-21.

[4]. Rooney KA, et al. Efficacy of tulathromycin compared with tilmicosin and florfenicol for the control of respiratory disease in cattle at high risk of developing bovine respiratory disease. Vet Ther. 2005 Summer;6(2):154-66.

[5]. Kilgore WR, et al. Therapeutic efficacy of tulathromycin, a novel triamilide antimicrobial, against bovine respiratory disease in feeder calves. Vet Ther. 2005 Summer;6(2):143-53.



源叶生物