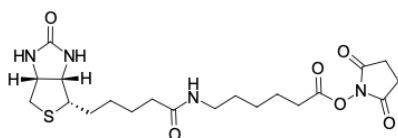


Biotin-X-NHS ester

<http://www.lumiprobe.com/p/biotin-x-nhs-ester>

Biotin may be conjugated to many proteins while maintaining the biological activity. The biotinylated probe is usually detected by avidin, streptavidin due to their effective binding which is used in various applications such as affinity chromatography, ELISA and Western Blot, fluorescence-activated cell sorting (FACS), intracellular labeling.

Biotin-X-NHS ester is a derivative with C6-spacer to reduce steric effect when binding amino acids, peptides, or proteins by reacting with primary amines. This compound is used to attach biotin to primary amines under alkaline conditions (pH 8-9).



Structure of Biotin-X-NHS ester

General properties

Appearance: white solid

Mass spec 339.2

M+
increment:

Molecular weight: 454.55

CAS number: 72040-63-2

Molecular formula: C₂₀H₃₀N₄O₆S

IUPAC name: (2,5-dioxopyrrolidin-1-yl) 6-[5-[(3aS,4S,6aR)-2-oxo-1,3,3a,4,6,6a-hexahydrothieno[3,4-d]imidazol-4-yl]pentanoylamino]hexanoate

Solubility: good in DMSO, moderately soluble in DMF

Quality control: NMR ¹H

Storage conditions: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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