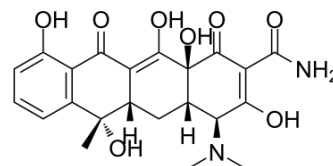


Tetracycline

Cat. No.:	HY-A0107
CAS No.:	60-54-8
Molecular Formula:	C ₂₂ H ₂₄ N ₂ O ₈
Molecular Weight:	444.43
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years



* The compound is unstable in solutions, freshly prepared is recommended.

SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (281.26 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.2501 mL	11.2504 mL	22.5007 mL
	5 mM	0.4500 mL	2.2501 mL	4.5001 mL
	10 mM	0.2250 mL	1.1250 mL	2.2501 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: ≥ 2.08 mg/mL (4.68 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: ≥ 2.08 mg/mL (4.68 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Tetracycline is a broad-spectrum antibiotic, exhibiting activity against a wide range of gram-positive and gram-negative bacteria.

IC₅₀ & Target

Bacterial^[1]

CUSTOMER VALIDATION

- **Cell Res.** 2020 Aug 24.
- **Adv Sci.** 2020 Jul.
- **MBio.** 2019 Aug 27;10(4). pii: e01949-19.
- **Chemosphere.** 2019 Jun;225:378-387.
- **Exp Cell Res.** 2020 May 13;112090.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Chopra I, et al. Tetracycline antibiotics: mode of action, applications, molecular biology, and epidemiology of bacterial resistance. *Microbiol Mol Biol Rev.* 2001 Jun;65(2):232-60.

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

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