

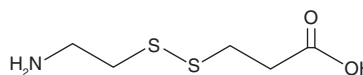
PRODUCT INFORMATION



Aminoethyl-SS-Propionic Acid

Item No. 35501

CAS Registry No.: 15579-00-7
Formal Name: 3-[(2-aminoethyl)dithio]-propanoic acid
MF: C₅H₁₁NO₂S₂
FW: 181.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Aminoethyl-SS-propionic acid is supplied as a solid. A stock solution may be made by dissolving the aminoethyl-SS-propionic acid in the solvent of choice, which should be purged with an inert gas. Aminoethyl-SS-propionic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of aminoethyl-SS-propionic acid in these solvents is approximately 11 and 16 mg/ml, respectively. Aminoethyl-SS-propionic acid is slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of aminoethyl-SS-propionic acid can be prepared by directly dissolving the solid in aqueous buffers. The solubility of aminoethyl-SS-propionic acid in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Aminoethyl-SS-propionic acid is a cleavable disulfide linker.^{1,2} It has been used in the synthesis of antibody-drug conjugates (ADCs) containing the antibody trastuzumab and a membrane-impermeable cytotoxin, which inhibits HER2 dimerization and induces cytotoxicity in HER2-positive breast cancer cells, respectively.²

References

1. Beck, A., Goetsch, L., Dumontet, C., *et al.* Strategies and challenges for the next generation of antibody-drug conjugates. *Nat. Rev. Drug Discov.* **16**(5), 315-337 (2017).
2. Knewtson, K.E., Perera, C., Hymel, D., *et al.* Antibody-drug conjugate that exhibits synergistic cytotoxicity with an endosome-disruptive peptide. *ACS Omega* **4**(7), 12955-12968 (2019).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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