

## **Biotin-PEG4-NHS ester**

http://www.lumiprobe.com/p/biotin-peg4-nhs-ester

Biotin-PEG4-NHS ester is an activated ester for simple and efficient biotin labeling of antibodies, proteins, and other primary amine-containing biomolecules. The NHS ester group reacts efficiently with amino groups by the nucleophilic attack, forming an amide bond and releasing N-Hydroxysuccinimide. Biotin-labeled compounds can then be linked to avidin or streptavidin for further purification or detection. The biotin group is relatively small and doesn't affect the biological activity of biotinylated proteins.

This reagent features a long PEG4-linker that separates the biotin residue from the target molecule, ensuring efficient binding to avidin or streptavidin. The linker also increases the compound's water solubility, thereby facilitating bioconjugation. Antibodies labeled with Biotin-PEG4-NHS ester exhibit less aggregation when stored in solution than those labeled with reagents with only hydrocarbon spacers.

## Structure of Biotin-PEG4-NHS ester

products.

## **General properties**

Appearance:	white to off-beige powder
Molecular weight:	588.68
CAS number:	459426-22-3
Molecular formula:	$C_{25}H_{40}N_4O_{10}S$
Solubility:	water, DMSO, DMF, DCM
Quality control:	NMR <sup>1</sup> H and HPLC-MS (95+%)
Storage conditions:	12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
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