

ATB107 hydrochloride

Chemical Properties

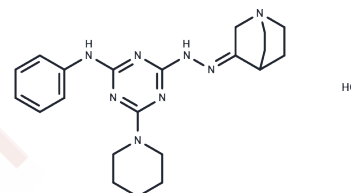
CAS No. :

Formula: C₂₁H₂₉ClN₈

Molecular Weight: 428.96

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	ATB107 hydrochloride is a novel and potent inhibitor of indole-3-glycerol phosphate synthase (IGPS) with a KD of 3 μ M.
Targets(IC50)	Others
In vitro	The minimum inhibitory concentration (MIC) of ATB107 hydrochloride is 0.1 μ g/mL for <i>M. tuberculosis</i> H37Ra. ATB107 hydrochloride also has high activity against <i>M. tuberculosis</i> H37Rv, with an MIC of 0.1 μ g/mL. All 50 fully susceptible clinical isolates tested are susceptible to ATB107 at 1 μ g/mL; of these, 41 (82%) are susceptible to ATB107 at 0.1 μ g/mL. The results also show that 67 (83.8%) multidrug-resistant TB (MDR-TB) isolates are susceptible to ATB107 hydrochloride at 1 μ g/mL, and 25 (31.3%) isolates are susceptible to ATB107 hydrochloride at 0.1 μ g/mL. Results show that the binding ability of ATB107 hydrochloride is well correlated with its concentrations. At the highest concentration of 200 μ g/mL, ATB107 hydrochloride can inhibit cell proliferation, with cell survival of about 60%. With the lower concentration of 50 μ g/mL, cell survival is more than 80% for ATB107 hydrochloride[1].

Solubility Information

Solubility	DMSO: 4.29 mg/mL (10 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	2.3312 mL	11.6561 mL	23.3122 mL
5 mM	0.4662 mL	2.3312 mL	4.6624 mL
10 mM	0.2331 mL	1.1656 mL	2.3312 mL
50 mM	0.0466 mL	0.2331 mL	0.4662 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

Shen H, et al. A novel inhibitor of indole-3-glycerol phosphate synthase with activity against multidrug-resistant Mycobacterium tuberculosis. FEBS J. 2009 Jan;276(1):144-54.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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