

L-Homoserine

Chemical Properties

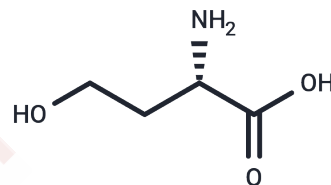
CAS No. : 672-15-1

Formula: C₄H₉NO₃

Molecular Weight: 119.12

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	L-Homoserine ((S)-(-)-2-AMINO-4-HYDROXYBUTYRIC ACID) is a more reactive variant of the amino acid serine. In this variant, the hydroxyl side chain contains an additional CH ₂ group which brings the hydroxyl group closer to its own carboxyl group, allowing it to chemically react to form a five-membered ring. This occurs at the point that amino acids normally join to their neighbours in a peptide bond. L-Homoserine is therefore unsuitable for forming proteins and has been eliminated from the repertoire of amino acids used by living things. L-Homoserine is the final product on the C-terminal end of the N-terminal fragment following a cyanogen bromide cleavage.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 1.2 mg/mL (10.07 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	8.3949 mL	41.9745 mL	83.949 mL
5 mM	1.679 mL	8.3949 mL	16.7898 mL
10 mM	0.8395 mL	4.1974 mL	8.3949 mL
50 mM	0.1679 mL	0.8395 mL	1.679 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

Sreekumar A , Poisson L M , Rajendiran T M , et al. Corrigendum: Metabolomic profiles delineate potential role for sarcosine in prostate cancer progression[J]. Nature, 2009, 457(7231):910-914.

Tan Y Q, Loh C K, bin Mohd Saffian S, et al. Improved HPLC Method with Automated Pre-Column Sample Derivatisation for Serum Pegylated L-Asparaginase Activity Measurement in Paediatric Acute Lymphoblastic Leukaemia Patients. Journal of Pharmaceutical and Biomedical Analysis. 2024: 116243.

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