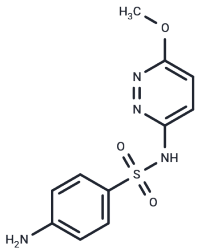
Data Sheet (Cat.No.T0844)

TargetMol

Sulfamethoxypyridazine

Chemical Properties



CAS No. : 80-35-3

Formula: C11H12N4O3S

Molecular Weight: 280.3

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	Sulfamethoxypyridazine (CL 13494) is a sulfanilamide antibacterial agent.
Targets(IC50)	Antibacterial,Antibiotic,PD-1/PD-L1
In vitro	In goats, following intramuscular (im) and subcutaneous (sc) administration, Sulfamethoxypyridazine has half-lives of 11.0 h and 13.7 h with bioavailabilities of 68.6% and 58.7%, respectively. The distribution and elimination half-lives are 0.1 h and 6.28 h, while the steady-state volume of distribution and total body clearance rates are 0.39 ml/kg/min and 0.73 ml/kg/min, respectively. Preliminary studies in rats infected with Pneumocystis carinii demonstrated that Sulfamethoxypyridazine is very effective. It was also found that treatment of Pneumocystis carinii infection in rats with Sulfamethoxypyridazine (1 mg/kg) is as effective as sulfamethazole. In a mouse model, Sulfamethoxypyridazine effectively combats Pneumocystis carinii, with ED50s based on silver stain and Giemsa stain scoring of 0.08 mg/kg/day and 0.06 mg/kg/day, respectively. Treatments of 0.1 mg/kg/day or 0.3 mg/kg/day show more pronounced effects against Pneumocystis carinii in the mouse model than the 0.47 mg/kg/day dose.

Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 257.5 mg/mL (918.66 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 (35.68 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	3.5676 mL	17.838 mL	35.6761 mL
5 mM	0.7135 mL	3.5676 mL	7.1352 mL
10 mM	0.3568 mL	1.7838 mL	3.5676 mL
50 mM	0.0714 mL	0.3568 mL	0.7135 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

Bartlett MS, et al. Antimicrob Agents Chemother, 1998, 42(4), 934-935.
Garg SK, et al. Vet Res, 1997, 28(1), 101-104.
Garg SK, et al. Rev Elev Med Vet Pays Trop, 1994, 47(2), 215-218.