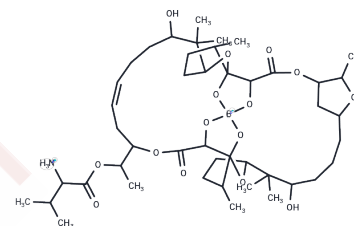


Boromycin

Chemical Properties

CAS No. :	34524-20-4
Formula:	C ₄₅ H ₇₄ BNO ₁₅
Molecular Weight:	879.89
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	Boromycin is a boron-containing macrolide antibiotic that has been found in Streptomyces. Boromycin inhibits growth of <i>B. subtilis</i> (MIC = 0.05 µg/ml) and induces efflux of potassium ions from <i>B. subtilis</i> without affecting Na ⁺ /K ⁺ -ATPase activity. It decreases the synthesis of protein, RNA, and DNA in <i>B. subtilis</i> when used at a concentration of 0.05 µg/ml. It inhibits the growth of <i>B. halodurans</i> (MIC = 10 ng/ml) and inhibits the futasine pathway of menaquinone synthesis in <i>B. halodurans</i> . Boromycin (3.4 nM) reverses bleomycin-induced cell cycle arrest at the G ₂ phase in Jurkat cells. It inhibits replication of the HIV-1 strains LAV-1 and RF and the HIV-2 strain LAV-2 in MT-4 cells (IC ₅₀ s = 0.008, 0.11, and 0.007 µM, respectively). It also inhibits replication of a clinical isolate of HIV-1, strain KK-1, in MT-4 cells and peripheral blood mononuclear cells (PBMCs; IC ₅₀ s = 0.14 and <0.1 µM, respectively).
Targets(IC ₅₀)	Others, Antibiotic

Solubility Information

Solubility	DMSO: Soluble Ethanol: Soluble Methanol: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.1365 mL	5.6825 mL	11.3651 mL
5 mM	0.2273 mL	1.1365 mL	2.273 mL
10 mM	0.1137 mL	0.5683 mL	1.1365 mL
50 mM	0.0227 mL	0.1137 mL	0.2273 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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