

Azido-PEG4-NHS

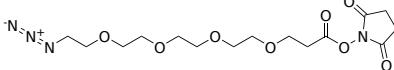
Catalog Number: 4535

Unit Size: 25 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	388.38
Soluble In	DMSO
Chemical Structure	 The chemical structure shows a terminal azido group (-N3-) attached to the first carbon of a PEG4 chain. The chain consists of four methylene groups (-CH2-CH2-CH2-CH2-) linked to a succinimidyl ester group (-CO-NH-CO-O-). The ester group is linked to a four-carbon chain (-CH2-CH2-CH2-CH3) which is further linked to a five-membered succinimide ring.

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Azido-PEG4-NHS is a versatile, high-purity crosslinker designed for efficient bioconjugation and click chemistry applications. It contains an NHS (N-hydroxysuccinimide) ester group that reacts readily with primary amines on proteins, peptides, or amine-coated surfaces, forming stable amide bonds. The azido (N_3) group on the opposite end facilitates click chemistry reactions, including copper-catalyzed azide-alkyne cycloaddition (CuAAC) and the Staudinger ligation with phosphine-modified molecules. The Staudinger ligation, a bioorthogonal and catalyst-free reaction, generates a stable amide linkage, enabling specific, covalent attachment in complex biological environments.