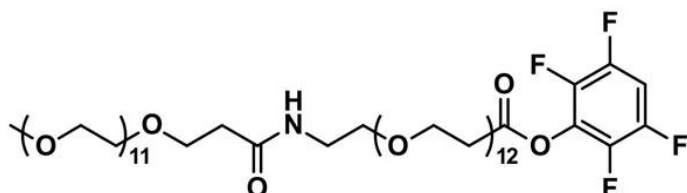


## **M-DPEG®<sub>12</sub>-AMIDO-DPEG®<sub>12</sub>-TFP ESTER**

**SKU:** QBD-10149



"m-dPEG®<sub>12</sub>-amido-dPEG®<sub>12</sub>-TFP ester, product number QBD-10149, is a long (77 atoms, 91.3 Å), methyl-terminated, discrete-length polyethylene glycol (dPEG®) spacer. The reactive end of the molecule is a 2,3,5,6-tetrafluorophenyl (TFP) ester. An amide bond joining two discrete PEG subunits is in the molecule's center. m-dPEG®<sub>12</sub>-amido-dPEG®<sub>12</sub>-TFP ester is designed to modify surfaces containing accessible free amines. Applications for m-dPEG®<sub>12</sub>-amido-dPEG®<sub>12</sub>-TFP ester include cell surface engineering, improving PK/BD, reducing bioconjugate immunogenicity, preventing protein aggregation, constructing dendrimers, and many more.

m-dPEG®<sub>12</sub>-amido-dPEG®<sub>12</sub>-TFP ester reacts with amine-functionalized surfaces (carbon nanotubes, nanoparticles made of silica or various metals, quantum dots, and similar types of products) or free amines on biomolecules. When used to coat surfaces or modify biomolecules, m-dPEG®<sub>12</sub>-amido-dPEG®<sub>12</sub>-TFP ester reduces or eliminates non-specific binding and increases water solubility. Crucially, the elimination of non-specific binding may increase the signal-to-noise ratio in imaging applications and assays where this is a consideration. Please note that modifying the surface amines of biomolecules with this uncharged, methyl-capped dPEG® spacer may alter the overall charge of the resulting conjugates. When reacting TFP esters with free amines, the optimal pH range is 7.5 - 8.5."

### **Specifications**

<b>Unit Size</b>	100 mg, 1000 mg
<b>Molecular Weight</b>	1336.45; single compound
<b>Chemical formula</b>	C <sub>59</sub> H <sub>105</sub> F <sub>4</sub> NO <sub>27</sub>
<b>CAS</b>	N/A
<b>Purity</b>	> 96%
<b>Spacers</b>	dPEG® Spacer is 77 atoms and 91.3 Å
<b>Shipping</b>	Ambient

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

**Typical solubility  
properties (for  
additional information  
contact Customer  
Support)**

Methylene Chloride, Acetonitrile, DMSO, DMAC or DMF.

**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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