

Product Information

Amine/Azide PEG reagent, *t*-boc-*N*-amido-PEG8-azide, Purity 98%

Cat. No.: X24-09-YYX466

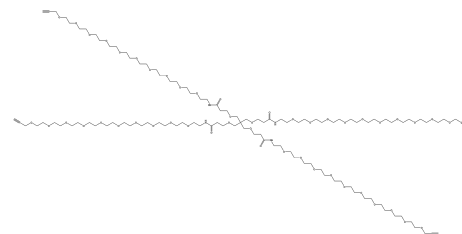
Size: 100 mg; 250 mg; 500 mg

CAS Number: 2231845-12-6

PubChem CID: 155288695

Synonym: 2231845-12-6; Amine/Azide PEG reagent; *t*-boc-*N*-amido-PEG8-azide

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	<i>t</i> -boc- <i>N</i> -amido-PEG8-azide serves as a monodisperse PEG linker. The PEG8 spacer enhances solubility in aqueous environments. Its azide group can participate in reactions with alkynes, BCN, and DBCO <i>via</i> click chemistry techniques. Additionally, the Boc protecting group can be removed under mild acidic conditions to yield free amines.
Molecular Weight	538.6
Molecular Formula	C ₂₃ H ₄₆ N ₄ O ₁₀
Functional Group 1	Boc
Functional Group 2	Azide
Functional Group 3	Amine
Reactive Group 1	Alkyne
Reactive Group 2	Acid
IUPAC Name	<i>tert</i> -butyl <i>N</i> -[2-[2-[2-[2-[2-[2-[2-[2-(2-Azidoethoxy)ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethyl]carbamate
InChI	InChI=1S/C23H46N4O10/c1-23(2,3)37-22(28)25-4-6-29-8-10-31-12-14-33-16-18-35-20-21-36-19-17-34-15-13-32-11-9-30-7-5-26-27-24/h4-21H2,1-3H3,(H,25,28)
InChI Key	BDFYYRYBZUPGSL-UHFFFAOYSA-N
Canonical SMILES	CC(C)(C)OC(=O)NCCOCCOCCOCCOCCOCCOCCOCCOCCOCCN=[N+]=[N-]
Form	Solid
Purity	98%
Identity	Confirmed by NMR.

Applications

In the area of peptide and protein modification, the *t*-boc protecting group can be selectively removed under specific conditions to expose the amine functionality for further reactions. In materials science, it can be incorporated into polymeric materials to control their properties such as hydrophobicity, mechanical strength, or surface functionality.

Storage

Store at -20°C.
