

Product data sheet



MedKoo Cat#: 571620 Name: DSP Crosslinker CAS: 57757-57-0 Chemical Formula: C ₁₄ H ₁₆ N ₂ O ₈ S ₂ Exact Mass: 404.0348 Molecular Weight: 404.408		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

DSP Crosslinker, also known as DTSSP Crosslinker, is a homobifunctional and cleavable crosslinker that is cell membrane permeable. DSP crosslinker has amine-reactive N-hydroxysuccinimide (NHS) esters at both ends of a cleavable, 8-atom (12.0 angstrom) spacer arm, and DSP cross links occur via these NHS esters.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	30.0	74.18
DMSO	53.67	132.70
DMSO:PBS (pH 7.2) (1:4)	0.20	0.49

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.47 mL	12.36 mL	24.73 mL
5 mM	0.49 mL	2.47 mL	4.95 mL
10 mM	0.25 mL	1.24 mL	2.47 mL
50 mM	0.05 mL	0.25 mL	0.49 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Akaki K, Mino T, Takeuchi O. DSP-crosslinking and Immunoprecipitation to Isolate Weak Protein Complex. Bio Protoc. 2022 Aug 5;12(15):e4478. doi: 10.21769/BioProtoc.4478. PMID: 36082367; PMCID: PMC9411015.
2. Pretto C, Tang M, Chen M, Xu H, Subrizi A, Urtti A, van Hest JCM. Cowpea Chlorotic Mottle Virus-Like Particles as Potential Platform for Antisense Oligonucleotide Delivery in Posterior Segment Ocular Diseases. Macromol Biosci. 2021 Aug;21(8):e2100095. doi: 10.1002/mabi.202100095. Epub 2021 May 24. PMID: 34031995.

In vivo study

TBD

7. Bioactivity

Biological target:

DSP Crosslinker is a cleavable ADC linker, used in the synthesis of antibody-drug conjugates (ADCs).

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In vitro activity

This study introduces the method of DSP (dithiobis(succinimidyl propionate))-mediated crosslinking, followed by tandem immunoprecipitation (FLAG and HA tags).

Reference: Bio Protoc. 2022 Aug 5;12(15):e4478. <https://pubmed.ncbi.nlm.nih.gov/36082367/>

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.