

DBCO PEG reagent, DBCO-PEG9-DBCO, Purity 98%

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



Description	DBCO-PEG9-DBCO is a reagent grade click chemistry linker featuring two DBCO groups and a hydrophilic PEG spacer arm. The DBCO groups react with azide-bearing compounds or biomolecules to form stable triazole linkages without the need for a copper catalyst.
Molecular Weight	1,031.2
Molecular Formula	C ₅₈ H ₇₀ N ₄ O ₁₃
Functional Group 1	DBCO
Functional Group 2	None
Functional Group 3	None
Reactive Group 1	Azide
IUPAC Name	<i>N</i> -[3-(2-Azatricyclo[10.4.0.0] ^{4,9}]hexadeca-1(16),4,6,8,12,14-hexaen-10-yn-2-yl)-3-oxopropyl]-3-[2-[2-[2-[2-[2-[2-[2-[3-[[3-(2-azatricyclo[10.4.0.0] ^{4,9}]hexadeca-1(16),4,6,8,12,14-hexaen-10-yn-2-yl)-3-oxopropyl]amino]-3-oxopropoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]propanamide
InChI	InChI=1S/C58H70N4O13/c63-55(59-25-21-57(65)61-45-51-13-3-1-9-47(51)17-19-49-11-5-7-15-53(49)61)23-27-67-29-31-69-33-35-71-37-39-73-41-43-75-44-42-74-40-38-72-36-34-70-32-30-68-28-24-56(64)60-26-22-58(66)62-46-52-14-4-2-10-48(52)18-20-50-12-6-8-16-54(50)62/h1-16H,21-46H2,(H,59,63)(H,60,64)
InChI Key	KEUODHOMOVWEC-UHFFFAOYSA-N
Canonical SMILES	C1C2=CC=CC=C2C#CC3=CC=CC=C3N1C(=O)CCNC(=O)CCOCCOCCOCCOCCOCCOCCOCCOCCOCCOCCC(=O)NCCCC(=O)N4CC5=CC=CC=C5C#CC6=CC=CC=C64
Form	Solid/Liquid

Purity	98%
Identity	Confirmed by NMR.
Applications	DBCO-PEG9-DBCO can be used in bioconjugation and molecular biology research, enabling efficient copper-free Click Chemistry reactions. The hydrophilic PEG9 arm increases water solubility and membrane permeability, making it ideal for studies on biomolecular interactions and the development of drug delivery systems.
Storage	Store at -20°C.