Product data sheet



MedKoo Cat#: 329858		
Name: Gamithromycin		''' N
CAS#: 145435-72-9		
Chemical Formula: C ₄₀ H ₇₆ N ₂ O ₁₂		E HO SOOH
Exact Mass: 776.5398		N O OU
Molecular Weight: 777.05		
Product supplied as:	Powder]
Purity (by HPLC):	≥ 98%	OH O
Shipping conditions	Ambient temperature	HO O
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.] OH
_	In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Gamithromycin is an animal used antibiotics. Gamithromycin is active in vitro against the bacterial agents most commonly associated with bronchopneumonia in older foals.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

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Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	16.0	20.59
DMSO	68.33	87.94
Ethanol	58.0	74.64
Ethanol:PBS (pH 7.2)	0.5	0.64
(1:1)		

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.29 mL	6.43 mL	12.87 mL
5 mM	0.26 mL	1.29 mL	2.57 mL
10 mM	0.13 mL	0.64 mL	1.29 mL
50 mM	0.03 mL	0.13 mL	0.26 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

- 1. Hamel D, Richard-Mazet A, Voisin F, Böhne I, Fraisse F, Rauh R, Huang R, Kellermann M, Letendre L, Dumont P, Rehbein S. Gamithromycin in swine: Pharmacokinetics and clinical evaluation against swine respiratory disease. Vet Med Sci. 2021 Mar;7(2):455-464. doi: 10.1002/vms3.375. Epub 2020 Oct 15. PMID: 33058489; PMCID: PMC8025653.
- 2. Hildebrand F, Venner M, Giguère S. Efficacy of gamithromycin for the treatment of foals with mild to moderate bronchopneumonia. J Vet Intern Med. 2015 Jan;29(1):333-8. doi: 10.1111/jvim.12504. PMID: 25619521; PMCID: PMC4858060.

7. Bioactivity

Biological target:

Gamithromycin is an antimicrobial agent which can inhibit the growth of MmmSC strains B237 and Tan8 with MICs of 0.00012 and 0.00006 $\mu g/mL$, respectively.

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In vitro activity

TBD

In vivo activity

The clinical scores, number of abscesses and the abscess scores after 1 and 2 weeks of treatment were significantly lower for foals treated with GAM (gamithromycin) or AZM-RIF compared to control foals (Fig 1). The WBC count of foals treated with GAM was significantly higher than that of foals treated with AZM-RIF on week 3 of treatment (Fig 1B).

Reference: J Vet Intern Med. 2015 Jan;29(1):333-8. https://pubmed.ncbi.nlm.nih.gov/25619521/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.