

Clavulanate lithium

Chemical Properties

CAS No. : 61177-44-4
 Formula: C₈H₈LiNO₅
 Molecular Weight: 205.09
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Clavulanate lithium (Clavulanic acid lithium) is an inhibitor of β -lactamase.
Targets(IC50)	Antibacterial,Antibiotic
In vitro	Combination of Clavulanate lithium with beta-lactam antibiotics prevents microbial lactamases from inactivating antibiotics, but when administered alone has weak antimicrobial activity against most organisms, causing relatively slow growth inhibition [1].

Solubility Information

Solubility	H ₂ O: 44.8 mg/mL (218.44 mM),Sonication is recommended. DMSO: 2.55 mg/mL (12.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.25 mg/mL (1.22 mM),Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8759 mL	24.3795 mL	48.7591 mL
5 mM	0.9752 mL	4.8759 mL	9.7518 mL
10 mM	0.4876 mL	2.438 mL	4.8759 mL
50 mM	0.0975 mL	0.4876 mL	0.9752 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Reading C, et al. Clavulanic Acid: a Beta-Lactamase-Inhibiting Beta-Lactam from *Streptomyces clavuligerus*. *Antimicrob Agents Chemother*. 1977 May; 11(5): 852-857.

Stokes DH, et al. Bactericidal effects of amoxicillin/clavulanic acid against intracellular *Legionella pneumophila* in tissue culture studies. *J Antimicrob Chemother*. 1989 Apr;23(4):547-56.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481