PRODUCT INFORMATION



N-acetyl-D-Leucine

Item No. 30489

CAS Registry No.: 19764-30-8 MF: $C_8H_{15}NO_3$ 173.2 FW: **Purity:** ≥95%

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

N-acetyl-D-Leucine is supplied as a crystalline solid. A stock solution may be made by dissolving the N-acetyl-D-leucine in the solvent of choice, which should be purged with an inert gas. N-acetyl-D-Leucine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-acetyl-D-leucine in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

N-acetyl-D-Leucine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-acetyl-D-leucine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. N-acetyl-D-Leucine has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

N-acetyl-D-Leucine is a derivative of D-leucine and a substrate for various enzymes in the amidohydrolase superfamily. It has been used to characterize the function of amidohydrolase enzymes from B. bronchiseptica, S. coelicolor, and G. oxydans.

Reference

1. Cummings, J., Fedorov, A.A., Xu, C., et al. Annotating enzymes of uncertain function: The deacylation of D-amino acids by members of the amidohydrolase superfamily. Biochemistry 48(27), 6469-6481 (2009).

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

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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