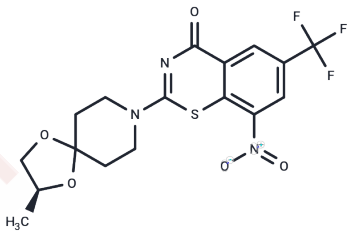
Data Sheet (Cat.No.T3582)

TargetMol

BTZ043

Chemical Properties



CAS No. : 1161233-85-7

Formula: C17H16F3N3O5S

Molecular Weight: 431.39

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	BTZ043 is a DprE1 inhibitor with nanomolar bactericidal activity against Mycobacterium tuberculosis in vitro.
Targets(IC50)	Antibacterial,Antibiotic,DprE1
In vitro	The inhibition of BTZ-resistant DprE1 followed the trend observed in the MIC measurements, with the C387 g mutant being more resistant to inhibition by PyrBTZ01, PyrBTZ02, and BTZ043 (7- to 9-fold increases in IC50) than the C387S mutant (2.5- to 4-fold increases in IC50).
In vivo	BTZ-043 was administered at 100 mg/kg (b.i.d., p.o.), and sulfamethoxazole/trimethoprim (SXT), at 100 mg/kg sulfamethoxazole, was used as a positive control.

Solubility Information

Solubility	DMSO: 15.6 mg/mL (36.16 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1.5 mg/mL (3.48 mM),Sonication is recommended. 10% DMSO+90% Saline: < 1.56 mg/mL (3.62 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1.56 mg/mL (3.62 mM),Solution. 10% DMSO+90% Corn oil: < 1.56 mg/mL (3.62 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% (20% SBE-β-CD in Saline): < 1.56 mg/mL (3.62 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3181 mL	11.5904 mL	23.1809 mL
5 mM	0.4636 mL	2.3181 mL	4.6362 mL
10 mM	0.2318 mL	1.159 mL	2.3181 mL
50 mM	0.0464 mL	0.2318 mL	0.4636 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

Makarov V, et al. Science, 2009, 324(5928), 801-804.
Lechartier B, et al. Antimicrob Agents Chemother, 2012.

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