

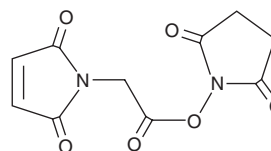
PRODUCT INFORMATION



Maleimidoacetic Acid N-hydroxysuccinimide ester

Item No. 17160

CAS Registry No.: 55750-61-3
Formal Name: 2,5-dihydro-2,5-dioxo-1H-pyrrole-1-acetic acid, 2,5-dioxo-1-pyrrolidinyl ester
Synonym: AMAS
MF: C₁₀H₈N₂O₆
FW: 252.2
Purity: ≥95%
UV/Vis.: λ_{max}: 217, 223 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Maleimidoacetic acid N-hydroxysuccinimide ester is supplied as a crystalline solid. A stock solution may be made by dissolving the maleimidoacetic acid N-hydroxysuccinimide ester in the solvent of choice, which should be purged with an inert gas. Maleimidoacetic acid N-hydroxysuccinimide ester is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of maleimidoacetic acid N-hydroxysuccinimide ester in these solvents is approximately 30 mg/ml.

Maleimidoacetic acid N-hydroxysuccinimide ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, maleimidoacetic acid N-hydroxysuccinimide ester should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Maleimidoacetic acid N-hydroxysuccinimide ester has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Maleimidoacetic acid N-hydroxysuccinimide ester is a crosslinking reagent that contains NHS ester- and maleimide-reactive groups at the opposite ends of a 4.4 Å spacer arm. This configuration allows for sequential, two-stage conjugation with amine and sulfhydryl functional groups in the preparation of protein-hapten or protein-protein conjugates.^{1,2}

References

1. May, J.M. Selective labeling of the erythrocyte hexose carrier with a maleimide derivative of glucosamine: Relationship of an exofacial sulfhydryl to carrier conformation and structure. *Biochemistry* **28**(4), 1718-1725 (1989).
2. Sayre, L.M., Larson, D.L., Takemori, A.E., *et al.* Design and synthesis of naltrexone-derived affinity labels with nonequilibrium opioid agonist and antagonist activities. Evidence for the existence of different μ receptor subtypes in different tissues. *J. Med. Chem.* **27**(10), 1325-1335 (1984).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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