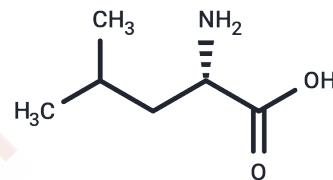


## L-Leucine

## Chemical Properties

CAS No. :	61-90-5
Formula:	C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub>
Molecular Weight:	131.17
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	L-Leucine ((S)-Leucine) is one of nine essential amino acids in humans (provided by food), L-Leucine is important for protein synthesis and many metabolic functions. L-Leucine contributes to regulation of blood-sugar levels; growth and repair of muscle and bone tissue; growth hormone production; and wound healing. L-Leucine also prevents breakdown of muscle proteins after trauma or severe stress and may be beneficial for individuals with phenylketonuria. L-Leucine is available in many foods and deficiency is rare.
Targets(IC50)	Endogenous Metabolite,mTOR

## Solubility Information

Solubility	H <sub>2</sub> O: 9.7 mg/mL (73.95 mM),Sonication is recommended. DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.6237 mL	38.1185 mL	76.2369 mL
5 mM	1.5247 mL	7.6237 mL	15.2474 mL
10 mM	0.7624 mL	3.8118 mL	7.6237 mL
50 mM	0.1525 mL	0.7624 mL	1.5247 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Borack, M., & Volpi, E. (2016). Efficacy and Safety of Leucine Supplementation in the Elderly. The Journal Of Nutrition, 146(12), 2625S-2629S. doi: 10.3945/jn.116.230771

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