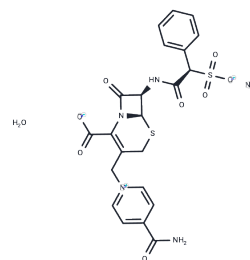


Cefsulodin (sodium salt hydrate)

Chemical Properties

CAS No. :	1426397-23-0
Formula:	C ₂₂ H ₁₉ N ₄ O ₈ S ₂ NaH ₂ O
Molecular Weight:	531.5
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	Cefsulodin is a β -lactam antibiotic that lyses actively-growing <i>E. coli</i> by binding specifically to the intermembrane proteins, penicillin-binding proteins 1a and b, whose transglycosylase and transpeptidase activities are involved in cell elongation and septation. ¹ Cefsulodin has been used in combination with other β -lactam antibiotics, such as cefazolin as a strategy to circumvent drug resistance. ²
Targets(IC50)	Others, Antibacterial, Antibiotic

Solubility Information

Solubility	DMSO: 0.1 mg/mL (0.19 mM), Sonication is recommended. PBS (pH 7.2): 10 mg/mL (18.81 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8815 mL	9.4073 mL	18.8147 mL
5 mM	0.3763 mL	1.8815 mL	3.7629 mL
10 mM	0.1881 mL	0.9407 mL	1.8815 mL
50 mM	0.0376 mL	0.1881 mL	0.3763 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

Jacoby, G.H., and Young, K.D. Cell cycle-independent lysis of *Escherichia coli* by cefsulodin, an inhibitor of penicillin-binding proteins 1a and 1b. *Journal of Bacteriology* 173(1):1-5 (1991)

Sarkar, S.K., Dutta, M., Kumar, A., et al. Sub-inhibitory cefsulodin sensitization of *E. coli* to β -lactams is mediated by PBP1b inhibition. *PLoS One* 7(11):2012)

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