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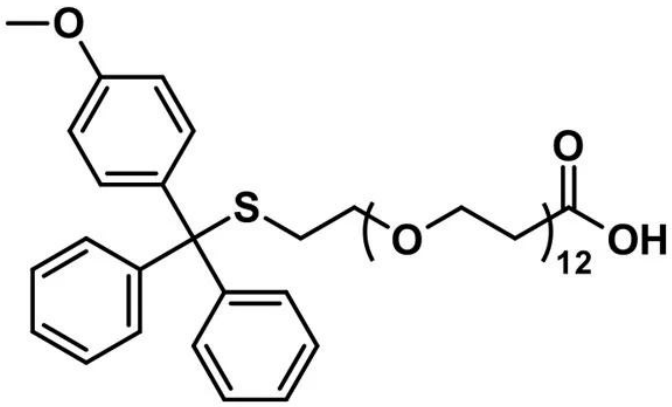
# METHOXYTRITYL-S-DPEG®$_{12}$-ACID

**SKU:** QBD-10846




Methoxytrityl-S-dPEG®12-acid, product number QBD-10846, permits the introduction of a protected thiol-dPEG® spacer/linker onto a molecule by reaction with a free amine. The dPEG®12 linker is functionalized with a methoxytrityl (Mmt)-protected thiol group one end and an amine-reactive propionic acid moiety on the other. The Mmt protecting group is easily removed under relatively mild conditions using dilute trifluoroacetic acid (TFA) with a scavenger.

QBD-10846 permits our customers to insert a medium-length (39 atoms, 46.8 Å) dPEG® into a peptide chain using familiar solid phase or solution phase chemistry. The dPEG® can be inserted at the N-terminus of a peptide chain or on any amino acid side chain with an exposed free amine. In addition, the dPEG® spacer can be used simply to provide additional distance in a synthetic construct where steric hindrance is a problem. The amphiphilic nature of dPEG® means that the construct will gain some degree of water solubility while remaining soluble in organic solvent. The Mmt protecting group removes relatively easily with a dilute solution of TFA that also contains a scavenger such as triethylsilane (TES) or triisopropylsilane (TIPS). Once the thiol group is deprotected, it can be reacted with another thiol to form a disulfide bond or with any thiol-reactive group such as maleimide, bromoacetamide, alkene (thiol-ene reaction) or alkyne (thiol-yne reaction).

Upon activation, Methoxytrityl-S-dPEG®12-acid reacts with any free amine, whether on a peptide, surface, or other molecule. This allows for a broad range of applications where this product can be employed to convert an amine to a thiol.

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## Specifications

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|---|---|
| **Unit Size** | 100mg, 1000mg |
| **Molecular Weight** | 907.11; single compound |
| **Chemical formula** | $C_{47}H_{70}O_{15}S$ |
| **CAS** | 1334169-94-6 |
| **Purity** | > 97% |
| **Spacers** | dPEG® Spacer is 39 atoms and 46.8 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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