

Product Information

Acid/DBCO PEG reagent, DBCO-PEG6-acid, Purity 95%

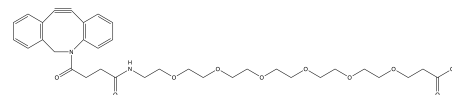
Cat. No.: X24-03-YW0369

Size: 100 mg; 250 mg; 500 mg

PubChem CID: 156598873

Synonym: DBCO-PEG6-acid; BP-25722

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



Product Information

Description	DBCO-PEG6-acid is a reagent grade analog of DBCO-Acid, featuring a PEG linker and a DBCO group, designed for copper-free Click Chemistry reactions due to its strain-promoted high energy. The hydrophilic PEG chain enhances water solubility.
Molecular Weight	640.7
Molecular Formula	C ₃₄ H ₄₄ N ₂ O ₁₀
Functional Group 1	Acid
Functional Group 2	DBCO
Functional Group 3	None
Reactive Group 1	Amine
Reactive Group 2	Azide
IUPAC Name	3-[2-[2-[2-[2-[2-[2-[4-(2-Azatricyclo[10.4.0.0 ^{4,9}]hexadeca-1(16),4,6,8,12,14-hexaen-10-yn-2-yl)-4-oxobutanoyl]amino]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]propanoic acid
InChI	InChI=1S/C34H44N2O10/c37-32(11-12-33(38)36-27-30-7-2-1-5-28(30)9-10-29-6-3-4-8-31(29)36)35-14-16-42-18-20-44-22-24-46-26-25-45-23-21-43-19-17-41-15-13-34(39)40/h1-8H,11-27H2,(H,35,37)(H,39,40)
InChI Key	NBCHNMYEDTNKC-UHFFFAOYSA-N
Canonical SMILES	C1C2=CC=CC=C2C#CC3=CC=CC=C3N1C(=O)CCC(=O)NCCOCCOCCOCCOCCOCCOCC(=O)O
Form	Solid/liquid
Purity	95%
Solubility	DMSO, DCM, DMF
Identity	Confirmed by NMR.

Applications	DBCO-PEG6-acid is used in bioconjugation and molecular biology research, enabling efficient copper-free Click Chemistry reactions. Its terminal carboxylic acid reacts with primary amine groups in the presence of activators like EDC or HATU to form stable amide bonds, making it ideal for modifying biomolecules and studying protein interactions.
Storage	Store at -20°C.