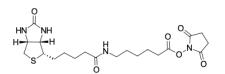


## **Biotin-X-NHS ester**

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**

General properties		
Appearance:	white solid	
Mass spec M+ increment:	339.2	
Molecular weight:	454.55	
CAS number:	72040-63-2	
Molecular formula:	$C_{20}H_{30}N_4O_6S$	
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 <sup>1</sup> H	
Storage conditions:	12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.	
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.	