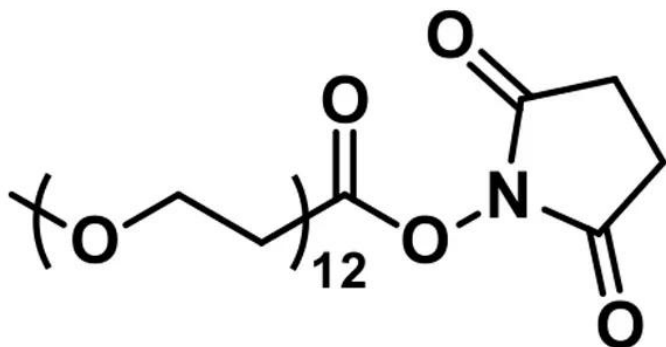


M-DPEG®₁₂-NHS ESTER

SKU: QBD-10262



m-dPEG®₁₂-NHS ester, product number QBD-10262, is a medium-length (38 atoms, 44.7 Å), methyl-terminated, discrete-chain-length polyethylene glycol (dPEG®) spacer functionalized with an N-hydroxysuccinimidyl (NHS) ester for reaction with amines.

NHS esters react optimally with free amines at pH 7.0 – 7.5. In aqueous media, the hydrolytic rate of the ester to the carboxylic acid increases with increasing pH. Reacting surface amines on biomolecules (e.g., proteins and peptides) with this uncharged, methyl-capped dPEG® spacer may alter the overall charge of the resulting conjugates.

Many applications employ this m-dPEG®₁₂-NHS ester. Published papers using this product include uses in:

- vaccine development;
- cell surface engineering;
- multimodal imaging;
- stable antimicrobial, cytotoxic dendrimers;
- nanoparticles for siRNA delivery;
- coating of nanoparticles, quantum dots, and carbon nanotubes;
- PK and immunogenicity improvements for organophosphorus hydrolase;
- PK and immunogenicity improvements for poly-L-lysine dendrimers used as drug delivery vehicles to tumors; and,
- preventing enzyme aggregation.

m-dPEG®₁₂-NHS ester, product number QBD-10262, is just one member of a comprehensive line of methyl-terminated dPEG® products, including dPEG® spacers containing 2 to 49 ethylene glycol units.

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

Specifications

Unit Size	100 mg, 1000 mg
Molecular Weight	685.75; single compound
Chemical formula	C ₃₀ H ₅₅ NO ₁₆
CAS	756525-94-7
Purity	> 98%
Spacers	dPEG® Spacer is 38 atoms and 44.7 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene chloride, Acetonitrile, 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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