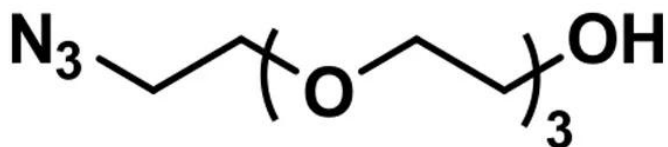


AZIDO-DPEG®4-OH

SKU: QBD-10541



Azido-dPEG®4-OH (Azido-dPEG®4-alcohol), product number QBD-10541, is a click chemistry reagent used to modify surfaces and biomolecules or to crosslink with other surfaces or biomolecules in supramolecular construction. This product consists of an azide and a terminal hydroxy group separated by a short (14 atoms), single molecular weight, discrete-length polyethylene glycol (dPEG®) chain. The terminal azide reacts in copper(I)-catalyzed, ruthenium-catalyzed, and strain-promoted azide-alkyne cycloaddition reactions (CuAAC, RuAAC, and SPAAC, respectively). If left unmodified, the alcohol group increases the water solubility and hydrodynamic volume of molecules and surfaces to which it is conjugated. Modifying the alcohol with a reactive group such as chloride, tosylate, or mesylate allows Azido-dPEG®4-OH to function as a crosslinker through subsequent chemical manipulations.

As a click chemistry reagent, azido-dPEG®4-OH can participate in CuAAC, RuAAC, and SPAAC reactions. Because Vector Laboratories' dPEG® products are amphiphilic, these reactions can occur almost equally well in water or organic solvents. Thus, azido-dPEG®4-OH can be used in conjugations with biomolecules where organic solvents may damage the conjugate target.

The primary alcohol group on the opposite end of the linker can be used as a neutrally charged functional group. In this function, the alcohol enhances the water solubility of the conjugate molecule. Alternatively, the alcohol group can be functionalized with reactive groups and used to modify the conjugate further.

Specifications

Unit Size	100mg, 1000mg
Molecular Weight	219.24; single compound
Chemical formula	C ₈ H ₁₇ N ₃ O ₄
CAS	86770-67-4
Purity	> 98%

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

Spacers	dPEG® Spacer is 14 atoms and 15.3 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene chloride, Acetonitrile, DMAC, DMSO or water.
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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