

PRODUCT INFORMATION



MTSEA-biotin

Item No. 17237

CAS Registry No.: 162758-04-5

Formal Name: S-[2-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]ethyl] ester methanesulfonylthioic acid

Synonym: N-Biotinylaminoethylmethanethiosulfonate, Methanethiosulfonate Ethylammonium-biotin

MF: $C_{13}H_{23}N_3O_4S_3$

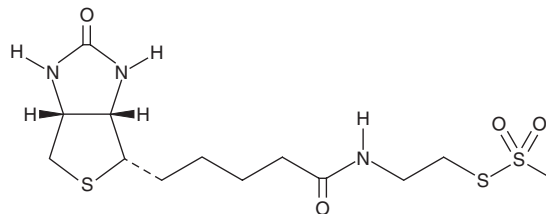
FW: 381.5

Purity: $\geq 95\%$

Supplied as: A crystalline solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

MTSEA-biotin is supplied as a crystalline solid. A stock solution may be made by dissolving the MTSEA-biotin in the solvent of choice, which should be purged with an inert gas. MTSEA-biotin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of MTSEA-biotin in these solvents is approximately 30 mg/ml.

MTSEA-biotin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MTSEA-biotin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MTSEA-biotin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

MTSEA-biotin is a thiol-reactive probe that can be used to label proteins at cysteine residues.^{1,2}

References

1. Wagner, D.A. and Czajkowski, C. Structure and dynamics of the GABA binding pocket: A narrowing cleft that constricts during activation. *J. Neurosci.* **21(1)**, 67-74 (2001).
2. Zhong, M., Kawaguchi, R., Ter-Stepanian, M., *et al.* Vitamin A transport and the transmembrane pore in the cell-surface receptor for plasma retinol binding protein. *PLoS One* **8(11)**, 1-12 (2013).

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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