

## **MPS (NHS-3-MALEIMIDOPROPIONATE)**

**SKU:** QBD-10217



"MPS (NHS-3-maleimidopropionate), product number QBD-10217, is the N-hydroxysuccinimidyl (NHS) ester of 3-(maleimido)propanoic acid and is used to crosslink sulfhydryls with amines. This product does not contain a dPEG® spacer between the reactive groups. The distance is six atoms (6.0 Å) from the reactive site of the maleimide to the carbonyl carbon of the propanoic acid.

The maleimido group reacts with sulfhydryl groups to form thiol ether bonds. In the range of pH 6.5 – 7.5, the thiol-maleimide reaction is chemoselective. Above pH 7.5, the maleimide group can also react with free amine groups. Consequently, high pH buffers should be avoided when using this product.

NHS esters are widely popular for reactions of carboxylic acids with primary or secondary amines to form stable amide bonds. Although the NHS ester hydrolyzes rather easily in water or aqueous buffer, this product can be dissolved in a water-miscible solvent such as N,N'dimethylacetamide (DMAC) that has been dried over 3 Å molecular sieves. The solution of MPS is then added to the water or aqueous buffer to start the reaction."

## Specifications

Unit Size	250 mg, 1000 mg
Molecular Weight	266.21; single compound
Chemical formula	$C_{11}H_{10}N_2O_6$
CAS	55750-62-4

For research use only. Not intended for animal or human therapeutic or diagnostic use.



Purity	> 98%
Spacers	Spacer is 6 atoms and 6.0 Å
Shipping	Ambient
Typical solubility properties (for additional information contact Customer Support)	DMAC or DMSO.
Storage and handling	-20°C; Always let come to room temperature before opening; be careful to limit exposure to moisture and restore under an inert atmosphere; stock solutions can be prepared with dry solvent and kept for several days (freeze when not in use). dPEG® pegylation compounds are generally hygroscopic and should be treated as such. This will be less noticeable with liquids, but the solids will become tacky and difficult to manipulate, if care is not taken to minimize air exposure.

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