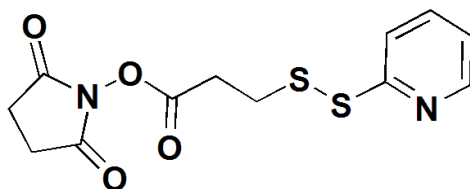


SPDP Crosslinker Protocol and Product Information Sheet

Product Category:	Heterobifunctional Crosslinkers
Catalog Number(s):	c1116-100mg , c1116-1g , c1116-custom
Product Name:	SPDP Crosslinker
Alternative Name(s):	3-(2-Pyridyldithio)propionic acid N-hydroxysuccinimide ester
CAS Number:	68181-17-9
Chemical Formula:	C ₁₂ H ₁₀ N ₂ O ₄ S ₂
Molecular Weight:	312.36
Spacer Arm Length:	6.8 Å



General SPDP Protein Crosslinking Protocol

1. Dissolve 5 mg of SPDP in 640 μ L [DMSO \(cr8105-25ml\)](#) or [DMF \(cr8106-25ml\)](#) to give a 25 mM crosslinker solution.
2. Dissolve protein #1 (without active thiol residues) at a concentration of 1-5 mg/mL in 100 mM sodium phosphate buffer, pH 7.2 to pH 8.0, 1 mM EDTA.
3. Add 20 μ L of 25 mM SPDP crosslinker solution to 1 mL of the above protein solution.
4. Allow reaction to proceed for 30-60 minutes at room temperature.
5. Remove unreacted SPDP crosslinker from protein containing solution through gel-filtration, such as [Desalting Resin g4109-1gm](#) (i.e. Sephadex® G-25).
6. Dissolve protein #2 in buffer (100 mM sodium phosphate pH 7.2 to 8.0, 1 mM EDTA).
7. Add 0.2 to 1.0 molar equivalents of protein #2 solution to desalted activated protein #1.
8. Allow this reaction to proceed for 8 to 16 hours at room temperature.
9. To cleave the newly formed conjugate, incubate crosslinked product with 50 mM DTT ([cr8101-5x10mg](#)) for 90-120 minutes at room temperature or 1 hour at 45°C.

References:

Hermanson, G.T. 1996. Bioconjugates Techniques. Academic Press, San Diego, CA USA.