

L-Valyl-L-phenylalanine

Chemical Properties

CAS No. :	3918-92-1
Formula:	C ₁₄ H ₂₀ N ₂ O ₃
Molecular Weight:	264.32
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-Valyl-L-phenylalanine is a dipeptide formed by the linkage of valine and phenylalanine via a peptide bond. It exhibits good biocompatibility and can be used in research on targeted drug delivery. L-Valyl-L-phenylalanine possesses hydrophobic side chains, and the dipeptide alkyl esters derived from it can be used to deplete cytotoxic T lymphocytes or natural killer cells from living organisms, cell populations, or tissues, making them useful for research into graft-versus-host disease (GVHD).
Targets(IC50)	Endogenous Metabolite
In vitro	An alkyl ester of dipeptide composed of L-valyl-L-phenylalanine can be used to eliminate cytotoxic T lymphocytes or natural killer cells in organisms, cell cultures, or tissues [1].

Solubility Information

Solubility	H ₂ O: 53.34 mg/mL (201.8 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	3.7833 mL	18.9165 mL	37.8329 mL
5 mM	0.7567 mL	3.7833 mL	7.5666 mL
10 mM	0.3783 mL	1.8916 mL	3.7833 mL
50 mM	0.0757 mL	0.3783 mL	0.7567 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

US5047401 A

Tsume Y, et al. Enhanced cancer cell growth inhibition by dipeptide prodrugs of floxuridine: increased transporter affinity and metabolic stability. Mol Pharm. 2008;5(5):717-727.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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