

Product Information

DBCO/NHS PEG reagent, DBCO-PEG4-NHS ester, Purity 98%

Cat. No.: X24-03-YW0382

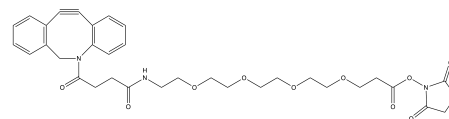
Size: 25 mg; 100 mg; 250 mg; 500 mg

CAS Number: 1427004-19-0

PubChem CID: 77078155

Synonym: 1427004-19-0; DBCO-PEG4-NHS ester; DBCO-PEG4-SPA

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



Product Information

Description	DBCO-PEG4-NHS Ester is a reagent grade click chemistry PEG reagent containing an NHS ester that reacts specifically and efficiently with primary amines at neutral or slightly basic conditions to form a covalent bond. The hydrophilic PEG spacer arm improves water solubility and provides a long, flexible connection that minimizes steric hindrance.
Molecular Weight	649.7
Molecular Formula	C ₃₄ H ₃₉ N ₃ O ₁₀
Functional Group 1	DBCO
Functional Group 2	NHS
Functional Group 3	None
Reactive Group 1	Amine
Reactive Group 2	Azide
IUPAC Name	(2,5-Dioxopyrrolidin-1-yl) 3-[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]propanoate
InChI	InChI=1S/C34H39N3O10/c38-30(11-12-31(39)36-25-28-7-2-1-5-26(28)9-10-27-6-3-4-8-29(27)36)35-16-18-44-20-22-46-24-23-45-21-19-43-17-15-34(42)47-37-32(40)13-14-33(37)41/h1-8H,11-25H2,(H,35,38)
InChI Key	RRCXYKNJTKJNTD-UHFFFAOYSA-N
Canonical SMILES	C1CC(=O)N(C1=O)OC(=O)CCOCCOCCOCCOCCNC(=O)CCC(=O)N2CC3=CC=CC=C3C#CC4=CC=CC=C42
Form	Sticky gel
Purity	98%

Solubility	DMSO, DCM, DMF
Identity	Confirmed by NMR.
Applications	DBCO-PEG4-NHS Ester is used in bioconjugation and molecular biology research, enabling efficient copper-free Click Chemistry reactions. Its NHS ester allows for specific modification of primary amines, making it ideal for studying protein interactions and enhancing surface modifications with improved solubility and reduced steric hindrance.
Storage	Store at -20°C.