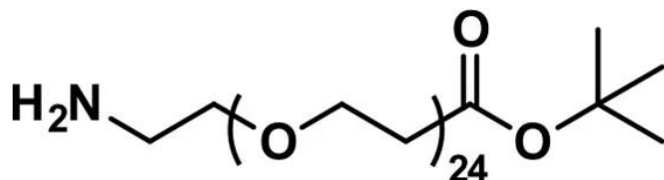


AMINO-DPEG®₂₄-T-BUTYL ESTER

SKU: QBD-10311



Amino-dPEG®₂₄-t-butyl ester, product number QBD-10311, is a heterobifunctional, monodisperse polyethylene glycol (PEG) linker containing a single molecular weight and discrete length PEG (dPEG®) chain. One end of the dPEG® chain terminates with a carbonyl-reactive primary amine. The opposite end terminates with an amine-reactive, tert-butyl-ester-protected propionic acid. The t-butyl ester protecting group cleaves easily with trifluoroacetic acid (TFA), exposing a propionic acid moiety that forms amide bonds with primary amines upon activation. This compound is useful for supramolecular construction and building novel crosslinkers. Conjugates modified with QBD-10311 have improved water solubility and greater hydrodynamic volume.

The amine end of the molecule reacts with activated carboxylic acid esters (for example, N-hydroxysuccinimidyl or tetrafluorophenyl esters) to form an amide bond. Also, carboxylic acids can couple to the amine end of Amino-dPEG®₂₄-t-butyl ester using a carbodiimide such as EDC, with or without an acylating agent such as N-hydroxysuccinimide (NHS).

After working up the reaction to remove unreacted components and isolate the intermediate, trifluoroacetic acid is used to remove the tert-butyl ester and expose the propionic acid end group. The exposed carboxylic acid can then react further. For example, activation as the NHS or TFP ester is possible. Also, the acid can be coupled directly to an amine as described above.

Specifications

Unit Size	100 mg, 1000 mg
Molecular Weight	1202.46; single compound
Chemical formula	C ₅₅ H ₁₁₁ NO ₂₆
CAS	872340-65-3
Purity	> 98%

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

Spacers	dPEG® Spacer is 76 atoms and 89.0 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene chloride, DMAC, or DMSO.
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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