**Proteins** 

## **Product** Data Sheet

# N-Benzyl-L-isoleucine

Cat. No.: HY-78906 CAS No.: 1859-49-0 Molecular Formula: C<sub>13</sub>H<sub>19</sub>NO<sub>2</sub> Molecular Weight: 221.3

Amino Acid Derivatives Target:

Pathway: Others

Storage: Powder -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 9.09 mg/mL (41.08 mM; ultrasonic and adjust pH to 2 with HCl)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.5188 mL	22.5938 mL	45.1875 mL
	5 mM	0.9038 mL	4.5188 mL	9.0375 mL
	10 mM	0.4519 mL	2.2594 mL	4.5188 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
  - Solubility: ≥ 0.91 mg/mL (4.11 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 0.91 mg/mL (4.11 mM); Clear solution

#### **BIOLOGICAL ACTIVITY**

 $\hbox{N-Benzyl-L-isoleucine is an isoleucine derivative} \ [1].$ Description

In Vitro Amino acids and amino acid derivatives have been commercially used as ergogenic supplements. They influence the secretion of anabolic hormones, supply of fuel during exercise, mental performance during stress related tasks and prevent exercise induced muscle damage. They are recognized to be beneficial as ergogenic dietary substances<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

1]. Luckose F, et al. Effects of a	mino acid derivatives on physi	cal, mental, and physiological	activities. Crit Rev Food Sci Nutr. 201	5;55(13):1793-1144.
	Courtiem, Dreaduct has not	hoon fully validated for me	odical applications. For years yet	use enly
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