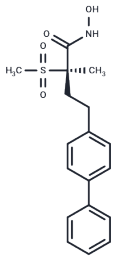
# Data Sheet (Cat.No.T41275)

PF-04753299

## Chemical Properties



CAS No. : 1289620-49-0

Formula: C18H21NO4S

Molecular Weight: 347.43

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 | PF-04753299 is a potent and selective inhibitor of UDP-3-O-(R-3-hydroxymyristol)-N-acetylglucosamine deacetylase (LpxC), demonstrating bactericidal effects against gonococcal isolates and exhibiting inhibitory activity against E. coli, P. aeruginosa, and K. pneumoniae, with minimum inhibitory concentration (MIC) 90 values of 2 μg/ml, 4 μg/ml, and 16 μg/ml, respectively. This compound is utilized in researching gram-negative bacterial infections [1]. |
| Targets(IC50) | Others,Antibacterial |
| In vivo | Rats were subjected to intraperitoneal challenge with Pseudomonas aeruginosa strain UC12120, a penicillin-resistant, quinolone-susceptible clinical isolate (1a Minimum Inhibitory Concentration MIC = 0.25 μg/mL), at 0.5 hr and 4 hr post-treatment with PF-04753299 (Subcutaneous Dose; Vehicle: 40% β-cyclodextrin dissolved in water). At 24 h post-infection, animals were necropsied and the bacterial load on the spleen was subsequently determined. The dose of compound required to reduce the bacterial load by 50% (ED50) was determined to be 35 mg/kg compared to untreated animals [2]. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 70 mg/mL (201.48 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.8783 mL | 14.3914 mL | 28.7828 mL |
| 5 mM | 0.5757 mL | 2.8783 mL | 5.7566 mL |
| 10 mM | 0.2878 mL | 1.4391 mL | 2.8783 mL |
| 50 mM | 0.0576 mL | 0.2878 mL | 0.5757 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

Constance M John, et al. Treatment of human challenge and MDR strains of Neisseria gonorrhoeae with LpxC inhibitors. J Antimicrob Chemother. 2018 Aug 1;73(8):2064-2071.
Brown MF, et al. Potent inhibitors of LpxC for the treatment of Gram-negative infections. J Med Chem. 2012 Jan 26; 55(2):914-23.





Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481