

PRODUCT INFORMATION

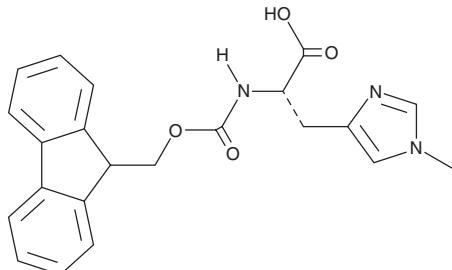


Fmoc-1-Methyl-L-histidine

Item No. 36312

CAS Registry No.: 202920-22-7

Formal Name: N-[(9H-fluoren-9-ylmethoxy) carbonyl]-1-methyl-L-histidine
Synonym: Fmoc-His(1-Me)-OH
MF: C₂₂H₂₁N₃O₄
FW: 391.4
Purity: ≥98%
Supplied as: A 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

Fmoc-1-methyl-L-histidine is supplied as a solid. A stock solution may be made by dissolving the Fmoc-1-methyl-L-histidine in the solvent of choice, which should be purged with an inert gas. Fmoc-1-methyl-L-histidine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of Fmoc-1-methyl-L-histidine in these solvents is approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Fmoc-1-methyl-L-histidine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of Fmoc-1-methyl-L-histidine in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Fmoc-1-methyl-L-histidine is an amino acid-containing building block.¹ It has been used in the production of ε-nitrogen-ligated copper centers in copper nitrite reductases.

Reference

1. Koebke, K.J., Yu, F., Van Stappen, C., et al. Methylated histidines alter tautomeric preferences that influence the rates of Cu nitrite reductase catalysis in designed peptides. *J. Am. Chem. Soc.* **141**(19), 7765-7775 (2019).

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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