

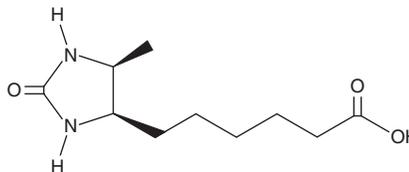
PRODUCT INFORMATION



D-Desthiobiotin

Item No. 30418

CAS Registry No.: 533-48-2
Formal Name: (4R,5S)-5-methyl-2-oxo-4-imidazolidinehexanoic acid
MF: C₁₀H₁₈N₂O₃
FW: 214.3
Purity: ≥95%
Supplied as: A crystalline 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

D-Desthiobiotin is supplied as a crystalline solid. A stock solution may be made by dissolving the D-desthiobiotin in the solvent of choice, which should be purged with an inert gas. D-Desthiobiotin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of D-desthiobiotin in ethanol is approximately 0.5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

D-Desthiobiotin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, D-desthiobiotin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. D-Desthiobiotin has a solubility of approximately 0.2 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

D-Desthiobiotin is a protein cross-linking agent and a precursor in the synthesis of biotin (Item No. 22582).¹ It has been used in the preparation of agarose matrices for affinity-based isolation of streptavidin-fluorophore conjugates.

Reference

1. Hirsch, J.D., Eslamizar, L., Filanoski, B.J., *et al.* Easily reversible desthiobiotin binding to streptavidin, avidin, and other biotin-binding proteins: Uses for protein labeling, detection, and isolation. *Anal. Biochem.* **308**(2), 343-357 (2002).

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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