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TECHNICAL DATA SHEET

Biotin PEG OPSS, MW 600, 1000, 2000, 3400, 5000, 10k, 20k

Catalog Numbers: PG2-BNOS-400, 600, 1k, 2k, 3k, 5k, 10k, 20k.

Synonym: Pyridyldithio PEG Biotin, Pyridyldisulfide PEG Biotin, Biotin PEG PDP, SPDP PEG Biotin, PDP PEG biotin, OPSS PEG Biotin

Description:

Biotin PEG OPSS is one of Nanocs' thiol reactive biotin PEG reagents that contain a pyridyldisulfide group and a biotin molecule on each PEG terminus. Biotin is a small bioactive molecule that has high affinity toward avidin or streptavidin. Biotin/streptavidin system has been widely used in molecule detection, bioassays and drug delivery applications. OPSS (ortho-pyridyldisulfide) reacts with free thiol group to form a cleavable disulfide bond. This reaction releases a UV detectable pyridine-2-thione which can be monitored spectrophotometrically at 343 nm; thus Biotin PEG OPSS can be used not only as a thiol biotinylation reagent, it can also be used as a thiol quantification reagent. Compared to other thiol reactive PEG biotins, OPSS PEG biotin is a reversible biotinylation reagent; disulfide bond formed between pyridyldisulfide and thiol can be cleaved with reducing reagents such as DTT to release anchored biotin. More notably, our OPSS PEG biotin is water soluble, all reactions or assays can be carried out in aqueous buffer without need any organic solvents.

Product Structure:

Product Specifications:

• Composition: **Biotin PEG OPSS**.

Appearance: White/off-white solid, semi-solid

depends on molecular weight.

Solubility: 10 mg/mL, clear in water,

chloroform, DMSO.

• Function group: **Biotin**.

Reactive group: Pyridine disulfide.

Handling and Use:

Biotin PEG OPSS should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For more information about using this product, visit www.nanocs.net.

Storage Conditions:

Pyridyldisulfide PEG Biotin should be stored at 4-8 $^{\circ}$ C. Desiccate. Materials may be handled under inert gas for best stability.

This product is for research use only and is not intended for use in humans or for diagnostic use.

Related Products:

Biotin PEG NHS
Biotin PEG Amine
Biotin PEG Maleimide
Biotin PEG COOH
Biotin PEG Azide
Biotin PEG FITC

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