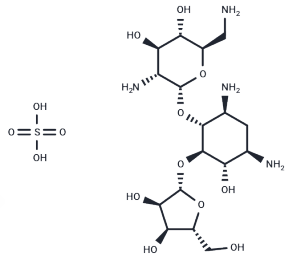
Data Sheet (Cat.No.T1214)

TargetMol

Ribostamycin sulfate

Chemical Properties



CAS No. : 53797-35-6

Formula: C17H34N4O10·H2SO4

Molecular Weight: 552.55

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	Ribostamycin sulfate (Vistamycin sulfate) , an aminoglycoside antibiotic, contains a neutral sugar moiety and is produced by Streptomyces ribosome.
Targets(IC50)	Antibacterial,Antibiotic
In vitro	Ribostamycin, as an intermediate in the biosynthesis of neomycin, can inhibit the chaperone activity of protein disulfide isomerase (PDI) but does not inhibit its isomerase activity. At a concentration of 256 μg/mL, it exhibits almost no toxicity to HUVEC cells.
In vivo	Compared to other antibiotics, Ribostamycin (400 mg/kg/day) causes the lowest ototoxicity, as its drug concentration in the inner ear fluid of guinea pigs is relatively low. Ribostamycin exhibits the least ototoxicity to the cochlea and vestibular organs of guinea pigs.

Solubility Information

Solubility	DMSO: 1000 mg/mL (1809.79 mM),Sonication is recommended. H2O: 100 mg/mL (180.98 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10%DMSO + 90% Saline: 100 mg/mL (180.98 mM),Sonication is recommended. PBS: 100 mg/mL (180.98 mM),Sonication is recommended. *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	1.8098 mL	9.049 mL	18.0979 mL
5 mM	0.362 mL	1.8098 mL	3.6196 mL
10 mM	0.181 mL	0.9049 mL	1.8098 mL
50 mM	0.0362 mL	0.181 mL	0.362 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

Horibe T, et al. Biochem Biophys Res Commun, 2001, 289(5), 967-972.
Hunfeld KP, et al. Int J Antimicrob Agents, 2001, 17(3), 203-208.
Casal M, et al. Mycopathologia, 1983, 83(1), 21-23.
Kitasato I, et al. Chemotherapy, 1990, 36(2), 155-168.