

## LpxC-IN-5

## Chemical Properties

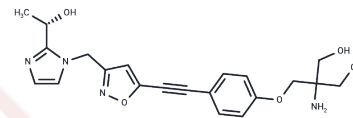
CAS No. : 2253951-38-9

Formula: C<sub>21</sub>H<sub>24</sub>N<sub>4</sub>O<sub>5</sub>

Molecular Weight: 412.446

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	LpxC-IN-5 is a potent, non-hydroxamate inhibitor of LpxC, which is an enzyme known as UDP-3-O-acyl-N-acetylglucosamine deacetylase. It exhibits an IC <sub>50</sub> value of 20 nM. Furthermore, LpxC-IN-5 displays antibacterial activity against various strains including E. coli ATCC25922, P. aeruginosa ATCC27853, K. pneumoniae ATCC13883, and P. aeruginosa 5567. The minimum inhibitory concentration (MIC) values for these strains are 16 µg/mL, 4 µg/mL, 64 µg/mL, and 4 µg/mL, respectively.
Targets(IC <sub>50</sub> )	Others, Antibacterial
In vitro	LpxC, a zinc metalloenzyme, catalyzes the initial committed step in the biosynthesis of Lipid A, a crucial element of the cell envelope in Gram-negative bacteria[1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4245 mL	12.1227 mL	24.2454 mL
5 mM	0.4849 mL	2.4245 mL	4.8491 mL
10 mM	0.2425 mL	1.2123 mL	2.4245 mL
50 mM	0.0485 mL	0.2425 mL	0.4849 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

Yamada Y, et al. Fragment-Based Discovery of Novel Non-Hydroxamate LpxC Inhibitors with Antibacterial Activity [published online ahead of print, 2020 Nov 19]. J Med Chem. 2020;10.1021/acs.jmedchem.0c01215.

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