

Thialysine HCl

Chemical Properties

CAS No. : 4099-35-8

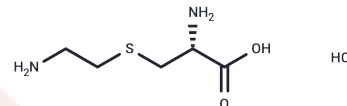
Formula: C₅H₁₃ClN₂O₂S

Molecular Weight: 200.69

Keep away from moisture

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	Thialysine HCl is a cytotoxic cysteine derivative that inhibits Escherichia coli, acting as a protein synthesis inhibitor and metabolite.
Targets(IC50)	Others,Amino Acids and Derivatives,Endogenous Metabolite,Antibacterial

Solubility Information

Solubility	H ₂ O: 8 mg/mL (39.86 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	4.9828 mL	24.914 mL	49.8281 mL
5 mM	0.9966 mL	4.9828 mL	9.9656 mL
10 mM	0.4983 mL	2.4914 mL	4.9828 mL
50 mM	0.0997 mL	0.4983 mL	0.9966 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

Luckose F, et al. Effects of amino acid derivatives on physical, mental, and physiological activities. *Crit Rev Food Sci Nutr.* 2015;55(13):1793-807.

Mattioli R, et, al. Arabidopsis N-acetyltransferase activity 2 preferentially acetylates 1,3-diaminopropane and thialysine. *Plant Physiol Biochem.* 2022 Jan 1;170:123-132.

Cinia C, et, al. Thialysine utilization by a lysine-requiring *Escherichia coli* mutant. *Mol Cell Biochem.* 1984;59(1-2): 149-54.

Jun DY, et, al. Mechanism underlying cytotoxicity of thialysine, lysine analog, toward human acute leukemia Jurkat T cells. *Biochem Pharmacol.* 2003 Dec 15;66(12):2291-300.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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