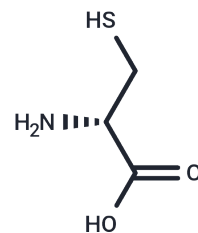


D-Cysteine

Chemical Properties

CAS No. :	921-01-7
Formula:	C ₃ H ₇ NO ₂ S
Molecular Weight:	121.16
Storage:	Store under nitrogen 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	D-Cysteine, the D-isomer of cysteine, is a powerful inhibitor of E. coli growth and is mediated by D-amino acid oxidase to produce H ₂ S, serving as a neuroprotective agent against cerebellar ataxia. Additionally, D-cysteine can inhibit the growth and cariogenicity of a two-species biofilm formed by Streptococcus mutans and Streptococcus hemoglobin.
Targets(IC50)	Endogenous Metabolite, Antibacterial

Solubility Information

Solubility	DMSO: 1 mg/mL (8.25 mM), Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	8.2535 mL	41.2677 mL	82.5355 mL
5 mM	1.6507 mL	8.2535 mL	16.5071 mL
10 mM	0.8254 mL	4.1268 mL	8.2535 mL
50 mM	0.1651 mL	0.8254 mL	1.6507 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

- Seki T. Availability of D-cysteine as a protectant for cerebellar neurons. *Nihon Yakurigaku Zasshi*. 2019;154(3):133-137.
- Soutourina J, et al. Role of D-cysteine desulfhydrase in the adaptation of *Escherichia coli* to D-cysteine. *J Biol Chem*. 2001 Nov 2;276(44):40864-72.
- Guo X, et al. Effect of D-cysteine on dual-species biofilms of *Streptococcus mutans* and *Streptococcus sanguinis*. *Sci Rep*. 2019 Apr 30;9(1):6689.

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