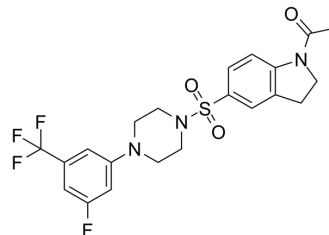


JH-LPH-28

Cat. No.:	HY-130837		
CAS No.:	2414592-36-0		
Molecular Formula:	C ₂₁ H ₂₁ F ₄ N ₃ O ₃ S		
Molecular Weight:	471.47		
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 : 12.5 mg/mL (26.51 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.1210 mL	10.6051 mL	21.2103 mL
	5 mM	0.4242 mL	2.1210 mL	4.2421 mL
	10 mM	0.2121 mL	1.0605 mL	2.1210 mL

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

BIOLOGICAL ACTIVITY

Description

JH-LPH-28, a sulfonyl piperazine analog, is a potent UDP-2,3-diacetylglucosamine pyrophosphate hydrolase LpxH inhibitor. JH-LPH-28 displays outstanding antibiotic activity with a MIC value of 0.83 µg/mL^[1].

In Vitro

JH-LPH-28 displays IC₅₀ values of 0.11 µM against *K. pneumoniae* LpxH and 0.083 µM against *E. coli* LpxH, respectively^[1]. JH-LPH-28 potently inhibits bacterial growth at 2.8 µg/mL and displays a MIC value of 1.6 µg/mL against wild-type *K. pneumoniae* (ATCC 10031)^[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-diacetylglucosamine 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.

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