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%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid UV/Vis.: λ_{max} : 248, 298 nm

Laboratory Procedures

For long term storage, we suggest that L-leucine 4-methoxy-β-naphthylamide (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

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. L-Leucine 4-methoxyβ-naphthylamide (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. 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.

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).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16223

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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