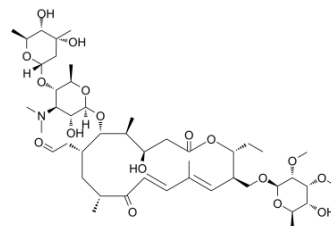


## Tylosin

<b>Cat. No.:</b>	HY-B0519A		
<b>CAS No.:</b>	1401-69-0		
<b>Molecular Formula:</b>	C <sub>46</sub> H <sub>77</sub> NO <sub>17</sub>		
<b>Molecular Weight:</b>	916.1		
<b>Target:</b>	Bacterial; Antibiotic		
<b>Pathway:</b>	Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (109.16 mM)  
 H<sub>2</sub>O : 0.67 mg/mL (0.73 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.0916 mL	5.4579 mL	10.9158 mL
	5 mM	0.2183 mL	1.0916 mL	2.1832 mL
	10 mM	0.1092 mL	0.5458 mL	1.0916 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (2.73 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (2.73 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (2.73 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Tylosin is a macrolide antibiotic for veterinary use. Tylosin is active against certain Gram-positive and Gram-negative bacteria. Tylosin is commonly used in the research of dysentery and atrophic rhinitis in pigs, pneumonia, arthritis, and mastitis in cattle, and mycoplasma infections in poultry<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

bacteria<sup>[1]</sup>

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## CUSTOMER VALIDATION

- Chemosphere. 2019 Jun;225:378-387.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. L-W Ji, et al. Comparative pharmacokinetics and bioavailability of tylosin tartrate and tylosin phosphate after a single oral and i.v. administration in chickens. J Vet Pharmacol Ther. 2014 Jun;37(3):312-5.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA