Data Sheet (Cat.No.T0810)

TargetMol

Ethambutol dihydrochloride

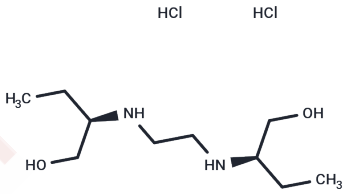
Chemical Properties

CAS No. : 1070-11-7

Formula: C10H26Cl2N2O2

Molecular Weight: 277.24

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	Ethambutol dihydrochloride is an anti-mycobacterial compound that inhibits arabinosyl transferase activity to prevent cell wall formation and can be used to induce hyperuricemia models.
Targets(IC50)	Antibacterial,Antibiotic,Antifungal
In vitro	Ethambutol primarily targets the product of the embB gene, inducing mutations within the emb gene in drug-resistant strains of tuberculosis. In Mycobacterium smegmatis, Ethambutol affects arabinogalactan and lipoarabinomannan biosynthesis.
In vivo	In animal models, Ethambutol is administered orally at a dosage of 100 mg/kg.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 257.5 mg/mL (928.8 mM),Sonication is recommended. H2O: 51 mg/mL (183.96 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (36.07 mM),Solution. *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	3.607 mL	18.0349 mL	36.0698 mL
5 mM	0.7214 mL	3.607 mL	7.214 mL
10 mM	0.3607 mL	1.8035 mL	3.607 mL
50 mM	0.0721 mL	0.3607 mL	0.7214 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

No authors listed. Tuberculosis (Edinb), 2008, 88(2), 102-105.
Ma X, Li H, Ji J, et al.Overexpression of outer membrane protein A (OmpA) increases aminoglycoside sensitivity in mycobacteria.BMC microbiology.2024, 24(1): 472.
Rastogi N, et al. Curr Microbiol. 1996, 33(3), 167-175.
Kaur D, et al. Int J Antimicrob Agents, 2001, 17(1), 51-55.