

## AMINO-DPEG® 12-TRIS (M-DPEG® 24)3

**SKU:** QBD-11474

Amino-dPEG®12-Tris(m-dPEG®24)3, product number QBD-11474, is a carboxylate-reactive, methyl-terminated, four-arm monodispersed PEG product designed to modulate the pharmacokinetics (PK) and biodistribution (BD) of conjugates. It can also be used in surface passivation of organic, inorganic, and biomolecular surfaces. Tris forms the core of the molecule. Three equal-length (76 atoms) methyl-terminated long arms plus one shorter (40 atoms) maleimido-terminated arm extend from the tris core. The total length of the product from the reactive amine to each of the terminal methyl groups is 121 atoms (99.8 Å).

The terminal primary amine reacts with carboxylic acids (carboxylates) and their active esters (e.g., NHS esters, TFP esters) to form stable amide bonds. The terminal amine also reacts with aldehydes to form a labile Schiff base that can be reduced to a stable secondary amine under mild conditions. The uncharged terminal methyl groups may alter the overall charge of the conjugate molecule.

The amphiphilic dPEG® construct imparts hydrophilicity to conjugates, reduces or eliminates the conjugates' antigenicity, and increases the hydrodynamic volume of conjugated molecules. With increased hydrodynamic volume, the renal clearance of conjugate molecules is reduced or eliminated.

This product is designed for modifying biomolecules like antibodies and antibody fragments but can be used in any bioconjugate application where free carboxylates or their active esters are available for reaction. Potential product applications include reducing or eradicating renal clearance, extending in vivo circulating half-life, and suppressing immune responses to

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





conjugates. Amino-dPEG®12-Tris(m-dPEG®24)3, product number QBD-11474, can passivate organic, inorganic, or biomoecular surfces to prevent non-specific, hydrophobic interactions.

## **Specifications**

**Unit Size** 25 mg, 100 mg

**Molecular Weight** 4147.94; single compound;

**Chemical formula**  $C_{187}H_{373}N_5O_{91}$ 

> CAS N/A

Purity > 97%

dPEG® Spacer is 121 atoms and 99.8 Å, avg. **Spacers** 

Shipping Ambient

**Typical solubility** properties (for

additional information Methylene Chloride, DMSO, DMAC, and DMF

contact Customer Support)

-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

Storage and handling 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.

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