Screening Libraries

Product Data Sheet

Sulfadimethoxine

Cat. No.: HY-B0337 CAS No.: 122-11-2

Molecular Formula: $C_{12}H_{14}N_4O_4S$

Molecular Weight: 310.33

Storage:

Target: Bacterial; Antibiotic

Pathway: Anti-infection

> Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

> -20°C 1 year

SOLVENT & SOLUBILITY

In Vitro DMSO : ≥ 100 mg/mL (322.24 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.2224 mL	16.1119 mL	32.2238 mL
	5 mM	0.6445 mL	3.2224 mL	6.4448 mL
	10 mM	0.3222 mL	1.6112 mL	3.2224 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	$Sulfadimethoxine (Sulphadimethoxine) is a sulfonamide antibiotic used to treat many infections \cite{Antibiotic}.$	
IC ₅₀ & Target	Antibacterial	
In Vitro	Sulfadimethoxine is a sulfonamide antibiotic. Sulfadimethoxine is used to treat many infections including treatment of respiratory, urinary tract, enteric, and soft tissue infections.	

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

• Chemosphere. 2019 Jun;225:378-387.

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REFERENCES

[1]. AGUIRRE M, [Sulfadimethoxine in various infections. Results]. Rev Clin Esp. 1961 Sep 30;82:394-9.

[2]. Guerard JJ, et al. Photochemical fate of sulfadimethoxine in aquaculture waters. Environ Sci Technol. 2009 Nov 15;43(22):8587-92.

Caution: Product has not been fully validated for medical applications. For research use only.

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