LKT Laboratories, Inc.

N-Acetyl-D-Leucine

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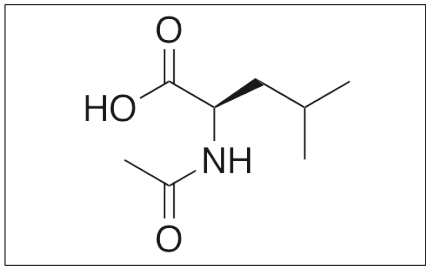
Product Information

Product ID A0921
CAS No. 19764-30-8
Chemical Name

Synonym

Formula $C_8H_{15}NO_3$
Formula Wt. 173.21
Melting Point 176-177°C
Purity ≥98%
Solubility



Bulk quanitites available upon request

Product ID	Size
A0921	1 g
A0921	5 g

Store Temp Ambient
Ship Temp Ambient
Description N-acetyl-D-leucine is a D-amino acid that is deacylated in bacteria by d-aminoacylase enzymes. D-amino acids inhibit bacterial biofilm formation when they are incorporated into the cell wall. Compounds such as N-acetyl-D-leucine induce release of amyloid fibers that link cells together in the biofilm.

References

Leiman SA, May JM, Lebar MD, et al. D-amino acids indirectly inhibit biofilm formation in Bacillus subtilis by interfering with protein synthesis. J Bacteriol. 2013 Dec;195(23):5391-5. PMID: 24097941.

Kolodkin-Gal I, Romero D, Cao S, et al. D-amino acids trigger biofilm disassembly. Science. 2010 Apr 30;328(5978):627-9. PMID: 20431016.

Cummings JA, Fedorov AA, Xu C, et al. Annotating enzymes of uncertain function: the deacylation of D-amino acids by members of the amidohydrolase superfamily. Biochemistry. 2009 Jul 14;48(27):6469-81. PMID: 19518059.