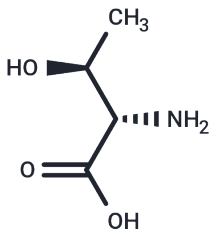
Data Sheet (Cat.No.T5076)

TargetMol

L-Allothreonine

Chemical Properties



CAS No. : 28954-12-3

Formula: C4H9NO3

Molecular Weight: 119.12

Storage: Keep away from direct sunlight,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	L-Allothreonine (L-allo-Threonine) is an essential amino acid in humans. L-Allothreonine is abundant in human plasma, particularly in newborns. Severe deficiency of threonine causes neurological dysfunction and lameness in experimental animals. L-Allothreonine is an immunostimulant which promotes the growth of thymus gland. L-Allothreonine also can probably promote cell immune defense function. L-Allothreonine is highly concentrated in meat products, cottage cheese, and wheat germ.
Targets(IC50)	Endogenous Metabolite
In vivo	The impact of applied intra-articular HA has been proven in many studies in animals. Studies on HA have shown that it promotes the synthesis of cartilage matrix, prevents its degradation, reduces inflammation, stimulates the synthesis of endogenous HA, and improves the resilience and moisture of cartilage. High molecular size HA preparations, applied topically, promote healing of fresh skin wounds. They also promote the healing of venous leg ulcers and are useful in the management of chronic wounds.

Solubility Information

Solubility	DMSO: Slightly soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

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

Shiraiwa, Tadashi; Fukuda, Keiji; Kubo, Motoki. Preparation of optically active allothreonine via optical resolution by replacing crystallization. Chemical & Pharmaceutical Bulletin (2002), 50(2), 287-291.