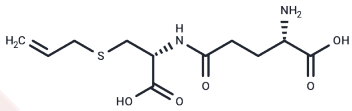
Data Sheet (Cat.No.T41054)

TargetMol

γ-Glutamyl-S-allylcysteine

Chemical Properties



CAS No. : 91216-95-4

Formula: C11H18N2O5S

Molecular Weight: 290.34

Storage: Store at low temperature,Keep away from moisture
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	γ-Glutamyl-S-allylcysteine (L-γ-Glutamyl-(S)-Allyl-Cysteine) is a γ-glutamyl peptide derived from Allium sativum L., known for its anti-glycation and antioxidant properties, as well as its ability to inhibit cholesterol biosynthesis.
Targets(IC50)	Antioxidant
In vitro	In a concentration-dependent manner, γ-Glutamyl-S-allylcysteine (0.1-2.5 mg/mL) inhibits the increase in fluorescence intensity at around 440 nm and reduces the free lysine side-chain reaction [2].At a concentration of 2.5 mg/mL, γ-Glutamyl-S-allylcysteine prevents the specific decrease in glycation of BSA α-helical content and the increase in β-fold in vitro [1].At a concentration of 2.5 mg/mL, γ-Glutamyl-S-allylcysteine inhibits the formation of protein cross-linking polymers [2].γ-Glutamyl-S-allylcysteine (10, 40, 160 μg/mL) possesses the ability to scavenge free radicals and chelate metals [2].

Solubility Information

Solubility	H2O: 65 mg/mL (223.88 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4442 mL	17.2212 mL	34.4424 mL
5 mM	0.6888 mL	3.4442 mL	6.8885 mL
10 mM	0.3444 mL	1.7221 mL	3.4442 mL
50 mM	0.0689 mL	0.3444 mL	0.6888 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

Yi-Yu Chen, et al. Enzymatic synthesis of γ-L-glutamyl-S-allyl-L-cysteine, a naturally occurring organosulfur compound from garlic, by Bacillus licheniformis γ-glutamyltranspeptidase. Enzyme Microb Technol. Jul-Aug 2015; 75-76:18-24.

Dehong Tan, et al. Decreased glycation and structural protection properties of γ-glutamyl-S-allyl-cysteine peptide isolated from fresh garlic scales (Allium sativum L.). Nat Prod Res. 2015;29(23):2219-22.