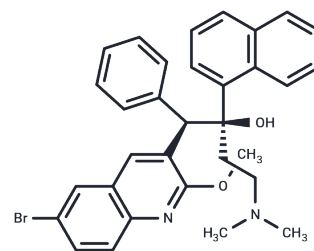


Bedaquiline

Chemical Properties

CAS No. :	843663-66-1
Formula:	C ₃₂ H ₃₁ BrN ₂ O ₂
Molecular Weight:	555.5
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Bedaquiline (R207910) is an anti-tuberculosis drug which selectively inhibit the mycobacterial energy metabolism i.e. ATP synthesis and found to be effective against all states of Mycobacterium tuberculosis.
Targets(IC50)	Antibacterial,Antibiotic
In vitro	Bedaquiline inhibits the growth of TDR M. tuberculosis strains, with MIC values ranging from 0.125 to 0.5 mg/L[1]. Among slowly growing mycobacteria (SGM), bedaquiline exhibits the highest activity against Mycobacterium avium with MIC50 and MIC90 values of 0.03 and 16 mg/L, respectively. Among rapidly growing mycobacteria (RGM), Mycobacterium abscessus subsp. abscessus (M. abscessus) and Mycobacterium abscessus subsp. massiliense (M. massiliense) seem more susceptible to bedaquiline than Mycobacterium fortuitum, with MIC50 and MIC90 values of 0.13 and >16 mg/L, respectively, for both species. Bedaquiline also shows moderate in vitro activity against NTM species[2]. Bedaquiline has an excellent in vitro activity against Mycobacterium tuberculosis, including multidrug resistant M tuberculosis[3].

Solubility Information

Solubility	DMSO: 5.56 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	1.8002 mL	9.0009 mL	18.0018 mL
5 mM	0.360 mL	1.8002 mL	3.6004 mL
10 mM	0.180 mL	0.9001 mL	1.8002 mL
50 mM	0.036 mL	0.180 mL	0.360 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.

Reference

Jang JC, et al. Bedaquiline susceptibility test for totally drug-resistant tuberculosis Mycobacterium tuberculosis. J Microbiol. 2017 Apr 20.