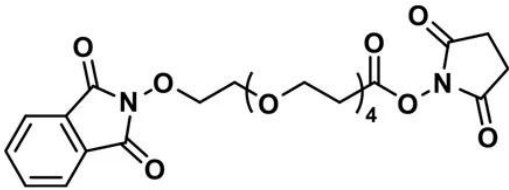


PHTHALIMIDOOXY-DPEG®4-NHS ESTER

SKU: QBD-10011



Phthalimidooxy-dPEG®4-NHS ester, product number QBD-10011, is a protected aminoxy compound linked to an amine-reactive N-hydroxysuccinimidyl (NHS) ester through a single molecular weight, discrete polyethylene glycol (dPEG®) spacer. This allows a hydrophilic, protected aminoxy group to be installed on peptides, proteins, small molecules, and amine-functionalized surfaces.

The amine-reactive NHS ester has optimal reactivity in the pH range of 7.0 - 7.4. This group should be reacted first as the subsequent deprotection step for the aminoxy group will also react with the NHS ester.

The phthaloyl moiety on phthalimidooxy-dPEG®4-NHS ester stably protects the aminoxy group. Following amide bond formation, the phthalimide group can be removed using aqueous hydrazine or hydroxylamine, leaving the aminoxy group free to react.

Oxime bonds form from the reaction between an aminoxy group and an aldehyde or ketone. If the formative reaction is between an aminoxy and an aldehyde, the oxime bond formed is called an aldoxime. The oxime bond formed by the reaction of an aminoxy and a ketone is called a ketoxime. Compared to hydrazone bonds, oxime bonds are exceptionally stable. They do not break under physiological or even slightly acidic conditions that can occur under some physiological states.

Specifications

Unit Size	100mg, 1000mg
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For research use only. Not intended for animal or human therapeutic or diagnostic use.

Molecular Weight	508.48; single compound
Chemical formula	C ₂₃ H ₂₈ N ₂ O ₁₁
CAS	N/A
Purity	> 98%
Spacers	dPEG® Spacer is 17 atoms and 19.0 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	Methylene chloride 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.

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