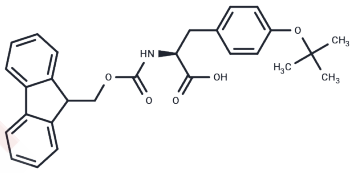
Data Sheet (Cat.No.T67575)

TargetMol

Fmoc-Tyr(tBu)-OH

Chemical Properties



CAS No. : 71989-38-3

Formula: C28H29NO5

Molecular Weight: 459.54

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-Tyr(tBu)-OH is a protected amino acid derivative widely employed in Fmoc-based solid-phase peptide synthesis and serves as a key reagent for the stepwise assembly of peptide chains. Fmoc-Tyr(tBu)-OH can be specifically utilized to synthesize Leu-EnkephalinAmide through solid-phase synthesis in aqueous media and is also used for the generation of amino acid derivatives such as Fmoc-Tyr-OAllyl, highlighting its versatility and importance in peptide chemistry.
Targets(IC50)	Others,Amino Acids and Derivatives
In vitro	Fmoc-Tyr(tBu)-OH is highly valuable in peptide chemistry for synthesizing complex peptides and proteins for research.

Solubility Information

Solubility	DMSO: 80 mg/mL (174.09 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 (7.18 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	2.1761 mL	10.8804 mL	21.7609 mL
5 mM	0.4352 mL	2.1761 mL	4.3522 mL
10 mM	0.2176 mL	1.088 mL	2.1761 mL
50 mM	0.0435 mL	0.2176 mL	0.4352 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

Bugatti K, et al. Novel Polymyxin-Inspired Peptidomimetics Targeting the SARS-CoV-2 Spike:hACE2 Interface. Int J Mol Sci. 2023 May 15;24(10):8765.
Ledwoń P, et al. Tripeptides conjugated with thiosemicarbazones: new inhibitors of tyrosinase for cosmeceutical use. J Enzyme Inhib Med Chem. 2023 Dec;38(1):2193676.
Schindler L, et al. Neurotensin analogs by fluoroglycosylation at Nω-carbamoylated arginines for PET imaging of NTS1-positive tumors. Sci Rep. 2022 Sep 2;12(1):15028.