

**TECHNICAL DATA SHEET** 

# Methoxy PEG Succinimidyl Acid Ester, mPEG-NHS

Catalog Numbers: PG1-SPA-1k, 2k, 5k, 10k, 20k, 30k, 40k.

Synonym: NHS PEG, PEG NHS, mPEG SPA, mPEG succinimidyl propionic acid

## **Description:**

mPEG NHS is a N-hydroxylsuccinimide (NHS) functionalized methoxy polyethylene glycol derivative that is used to react with primary amine (-NH<sub>2</sub>) groups either in aqueous solution or organic solvents. These NHS PEGs have been used to modify proteins, antibodies, peptides and many other materials via their available amino groups. NHS esters react with primary amine groups at pH 7~10 to form stable amide bonds. Compared to other PEG NHS ester derivatives, Nanocs' succinimidyl propionic acid PEG ester offers superior reactivity and higher stability in aqueous solution. NHS esters react with deprotonated primary amines, therefore, the reaction requires neutral to basic pH values to proceed. Primary amines react with NHS esters by nucleophilic attack and NHS is released as a byproduct. Hydrolysis of the NHS-ester competes with the reaction in aqueous solution and increases with increasing pH.

### Product Structure:



### Product Specifications:

- Composition: mPEG Succinimidyl Ester.
- Appearance: White/Off-white solid or semisolid depends on molecular weight.
- Purity: > 95%;
- Solubility: 10 mg/mL, clear in water, chloroform, DMSO, etc.
- Stability: 6 months at -20 °C.

## Handling and Use:

**mPEG succinimidyl NHS** esters readily undergo hydrolysis at elevated temperature. Material 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:**

**PEG NHS** should be stored at -20 <sup>0</sup>C. Desiccate. Materials may be handled under inert gas for best stability. Re-test material after 6 months.

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

### Related Products:

mPEG-SA-NHS mPEG Maleimide mPEG thiol mPEG-GA-NHS mPEG azide mPEG amine

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