

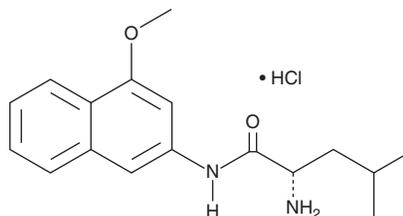
PRODUCT INFORMATION



L-Leucine 4-methoxy-β-naphthylamide (hydrochloride)

Item No. 16223

CAS Registry No.: 4467-68-9
Formal Name: (S)-2-amino-N-(4-methoxy-2-naphthalenyl)-4-methyl-pentanamide, monohydrochloride
Synonym: Leu-MNA
MF: C₁₇H₂₂N₂O₂ • HCl
FW: 322.8
Purity: ≥98%
UV/Vis.: λ_{max}: 248, 298 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

L-Leucine 4-methoxy-β-naphthylamide (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the L-leucine 4-methoxy-β-naphthylamide (hydrochloride) in the solvent of choice, which should be purged with an inert gas. L-Leucine 4-methoxy-β-naphthylamide (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of L-leucine 4-methoxy-β-naphthylamide (hydrochloride) in these solvents is approximately 25, 10, and 20 mg/ml, respectively.

L-Leucine 4-methoxy-β-naphthylamide (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, L-leucine 4-methoxy-β-naphthylamide (hydrochloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. L-Leucine 4-methoxy-β-naphthylamide (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

L-Leucine 4-methoxy-β-naphthylamide is a cell-permeable substrate for aminopeptidase M and leucine aminopeptidase that was developed for intracellular analysis of protease activities.^{1,2}

References

1. Monis, B., Wasserkrug, H., and Seligman, A.M. Comparison of fixatives and substrates for aminopeptidase. *J. Histochem. Cytochem.* **13(6)**, 503-509 (1965).
2. Rüttger, A., Mollenhauer, J., Löser, R., et al. Microplate assay for quantitative determination of cathepsin activities in viable cells using derivatives of 4-methoxy-β-naphthylamide. *Biotechniques* **41(4)**, 469-473 (2006).

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.

WARRANTY AND LIMITATION OF REMEDY

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