

Product Data Sheet

Tilmicosin

Cat. No.: HY-B0905 CAS No.: 108050-54-0 Molecular Formula: $C_{46}H_{80}N_2O_{13}$ Molecular Weight: 869.13

Target: Bacterial; Antibiotic

Pathway: Anti-infection

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

1M HCl: 100 mg/mL (115.06 mM; ultrasonic and adjust pH to 1 with HCl)

DMSO: 100 mg/mL (115.06 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	1.1506 mL	5.7529 mL	11.5058 mL	
	5 mM	0.2301 mL	1.1506 mL	2.3012 mL	
	10 mM	0.1151 mL	0.5753 mL	1.1506 mL	

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (2.88 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (2.88 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (2.88 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Tilmicosin is a macrolide antibiotic, is used for the research of bovine respiratory disease and ovine respiratory disease associated with Mannheimia (Pasteurella) haemolytica.
IC ₅₀ & Target	Macrolide

CUSTOMER VALIDATION

- Microorganisms. 2024 Jan 25, 12(2), 256.
- Vet Microbiol. 2024 May, 292, 110046.

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[1]. Micotil 300 New Animal Drug Application

Caution: Product has not been fully validated for medical applications. For research use only.

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