Data Sheet (Cat.No.T23858)

TargetMol

WCK-5153

Chemical Properties

CAS No. : 1436862-38-2

Formula: C12H19N5O7S

Molecular Weight: 377.37

Storage: Store at low temperature
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	WCK-5153 is an enhancer of β-Lactamase and an inhibitor of PBP2 with antimicrobial activities against Pseudomonas aeruginosa. WCK-5153 can be used in studies about the treatment of serious infections caused by highly drug-resistant Gram-negative pathogens.
Targets(IC50)	Antibacterial

Solubility Information

Solubility	DMSO: 3.78 mg/mL (10.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6499 mL	13.2496 mL	26.4992 mL
5 mM	0.530 mL	2.6499 mL	5.2998 mL
10 mM	0.265 mL	1.325 mL	2.6499 mL
50 mM	0.053 mL	0.265 mL	0.530 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

Moya B, et al. WCK 5107 (Zidebactam) and WCK 5153 Are Novel Inhibitors of PBP2 Showing Potent "β-Lactam Enhancer" Activity against Pseudomonas aeruginosa, Including Multidrug-Resistant Metallo-β-Lactamase-Producing High-Risk Clones. Antimicrob Agents Chemother. 2017 May 24;61(6):e02529-16.
Papp-Wallace KM, et al. Strategic Approaches to Overcome Resistance against Gram-Negative Pathogens Using β-Lactamase Inhibitors and β-Lactam Enhancers: Activity of Three Novel Diazabicyclooctanes WCK 5153, Zidebactam (WCK 5107), and WCK 4234. J Med Chem. 2018 May 10;61(9):4067-4086.
Moya B, et al. WCK 5107 (Zidebactam) and WCK 5153 Are Novel Inhibitors of PBP2 Showing Potent "β-Lactam Enhancer" Activity against Pseudomonas aeruginosa, Including Multidrug-Resistant Metallo-β-Lactamase-Producing High-Risk Clones. Antimicrob Agents Chemother. 2017 May 24;61(6). pii: e02529-16.
Moya B, et al. In Vitro and In Vivo Activities of β-Lactams in Combination with the Novel β-Lactam Enhancers Zidebactam and WCK 5153 against Multidrug-Resistant Metallo-β-Lactamase-Producing Klebsiella pneumoniae. Antimicrob Agents Chemother. 2019 Apr 25;63(5):e00128-19.

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