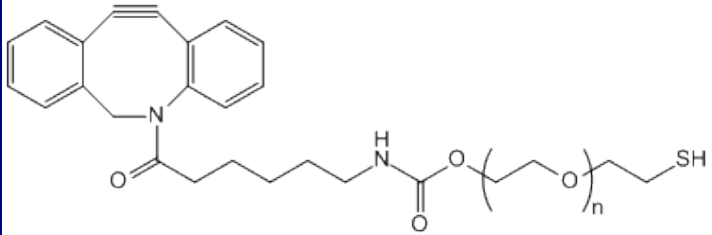


DBCO PEG Thiol Crosslinkers

Product name	Cat.number 1: 100mg	qty	Structure :
DBCO-PEGx-Thiol DBCO-PEG-SH Dibenzocyclooctyne-PEG-Thiol [BPG]	AWJSU1 AWJSU- B36JI1 B36JJ1 B36JK1 B36JL1	400Da 600Da 1000Da 2000Da 3400Da 5000Da	

Store at -20°C – keep in dry and avoid sunlight.(M)

Description:

DBCO PEG thiol is a bifunctional pegylated crosslinker typically used to conjugate azide-modified biomolecules (Click Chemistry) .

- **DBCO** (dibenzocyclooctyne) group reacts with azides in a specific and biorthogonal way without a need of any metal catalysts. The strain-promoted 1,3-dipolar cycloaddition of cyclooctynes and azides, also termed as the Cu-free click reaction, is a bioorthogonal reaction that enables the conjugation of two molecules in aqueous solution. DBCO possess fast kinetics and stability in aqueous buffer.

DBCO reagents can be used to label azide-modified biomolecules spontaneous without the need for toxic Cu catalysts.

- **Thiol** group reacts by exchange with other sulfhydryls, and reacts more readily with several groups such as Maleimide, VinylSulfone, IodoAcetamide,...

- **PEG** spacer increases solubility and stability and reduce immunogenicity of conjugated peptides and proteins. It can also suppress the non-specific binding of charged molecules to the modified surfaces, lowering unspecific interaction (background in assays).

Physical Properties:

White solid or viscous liquid depends on molecule weight;

Soluble in regular aqueous solution as well as most organic solvents;

Copper-free Click reaction procedures:

Prepare the azide-containing reagents in reaction buffer.

Add DBCO reagents to azide containing reagents. Add 1 mol equivalent of limiting reagent to 1.5~3.0 mol equivalents of abundance reagent.

Incubate the reaction at room temperature for 2~4 hours or 2~12 hours at 4°C.

Purify conjugates either by dialysis or size-exclusion chromatograph.

Applications

Applied in medical research, drug-release, nanotechnology and new materials research, cell culture. In the study of ligand, polypeptide synthesis support, a graft polymer compounds, new materials, and polyethylene glycol-modified functional coatings and other aspects of the active compound.

FT- B36JI1

Related products

- Other DBCO PEG linkers: [PL-DQP580](#) , i.e.
DBCO-PEGn-AMINE (DQP512/n=4; [pl-DQP590](#))
DBCO-PEG4-COOH (MRU911)
DBCO-PEGx-NHS Ester (FT-[AXBKX1](#)) DBCO-PEOn-NHS Ester (#B4S4B0, B4S4D0, AXBJE5)
DBCO-PEG4-BIOTIN (DQP721, AXBJF1)
DBCO-PEGx-CYanine3/5/5.5/7 ([FT-1Q7081](#))
- Cleavable labeling agents ([pl](#)), i.e. PC-DBCO-NHS Ester ([ft-AXBKX1](#))

Contact:

Catalog size quantities and prices may be found at <http://www.interchim.com>.

For any question , please ask uptima@interchim.com Uptima / Interchim; Hotline : +33(0)4 70 03 73 06