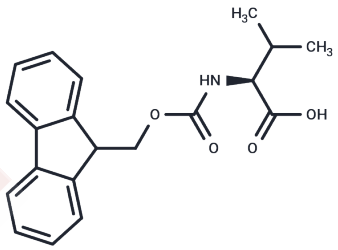
Data Sheet (Cat.No.T67564)

TargetMol

Fmoc-Val-OH

Chemical Properties



CAS No. : 68858-20-8

Formula: C20H21NO4

Molecular Weight: 339.39

Storage: 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	Fmoc-Val-OH is a chemically protected valine derivative used in peptide synthesis to block reactive functional groups, enabling selective reactions and precise stepwise elongation of peptide chains by forming stable covalent bonds that prevent unwanted side reactions until the deprotection step.
Targets(IC50)	Others,Amino Acids and Derivatives
In vitro	Fmoc-Val-OH serves as the starting material and can be used to synthesize pentapeptides containing difficult sequences via O-acyl parazacco spilurus subsp. spilurus dipeptide (O-acyl isodipeptide) units [1]. it can also be employed in the synthesis of polypeptides through the Fmoc solid-phase method following the backbone amide linker (BAL) strategy [2].

Solubility Information

Solubility	DMSO: 80 mg/mL (235.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9465 mL	14.7323 mL	29.4646 mL
5 mM	0.5893 mL	2.9465 mL	5.8929 mL
10 mM	0.2946 mL	1.4732 mL	2.9465 mL
50 mM	0.0589 mL	0.2946 mL	0.5893 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

Y Sohma, et al. O-Acyl isopeptide method?for the efficient synthesis of difficult sequence-containing peptides: use of `O-acyl isodipeptide unit. Tetrahedron Letters, 47, 3013-3017 (2006)

Kappel JC, Barany G. Backbone amide linker (BAL) strategy for Nalpha-9-fluorenylmethoxycarbonyl (Fmoc) solid-phase synthesis of peptide aldehydes. J Pept Sci. 2005 Sep;11(9):525-35.