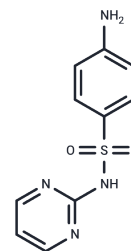


## Sulfadiazine

## Chemical Properties

CAS No. :	68-35-9
Formula:	C10H10N4O2S
Molecular Weight:	250.28
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Sulfadiazine (Sulphadiazine) is a synthetic pyrimidinyl sulfonamide derivative, short-acting bacteriostatic Sulfadiazine inhibits bacterial folic acid synthesis by competing with para-aminobenzoic acid. It is used in combination with pyrimethamine to treat toxoplasmosis in patients with acquired immunodeficiency syndrome and in newborns with congenital infections.
Targets(IC50)	Antibacterial, Antibiotic, Parasite, Autophagy

## Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 50 mg/mL (199.78 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (7.99 mM), Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.9955 mL	19.9776 mL	39.9553 mL
5 mM	0.7991 mL	3.9955 mL	7.9911 mL
10 mM	0.3996 mL	1.9978 mL	3.9955 mL
50 mM	0.0799 mL	0.3996 mL	0.7991 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

Iliades P, et al. Antimicrob Agents ChemOthers. 2005 Feb;49(2):741-8.

Khan K Y, Li G, Du D, et al. Impact of polystyrene microplastics with combined contamination of norfloxacin and sulfadiazine on Chrysanthemum coronarium L. Environmental Pollution. 2022: 120522.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481