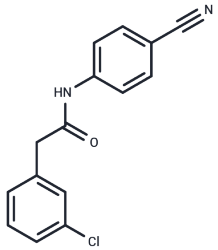
Data Sheet (Cat.No.T72047)

TargetMol

Antibacterial agent 125

Chemical Properties



CAS No. : 1274611-43-6

Formula: C15H11ClN2O

Molecular Weight: 270.71

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	Antibacterial Agent 125 exhibits potent antimicrobial activity against clinically relevant Gram-positive pathogens, displaying Minimum Inhibitory Concentration (MIC) 50 values ranging from 0.25 to 8 μM. It is suitable for researching antimicrobial resistance.
Targets(IC50)	Antibacterial
In vitro	Antibacterial agent 125 exhibits potent inhibition against methicillin-resistant Staphylococcus aureus strains while displaying no cytotoxic effects in human cells.[1] Antibacterial agent 125 does not promote resistance even after ten passages and demonstrates a moderate capacity to hinder biofilm formation.[1]

Solubility Information

Solubility	DMSO: 225 mg/mL (831.15 mM),Sonication and heating to 60℃ are 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 (18.47 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.694 mL	18.4699 mL	36.9399 mL
5 mM	0.7388 mL	3.694 mL	7.388 mL
10 mM	0.3694 mL	1.847 mL	3.694 mL
50 mM	0.0739 mL	0.3694 mL	0.7388 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

Brunelli F, et al. Isocyanides in med chem: A scaffold hopping approach for the identification of novel 4-isocyanophenylamides as potent antibacterial agents against methicillin-resistant Staphylococcusaureus. Eur J Med Chem. 2023 ; 246:114950.