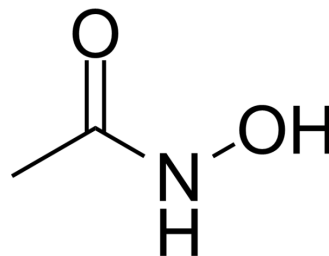


Acetohydroxamic acid

Cat. No.:	HY-B1235		
CAS No.:	546-88-3		
Molecular Formula:	C ₂ H ₃ NO ₂		
Molecular Weight:	75.07		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (3330.23 mM; Need ultrasonic)
 H₂O : 100 mg/mL (1332.09 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		13.3209 mL	66.6045 mL	133.2090 mL
	5 mM		2.6642 mL	13.3209 mL	26.6418 mL
	10 mM		1.3321 mL	6.6605 mL	13.3209 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (1332.09 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (27.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (27.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (27.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Acetohydroxamic acid is a potent and irreversible inhibitor of bacterial and plant urease and also used as adjunctive therapy in chronic urinary infection. Target: Urease. Acetohydroxamic acid selectively inhibits arachidonate 5-lipoxygenase and thus has potential use in the treatment of asthma.

CUSTOMER VALIDATION

- bioRxiv. 2021 Jan 5.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Sharma M, et al. Biotransformation of Acetamide to Acetohydroxamic Acid at Bench Scale Using Acyl Transferase Activity of Amidase of *Geobacillus pallidus* BTP-5x MTCC 9225. *Indian J Microbiol.* 2012 Mar;52(1):76-82.

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

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