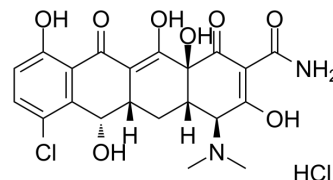


Demeclocycline hydrochloride

Cat. No.:	HY-17560
CAS No.:	64-73-3
Molecular Formula:	C ₂₁ H ₂₂ Cl ₂ N ₂ O ₈
Molecular Weight:	501.31
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (199.48 mM; Need ultrasonic)
H₂O : 20 mg/mL (39.90 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.9948 mL	9.9739 mL	19.9477 mL
	5 mM	0.3990 mL	1.9948 mL	3.9895 mL
	10 mM	0.1995 mL	0.9974 mL	1.9948 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 (4.99 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.5 mg/mL (4.99 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Demeclocycline hydrochloride is a tetracycline antibiotic; is an antibiotic in the treatment of Lyme disease, acne, and bronchitis.

CUSTOMER VALIDATION

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

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Cherrill DA, et al. Demeclocycline treatment in the syndrome of inappropriate antidiuretic hormone secretion. *Ann Intern Med.* 1975 Nov;83(5):654-6.
- [2]. Singer I, et al. Demeclocycline-induced nephrogenic diabetes insipidus. In-vivo and in-vitro studies. *Ann Intern Med.* 1973 Nov;79(5):679-83.
- [3]. Forrest JN Jr, et al. Superiority of demeclocycline over lithium in the treatment of chronic syndrome of inappropriate secretion of antidiuretic hormone. *N Engl J Med.* 1978 Jan 26;298(4):173-7.
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Caution: Product has not been fully validated for medical applications. For research use only.

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