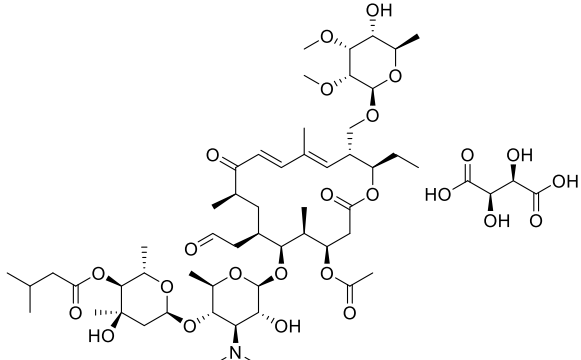


Product data sheet



MedKoo Cat#: 464768 Name: Tylvalosin tartrate CAS#: 63428-13-7 (tartrate) Chemical Formula: C ₅₇ H ₉₃ NO ₂₅ Exact Mass: Molecular Weight: 1192.35		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Tylvalosin is a macrolide antibiotic. It is active against *S. aureus*, *E. coli*, and *P. multocida* (MICs = 2, 128, and 128 µg/ml, respectively). Tylvalosin (5 and 10 µg/ml) reduces LPS-induced production of pro-inflammatory cytokines, prostaglandin E2 (PGE2), and nitric oxide in RAW 264.7 cells. It reduces the severity of lung lesions in pigs infected with *M. hyopneumoniae* and *P. multocida* when administered at a dose of 10 mg/kg per day in the drinking water. Formulations containing tylvalosin have been used in the treatment and metaphylaxis of enzootic pneumonia caused by *M. hyopneumoniae* in pigs.

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

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	30	25.16
DMF	30	25.16
Ethanol	30	25.16

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	0.84 mL	4.19 mL	8.39 mL
5 mM	0.17 mL	0.84 mL	1.68 mL
10 mM	0.08 mL	0.42 mL	0.84 mL
50 mM	0.02 mL	0.08 mL	0.17 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

Guedes RM, França SA, Machado GS, Blumer MA, da Costa Cruz EC Jr. Use of tylvalosin-medicated feed to control porcine proliferative enteropathy. Vet Rec. 2009 Sep 19;165(12):342-5. doi: 10.1136/vr.165.12.342. PMID: 19767637.

7. Bioactivity

Biological target:

Tylvalosin tartrate (Acetylisovaleryltylosin tartrate) is a macrolide antibiotic that can against Gram-positive bacteria.

Product data sheet



In vitro activity

TBD

In vivo activity

Clinical signs of the disease were more evident in the untreated group than in the treated group. The average daily weight gain, average daily feed consumption and feed conversion efficiency were better in the treated group. The combined length of intestine with lesions was 2847 cm in the untreated group and 183 cm in the treated group. The tylvalosin treatment significantly reduced the level of *L. intracellularis* infection; almost half of the treated pigs were IHC-negative compared with 3.3 per cent of the untreated pigs.

Reference: Guedes RM, França SA, Machado GS, Blumer MA, da Costa Cruz EC Jr. Use of tylvalosin-medicated feed to control porcine proliferative enteropathy. Vet Rec. 2009 Sep 19;165(12):342-5. doi: 10.1136/vr.165.12.342. PMID: 19767637.

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.