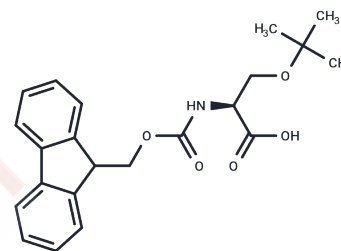


Fmoc-Ser(tBu)-OH

Chemical Properties

CAS No. :	71989-33-8
Formula:	C ₂₂ H ₂₅ NO ₅
Molecular Weight:	383.44
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	Fmoc-Ser(tBu)-OH is a protected serine derivative widely applied in peptide synthesis and chemical biology. Fmoc-Ser(tBu)-OH, bearing a tert-butyl-protected hydroxyl group, provides selectivity and stability during synthetic processes, enabling its use in the assembly of peptides, biomaterials, and research compounds across diverse life science applications.
Targets(IC50)	Others,Amino Acids and Derivatives
In vitro	Fmoc-Ser(tBu)-OH serves as an N-terminal protecting reagent applied in peptide synthesis [1]. Reported applications include: achieving cyclization steps through chemoselective serine ligation in the total synthesis of the antibiotic daptomycin [2]; preparing MUC1 (a T-cell helper peptide) via repeated pentafluorophenyl ester-mediated fragment condensation [3]; and being utilized in the linear solid-phase peptide synthesis of ubiquitin and diubiquitin [4].

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.608 mL	13.0398 mL	26.0797 mL
5 mM	0.5216 mL	2.608 mL	5.2159 mL
10 mM	0.2608 mL	1.304 mL	2.608 mL
50 mM	0.0522 mL	0.2608 mL	0.5216 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

Townsend SD, et al. Advances in proline ligation. *J Am Chem Soc.* 2012 Feb 29;134(8):3912-6.

Lam HY, et al. Total synthesis of daptomycin by cyclization via a chemoselective serine ligation. *J Am Chem Soc.* 2013 Apr 24;135(16):6272-9.

Wilkinson BL, et al. Self-adjuvanting multicomponent cancer vaccine candidates combining per-glycosylated MUC1 glycopeptides and the Toll-like receptor 2 agonist Pam3CysSer. *Angew Chem Int Ed Engl.* 2011 Feb 11;50(7):1635-9.

El Oualid F, et al. Chemical synthesis of ubiquitin, ubiquitin-based probes, and diubiquitin. *Angew Chem Int Ed Engl.* 2010 Dec 27;49(52):10149-53.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481