Product Data Sheet

Valnemulin hydrochloride

Cat. No.: HY-B0027 CAS No.: 133868-46-9 Molecular Formula: $C_{31}H_{53}CIN_2O_5S$

Molecular Weight: 601.28

Target: Bacterial; Antibiotic Pathway: Anti-infection

4°C, sealed storage, away from moisture Storage:

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro DMSO: $\geq 100 \text{ mg/mL} (166.31 \text{ mM})$

> H₂O: 100 mg/mL (166.31 mM; Need ultrasonic) * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.6631 mL	8.3156 mL	16.6312 mL
	5 mM	0.3326 mL	1.6631 mL	3.3262 mL
	10 mM	0.1663 mL	0.8316 mL	1.6631 mL

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

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 100 mg/mL (166.31 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (4.16 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.16 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.16 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Valnemulin hydrochloride is a pleuromutilin antibiotic which inhibits protein synthesis in bacteria by binding the peptidyl transferase enzyme in the 50s ribosomal subunit.

CUSTOMER VALIDATION

- Cell Rep. 2023 Mar 20;42(3):112275.
- J Biol Chem. 2021, 100525.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. L. Stipkovits, et al. The efficacy of valnemulin (Econor®) in the control of disease caused by experimental infection of calves with Mycoplasma bovis. Research in Veterinary Science, Volume 78, Issue 3, June 2005, Pages 207–215.

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

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