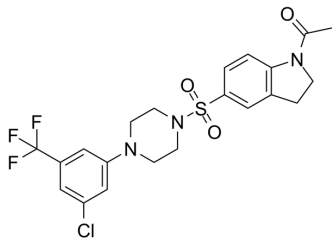
JH-LPH-33

Cat. No.:	HY-130838
CAS No.:	2414590-04-6
Molecular Formula:	$C_{21}H_{21}ClF_3N_3O_3S$
Molecular Weight:	487.92
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 : 2 mg/mL (4.10 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0495 mL	10.2476 mL	20.4952 mL
	5 mM	---	---	---
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

JH-LPH-33, a sulfonyl piperazine analog, is a potent UDP-2,3-diacylglucosamine pyrophosphate hydrolase LpxH inhibitor. JH-LPH-33 displays outstanding antibiotic activity with a MIC value of 0.66 μg/mL[1].

In Vitro

JH-LPH-33 displays IC_{50} values of 0.026 μM against K. pneumoniae LpxH and 0.046 μM against E. coli LpxH, respectively[1].
JH-LPH-33 potently inhibits bacterial growth at 1.6 μg/mL and displayes a MIC value of >64 μg/mL against E. coli[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.

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