Data Sheet (Cat.No.T67552)

TargetMol

Fmoc-Asp(tBu)-OH

Chemical Properties

CAS No. : 71989-14-5

Formula: C23H25NO6

Molecular Weight: 411.454

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-Asp(tBu)-OH is a chemically protected aspartic acid derivative widely utilized in peptide synthesis and biochemical research, providing a stable platform for the construction of peptides and other biomolecules, and Fmoc-Asp(tBu)-OH facilitates investigations in protein engineering, drug discovery, and chemical biology.
Targets(IC50)	Others,Amino Acids and Derivatives
In vitro	Fmoc-Asp(OtBu)-OH can be used to prepare scorpion toxin II model peptide variants [2].

Solubility Information

Solubility	DMSO: 160 mg/mL (388.86 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 3.3 mg/mL (8.02 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4304 mL	12.1521 mL	24.3043 mL
5 mM	0.4861 mL	2.4304 mL	4.8609 mL
10 mM	0.243 mL	1.2152 mL	2.4304 mL
50 mM	0.0486 mL	0.243 mL	0.4861 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

Esquivel J B, et al. Chiral HPLC separation of protected amino acids. Journal of liquid chromatography & related technologies, 1998, 21(6): 777-791.

Behrendt R, Huber S, Martí R, White P. New t-butyl based aspartate protecting groups preventing aspartimide formation in Fmoc SPPS. J Pept Sci. 2015 Aug;21(8):680-7.