

AU1235

Chemical Properties

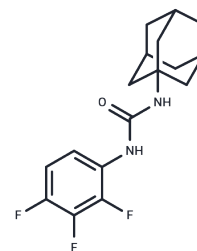
CAS No. : 1338780-86-1

Formula: C₁₇H₁₉F₃N₂O

Molecular Weight: 324.34

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	AU1235 is a Mycobacterium tuberculosis inhibitor.
Targets(IC50)	Antibacterial
In vitro	AU1235 has a MIC of 0.1 µg/mL (0.3 µM) (minimum bactericidal concentration of 0.1 µg/mL). AU1235 is similarly active against MDR clinical isolates of M. tb displaying resistance to isoniazid, rifampicin, and pyrazinamide in addition to streptomycin, fluoroquinolones and/or ethambutol. AU1235 also inhibits Mycobacterium smegmatis and Mycobacterium fortuitum (MICs: 3.2 to 6.4 µg/mL). AU1235 (10 times MIC) does not increase the killing effect within the first 7 days indicating that the killing is time-dependent rather than concentration-dependent. In an anaerobic model involving non-replicating M. tb H37Rv bacilli, AU1235 at 10 µg/mL shows no detectable activity suggesting that it acts on a biosynthetic pathway required for active bacterial multiplication. AU1235 does not inhibit the biosynthesis of mycolic acids per se but specifically their ability to be transferred onto their cell wall and outer membrane acceptors.

Solubility Information

Solubility	DMSO: 3.25 mg/mL (10.02 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0832 mL	15.4159 mL	30.8318 mL
5 mM	0.6166 mL	3.0832 mL	6.1664 mL
10 mM	0.3083 mL	1.5416 mL	3.0832 mL
50 mM	0.0617 mL	0.3083 mL	0.6166 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

Grzegorzewicz AE, et al. Inhibition of mycolic acid transport across the Mycobacterium tuberculosis plasma membrane. Nat Chem Biol. 2012 Feb 19;8(4):334-41.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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