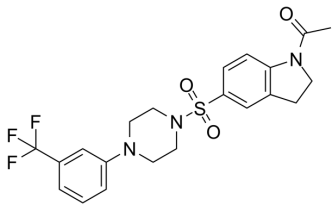
LpxH-IN-AZ1

Cat. No.:	HY-130836
CAS No.:	901260-40-0
Molecular Formula:	$C_{21}H_{22}F_3N_3O_3S$
Molecular Weight:	453.48
Target:	Bacterial
Pathway:	Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (55.13 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2052 mL	11.0258 mL	22.0517 mL
	5 mM	0.4410 mL	2.2052 mL	4.4103 mL
	10 mM	0.2205 mL	1.1026 mL	2.2052 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

LpxH-IN-AZ1, a sulfonyl piperazine compound, is a potent UDP-2,3-diacylglucosamine pyrophosphate hydrolase LpxH inhibitor. LpxH-IN-AZ1 is a potent inhibitor of Klebsiella pneumoniae LpxH with IC_{50} of 0.36 μM [1].

In Vitro

LpxH-IN-AZ1 displays IC_{50} values of 0.36 μM against K. pneumoniae LpxH and 0.14 μM against E. coli LpxH, respectively[1]. LpxH-IN-AZ1 (1 μM) inhibits 75% of the activity of K. pneumoniae LpxH and 83% of the activity of E. coli LpxH in the presence of 100 μM UDPDAGn[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA