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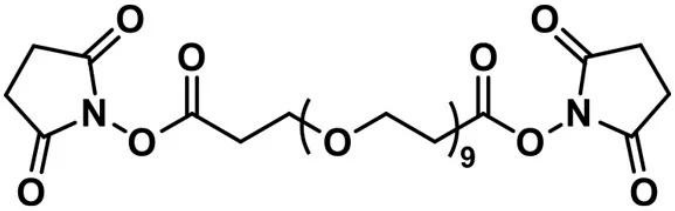
BIS-DPEG®₉-NHS ESTER

SKU: QBD-10246



Bis-dPEG®9-NHS ester, product number QBD-10246, is a homobifunctional, amine-reactive, single molecular weight PEG crosslinker with a medium-length (31 atoms, 35.7 Å), discrete PEG (dPEG®) chain length. Each end of the chain terminates as the N-hydroxysuccinimidyl (NHS) ester of propionic acid. Several scientific publications describe the use of QBD-10246.

NHS esters react with free amines such as the ε-amines of lysine with an optimal pH range of 7.0 – 7.5. However, NHS esters can react with free amines with pH as low as 6.0. NHS esters are susceptible to hydrolysis in aqueous media. The hydrolysis rate of the ester increases with the pH.

Thus, we strongly discourage storing Bis-dPEG®9-NHS ester in water or aqueous buffer. Instead, we recommend that customers make new solutions of the product as needed, use them immediately, and discard unused solutions after use. If customers desire to store the product in solution, we recommend the use of a pure, anhydrous, water-miscible solvent such as dimethyl sulfoxide (DMSO), N,N-dimethylacetamide (DMAC), or N,N-dimethylformamide (DMF). DMSO, DMAC, or DMF can be dried chemically or by storing for a minimum of 24 hours over 3 Å molecular sieves. With DMF, use only fresh solvent as the compound decomposes over time to form free amines that will react with the NHS esters.

Specifications

Unit Size	100 mg, 1000 mg
Molecular Weight	708.71; single compound
Chemical formula	$C_{30}H_{48}N_2O_{17}$
CAS	1008402-79-6
Purity	> 97%

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

Spacers	dPEG® Spacer is 31 atoms and 35.7 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.
