

Nacubactam

Chemical Properties

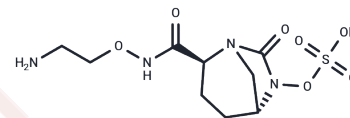
CAS No. : 1452458-86-4

Formula: C₉H₁₆N₄O₇S

Molecular Weight: 324.31

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	Nacubactam (OP0595 free acid) is a potent non- β -lactam β -lactamase inhibitor, effective against class A and class C β -lactamases.
Targets(IC50)	Antibacterial

Solubility Information

Solubility	H ₂ O: 50 mg/mL (154.17 mM),Sonication and heating to 60°C are recommended. DMSO: 250 mg/mL (770.87 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (15.42 mM),Sonication is recommended. <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	3.0835 mL	15.4173 mL	30.8347 mL
5 mM	0.6167 mL	3.0835 mL	6.1669 mL
10 mM	0.3083 mL	1.5417 mL	3.0835 mL
50 mM	0.0617 mL	0.3083 mL	0.6167 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

Monogue ML, et al. In Vivo Efficacy of Meropenem with a Novel Non- β -Lactam- β -Lactamase Inhibitor, Nacubactam, against Gram-Negative Organisms Exhibiting Various Resistance Mechanisms in a Murine Complicated Urinary Tract Infection Model. *Antimicrob Agents Chemother.* 2018 Aug 27;62(9).

Livermore DM, et al. Activity of OP0595/ β -lactam combinations against Gram-negative bacteria with extended-spectrum, AmpC and carbapenem-hydrolysing β -lactamases. *J Antimicrob Chemother.* 2015 Nov;70(11):3032-41.

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