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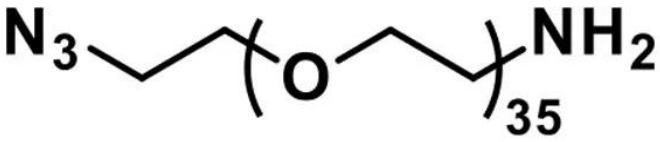
AZIDO-DPEG®$_{35}$-AMINE

SKU: QBD-10526



DESCRIPTION

Azido-dPEG®35-amine, product number QBD-10526, is a carbonyl-reactive, biocompatible crosslinking reagent that can participate in multiple types of reactions. The product consists of azide and amine groups on opposite ends of a long (107 atoms), single molecular weight, discrete polyethylene glycol (dPEG®) chain. Alkynes react with the azido group in metal-catalyzed or strain-promoted click chemistry to yield triazole derivatives. Moreover, the azide group functions as a masked amine that reduces to a primary amine via a suitable reducing agent. Furthermore, Azido-dPEG®35-amine can participate in a Staudinger ligation with appropriate phosphine derivatives to create a water-soluble product.

The amphiphilic dPEG® product adds hydrodynamic volume and imparts water solubility to any compound to which it is conjugated. Also, because the terminal azide group functions in multiple different types of reactions, Azido-dPEG®35-amine can act as either a heterobifunctional, click chemistry crosslinker or a monoprotected homobifunctional crosslinking reagent. As a heterobifunctional click chemistry reagent, the azide group reacts with alkynes to form triazoles. The amino terminus of the molecule then can react with carboxylic acids, aldehydes, or ketones to crosslink the conjugate to another molecule. As a monoprotected homobifunctional crosslinker, the amine end reacts first with carboxylic acids (or their active esters), aldehydes, or ketones, leaving the azide end of the molecule free. The reduction of the azido group with a suitable reducing agent, such as triphenylphosphine, yields a free amine that can be conjugated similarly to the conjugation of the first amine group. Reacting the amine groups with aldehydes or ketones results in labile Schiff bases that should be reduced to secondary amines for bond stability.

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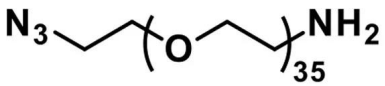
SPECIFICATIONS

CAS Number	749244-38-0
Molecular Weight	1627.94; single compound
Chemical Formula	$C_{72}H_{146}N_4O_{35}$
Purity	> 97%
Unit Size	100 mg, 1000 mg
Solubility	Methylene chloride, Acetonitrile, DMAC, or DMSO.
Spacers	dPEG® Spacer is 107 atoms and 129.0 Å
Storage Instructions	-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.
Shipping Instructions	Ambient

DOCUMENTS

- Safety Data Sheet
- Datasheet

GALLERY IMAGES



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