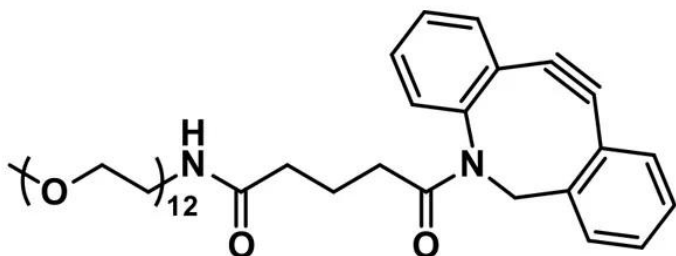


M-DPEG®₁₂-DBCO

SKU: QBD-10596



m-dPEG®₁₂-DBCO, product number QBD-10596, is a methoxy-terminated, discrete polyethylene glycol (dPEG®) click chemistry reagent designed for chemical modification of surfaces through strain-promoted azide-alkyne cycloaddition (SPAAC). From the terminal methyl group to the reactive site on the dibenzylcyclooctyne (DBCO) group, the dPEG® spacer is 39 atoms long.

DBCO was designed for bio-orthogonal click chemistry applications using SPAAC, also known as copper-free click chemistry, which was developed by Carolyn Bertozzi and colleagues to avoid the potential toxicity of Cu(I) that is used in Copper(I)-Promoted Azide Alkyne Cycloaddition (CuAAC) discovered by K. Barry Sharpless and colleagues. The dPEG® spacer differs from traditional PEG spacers and linkers in that it consists of a single molecular weight and chain length of PEG (i.e., it is monodispersed), which simplifies analysis of conjugates made with this compound.

Potential uses for this product include modifying alkyne-functionalized surfaces and peptides and proteins containing alkyne-functionalized amino acid side chains.

Specifications

Unit Size	100mg, 1000mg
Molecular Weight	861.03; single compound
Chemical formula	C ₄₅ H ₆₈ N ₂ O ₁₄
CAS	N/A
Purity	> 97%
Spacers	dPEG® Spacer is 39 atoms and 45.0 Å

For research use only. Not intended for animal or human therapeutic or diagnostic use.

Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene Chloride, Acetonitrile, Methanol, DMSO, or DMAC.
Storage and handling	-20°C; Always let come to room temperature before opening; be careful to limit exposure to moisture and restore under an inert atmosphere; stock solutions can be prepared with dry solvent and kept for several days (freeze when not in use). dPEG® pegylation compounds are generally hygroscopic and should be treated as such. This will be less noticeable with liquids, but the solids will become tacky and difficult to manipulate, if care is not taken to minimize air exposure.

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