

Product data sheet



MedKoo Cat#: 571625 Name: EGS Crosslinker CAS#: 70539-42-3 Chemical Formula: C ₁₈ H ₂₀ N ₂ O ₁₂ Exact Mass: 456.1016 Molecular Weight: 456.36	
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:

EGS Crosslinker, or Ethylene glycol bis(succinimidylsuccinate), is a water insoluble homobifunctional crosslinker that can be used to label intracellular proteins. EGS crosslinker is often used in CHIP assays to determine DNA-protein binding interactions.

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
DMSO	100.0	219.13

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.19 mL	10.96 mL	21.91 mL
5 mM	0.44 mL	2.19 mL	4.38 mL
10 mM	0.22 mL	1.10 mL	2.19 mL
50 mM	0.04 mL	0.22 mL	0.44 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. O'Brien AM, O'Fágáin C, Nielsen PF, Welinder KG. Location of crosslinks in chemically stabilized horseradish peroxidase: implications for design of crosslinks. *Biotechnol Bioeng.* 2001 Dec;76(4):277-84. doi: 10.1002/bit.1194. PMID: 11745154.

In vivo study

TBD

7. Bioactivity

Biological target:

EGS Crosslinker (EGNHS) is an alkyl/ether-based PROTAC linker that can be used in the synthesis of PROTACs.

In vitro activity

The bifunctional compound, ethylene-glycol bis(N-hydroxysuccinimidylsuccinate) (EGNHS), stabilizes horseradish peroxidase C (HRP) by reaction with the enzyme's lysine residues. Most significantly, EGNHS is shown to form a crosslink between Lys232 and Lys241 of HRP and modifies Lys174 without formation of a crosslink. These findings are in agreement with the lysine side-chain reactivities predicted from the surface accessibility of the amino groups, and the maximal span of 16 Å of the EGNHS crosslinker.

Reference: *Biotechnol Bioeng.* 2001 Dec;76(4):277-84. <https://pubmed.ncbi.nlm.nih.gov/11745154/>

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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.