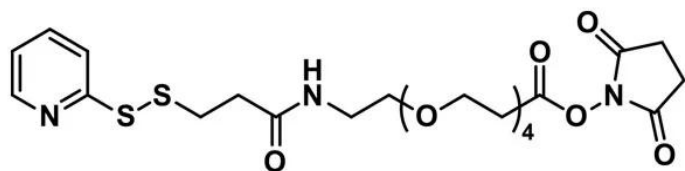




SPDP-DPEG®4-NHS ESTER

SKU: QBD-10374



DESCRIPTION

SPDP-dPEG®4-NHS ester, product number QBD-10374, is Vector Laboratories' water-soluble version of the immensely popular, but unfortunately hydrophobic, SPDP crosslinker. SPDP-dPEG®4-NHS ester is a heterobifunctional crosslinker. The N-hydroxysuccinimidyl (NHS) ester end of the molecule reacts with free amines. The opposite end is a 3-(2-pyridyldithio)-propionate functional group that reacts with sulfhydryl groups in thiol-containing molecules to form disulfide bonds. Between the two functional groups is a short (20 atoms), amphiphilic, single molecular weight, discrete polyethylene glycol (dPEG®) spacer.

Among the most popular heterobifunctional crosslinking reagents used in bioconjugate chemistry are those compounds that conjugate molecules containing free amine groups with molecules that contain sulfhydryl groups. SPDP (N-succinimidyl 3-(2-pyridyldithio)-propionate) is one of the most popular versions of this type of crosslinker. Unfortunately, SPDP and its popular varieties (LC-SPDP and Sulfo-LC-SPDP) are hydrophobic molecules. When conjugated to biomolecules, care must be taken not to modify the target molecules too much, because this can precipitate the conjugate products.

By contrast, SPDP-dPEG®4-NHS ester, product number QBD-10374, is used like SPDP and its related hydrophobic products. However, precautions against overly modifying the target molecule are not necessary. The water-soluble dPEG® product will not cause the resulting conjugates to precipitate due to excessive hydrophobicity.

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



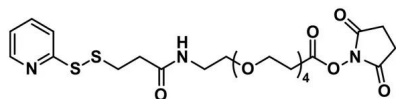
SPECIFICATIONS

CAS Number	1334177-95-5
Molecular Weight	559.65; single compound
Chemical Formula	C ₂₃ H ₃₃ N ₃ O ₉ S ₂
Purity	> 97%
Unit Size	100 mg, 1000 mg
Solubility	Methylene chloride, Acetonitrile, DMAC or DMSO.
Spacers	dPEG® Spacer is 20 atoms and 23.1 Å
Storage Instructions	-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.
Shipping Instructions	Ambient

DOCUMENTS

- [Safety Data Sheet](#)
- [Datasheet](#)

GALLERY IMAGES



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