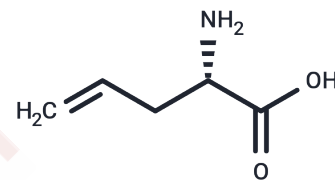


L-Allylglycine

Chemical Properties

CAS No. :	16338-48-0
Formula:	C ₅ H ₉ NO ₂
Molecular Weight:	115.13
Storage:	Keep away from moisture 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	L-Allylglycine is a potent inhibitor of the synthetic enzyme for GABA, glutamic acid decarboxylase.
Targets(IC50)	GABA Receptor, Dehydrogenase
In vitro	L-allylglycine inhibits glutamic acid decarboxylase(GAD) only when used at high concentrations (1-80 mM). The more potent in vivo activity can be attributed to metabolic conversion of L-allylglycine to 2-keto-4-pentanoic acid, a more potent convulsant and GAD inhibitor[1].
In vivo	The stereoisomers of allylglycine were injected into the posterior hypothalamus at a site also shown to be reactive to bicuculline. Injection of L-allylglycine but not D-allylglycine caused substantial increases in heart rate but only slight increases in blood pressure[1].

Solubility Information

Solubility	PBS (pH 7.2): 10 mg/mL (86.86 mM), Sonication is recommended. Ethanol: Insoluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	8.6858 mL	43.4292 mL	86.8583 mL
5 mM	1.7372 mL	8.6858 mL	17.3717 mL
10 mM	0.8686 mL	4.3429 mL	8.6858 mL
50 mM	0.1737 mL	0.8686 mL	1.7372 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

Abshire VM, et al. Injection of L-allylglycine into the posterior hypothalamus in rats causes decreases in local GABA which correlate with increases in heart rate. *Neuropharmacology*. 1988 Nov;27(11):1171-7.

Meldrum BS, et al. Redistribution of transmitter amino acids in rat hippocampus and cerebellum during seizures induced by L-allylglycine and bicuculline: an immunocytochemical study with antisera against conjugated GABA, glutamate and aspartate. *Neuroscience*. 1987 Jul;22(1):17-27.

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