Dimethyl sulfoxide

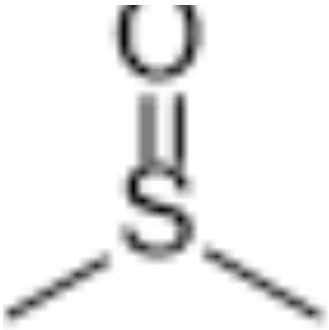
Cat. No.: HY-Y0320

CAS No.: 67-68-5

Molecular Formula: C_2H_6OS

Molecular Weight: 78.13

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (1279.92 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	12.7992 mL	63.9959 mL	127.9918 mL
	5 mM	2.5598 mL	12.7992 mL	25.5984 mL
	10 mM	1.2799 mL	6.3996 mL	12.7992 mL

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

BIOLOGICAL ACTIVITY

Description

Dimethyl sulfoxide (DMSO) is an aprotic solvent that dissolves polar and non-polar compounds, including water-insoluble therapeutic and toxic agents. Dimethyl sulfoxide (DMSO) has a strong affinity for water and can rapidly penetrate or enhance the penetration of other substances into biological membranes. Dimethyl sulfoxide also has potential free radical scavenging and anticholinesterase effects and may affect coagulation activity. Dimethyl sulfoxide also induces histamine release from mast cells but is thought to have low systemic toxicity. Dimethyl sulfoxide also exhibits antifreeze and antibacterial properties[1][2][3].

MCE provides Dimethyl sulfoxide that complies with the inspection standards (Ch.P) of Part 4 of the Chinese Pharmacopoeia (2020 Edition).

In Vitro

DMSO is an organic solvent that is freely miscible with water, lipids and organic agents. These properties allow for exceptional membrane penetration. The mechanism of action of DMSO is thought to be a combination of anti-inflammatory effects, nerve blockade, smooth muscle relaxation, and collagen inhibition[2].

DMSO (HY-Y0320) can be used for compound dissolution, and is not recommended for cell cryopreservation.

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

CUSTOMER VALIDATION

- Signal Transduct Target Ther. 2023 Sep 25;8(1):366.
- Ann Rheum Dis. 2022 May;81(5):676-686.
- ACS Nano. 2023 Oct 2.
- Nat Commun. 2023 Dec 1;14(1):7940.
- Adv Sci (Weinh). 2023 Oct;10(28):e2302130.

See more customer validations on www.MedChemExpress.com

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA