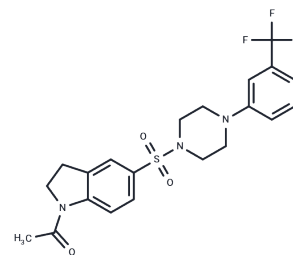


LpxH-IN-AZ1

Chemical Properties

CAS No. :	901260-40-0
Formula:	C ₂₁ H ₂₂ F ₃ N ₃ O ₃ S
Molecular Weight:	453.48
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	LpxH-IN-AZ1 is a potent inhibitor of the UDP-2,3-diacylglucosamine pyrophosphate hydrolase, LpxH, and sulfonylpiperazine compounds. LpxH-IN-AZ1 exhibits antimicrobial activity and inhibits <i>Klebsiella pneumoniae</i> with an IC ₅₀ of 0.36 μM.
Targets(IC ₅₀)	Antibacterial
In vitro	LpxH-IN-AZ1 (1 μM) inhibits <i>K. pneumoniae</i> LpxH activity by 75% and <i>E. coli</i> LpxH activity by 83% when 100 μM UDPDAGn is present[1]. Additionally, it exhibits IC ₅₀ values of 0.36 μM for <i>K. pneumoniae</i> LpxH and 0.14 μM for <i>E. coli</i> LpxH[1].

Solubility Information

Solubility	DMSO: 22.67 mg/mL (50 mM), Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2052 mL	11.0258 mL	22.0517 mL
5 mM	0.441 mL	2.2052 mL	4.4103 mL
10 mM	0.2205 mL	1.1026 mL	2.2052 mL
50 mM	0.0441 mL	0.2205 mL	0.441 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.

Reference

Cho J, et al. Structural basis of the UDP-diacylglucosamine pyrophosphohydrolase LpxH inhibition by sulfonyl piperazine antibiotics. *Proc Natl Acad Sci U S A*. 2020 Feb 25;117(8):4109-4116.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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