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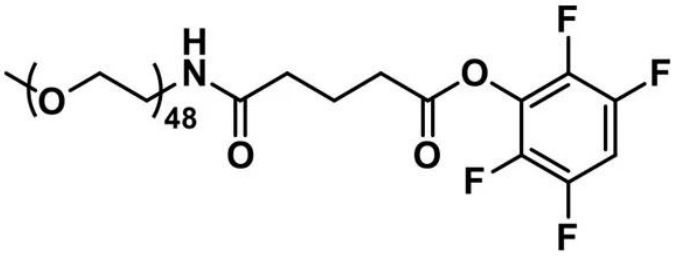
M-DPEG®$_{48}$-NH-CO$(CH_2)_3$CO-TFP ESTER

SKU: QBD-10143



m-dPEG®$_{48}$-NH-CO$(CH_2)_3$CO-TFP ester, product number QBD-10143, is a long (151 atoms, 178.5 Å), methyl-terminated, discrete-length polyethylene glycol (dPEG®) spacer. With a reactive end of 2,3,5,6-tetrafluorophenyl (TFP) ester, m-dPEG®$_{48}$-NH-CO$(CH_2)_3$CO-TFP ester is designed to modify surfaces containing available free amines.

In aqueous media, free amines react optimally with TFP esters at pH 7.5 – 8.5. Compared to N-hydroxysuccinimidyl (NHS) esters, TFP esters are more hydrolytically stable in water and aqueous buffer. Nevertheless, in aqueous media, the rate at which the ester hydrolyzes to the carboxylic acid increases as the pH rises. Moreover, please note that reacting free amines on biomolecules with this uncharged, methyl-capped dPEG® spacer may alter the overall charge of the resulting conjugates.

Many applications potentially could use m-dPEG®$_{48}$-NH-CO$(CH_2)_3$CO-TFP ester successfully. Among those applications are: cell surface engineering; PK, BD, and immunogenicity profile improvements for biomolecules; imaging applications, by reducing background and non-specific binding and consequently increasing the signal-to-noise ratio; dendrimer construction; nanoparticle, quantum dot, and carbon nanotube surface coating; and, prevention of protein aggregation."

Specifications

Unit Size	100 mg, 1000 mg
Molecular Weight	2407.76; single compound
Chemical formula	$C_{108}H_{203}F_4NO_{51}$
CAS	N/A

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

Purity	> 97%
Spacers	dPEG® Spacer is 151 atoms and 178.5 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene Chloride, DMAC, DMSO, DMF or Acetonitrile.
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.
