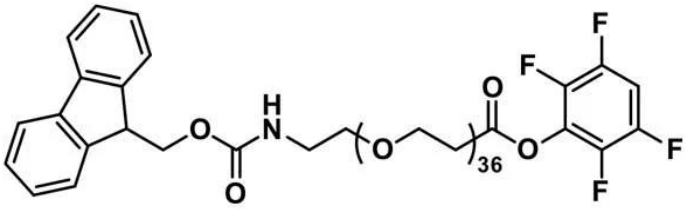
www.vectorlabs.com
e: customerservice@vectorlabs.com
t: (650) 697-3600

FMOC-N-AMIDO-DPEG®$_{36}$-TFP ESTER

SKU: QBD-11008



Fmoc-N-amido-dPEG®36-TFP ester, product number QBD-11008 contains an Fmoc-protected amine on one end of a long (112 atoms), single molecular weight, discrete-chain-length polyethylene glycol (dPEG®) spacer and the tetrafluorophenyl (TFP) ester of a propionic acid group on the other end. This product is ready for the direct introduction of a water-soluble, amphiphilic spacer into a peptide chain. The Fmoc protecting group on the N-terminus of the molecule cleaves easily with standard peptide chemistry.

Fmoc-N-amido-dPEG®36-TFP ester permits our customers to insert a dPEG® spacer into a peptide chain using standard Fmoc chemistry without the need to activate the acid terminus for conjugation. The product works in solid-phase and solution-phase synthetic processes; however, it may work better in solution-phase syntheses because of the dPEG® spacer's length. In aqueous solutions, TFP esters are more hydrolytically stable than NHS esters and have an optimum pH range of 7.5 - 8.0 for conjugation. The dPEG® linker attaches at the N-terminal end of the peptide chain or on the free amine side chain of amino acids such as lysine. Additional peptide synthesis can be carried out to extend the peptide further, creating a peptide with a flexible, hydrophilic linker or spacer in the middle or joining two different peptides across the dPEG® bridge. In addition, the dPEG® chain can provide spacing in a synthetic construct where steric hindrance is a problem. Amphiphilic, non-immunogenic dPEG® increases the hydrodynamic volume and improves the water solubility of the conjugate while remaining soluble in organic solvents. The Fmoc protecting group is removed easily with a solution of piperidine in N,N-dimethylformamide (DMF).

Specifications

Unit Size	100mg, 1000mg
Molecular Weight	2045.30; single compound
Chemical formula	$C_{96}H_{161}F_4NO_{40}$

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

www.vectorlabs.com
e: customerservice@vectorlabs.com
t: (650) 697-3600

CAS	N/A
Purity	> 98%
Spacers	dPEG® Spacer is 112 atoms and 131.4 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene Chloride, Methanol 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.
