

Product Information

SPDP NHS ester

Cat. No.: X24-09-YYX131

Size: 100 mg; 250 mg; 500 mg; 1 g

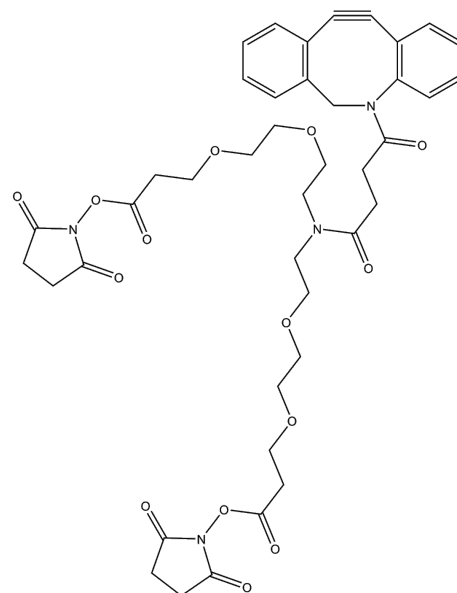
CAS Number: 68181-17-9

PubChem CID: 100682

Synonym: 68181-17-9; SPDP; *N*-Succinimidyl 3-(2-pyridyldithio)propionate; SPDP

Crosslinker; 3-(2-Pyridyldithio)propionic acid *N*-hydroxysuccinimide ester

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	SPDP NHS ester is a heterobifunctional crosslinker capable of reacting with both amine and sulfhydryl groups. It allows for the covalent linking of biomolecules, such as proteins and peptides. This is valuable in drug delivery systems, where it can be used to attach therapeutic agents to targeting molecules. It also finds application in the development of immunoassays and protein modification studies.
Molecular Weight	312.4
Molecular Formula	C ₁₂ H ₁₂ N ₂ O ₄ S ₂
Functional Group 1	Ester
Functional Group 2	NHS
Functional Group 3	S-S disulfide bond
Reactive Group 1	Amine
IUPAC Name	(2,5-Dioxopyrrolidin-1-yl) 3-(pyridin-2-yl)disulfanylpropanoate
InChI	InChI=1S/C12H12N2O4S2/c15-10-4-5-11(16)14(10)18-12(17)6-8-19-20-9-3-1-2-7-13-9/h1-3,7H,4-6,8H2
InChI Key	JWDFQMWEFLOOED-UHFFFAOYSA-N
Canonical SMILES	C1CC(=O)N(C1=O)OC(=O)CCSSC2=CC=CC=N2
Form	Solid
Identity	Confirmed by NMR.

Applications	SPDP (succinimidyl 3-(2-pyridyldithio)propionate) NHS ester is commonly used for conjugating proteins and antibodies to a variety of ligands, allowing for the formation of stable thioether bonds. This is essential in the fields of bioconjugation, diagnostics, and therapeutic antibody development.
Storage	Store at -20°C.