**Proteins** 

# Inhibitors

## **Product** Data Sheet

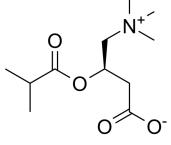
## Isobutyryl-L-carnitine

Cat. No.: HY-113165 CAS No.: 25518-49-4 Molecular Formula: C<sub>11</sub>H<sub>21</sub>NO<sub>4</sub> Molecular Weight: 231.29

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 250 mg/mL (1080.89 mM; Need ultrasonic)  $H_2O: 125 \text{ mg/mL}$  (540.45 mM; Need ultrasonic)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 4.3236 mL | 21.6179 mL | 43.2358 mL |
|                              | 5 mM                          | 0.8647 mL | 4.3236 mL  | 8.6472 mL  |
|                              | 10 mM                         | 0.4324 mL | 2.1618 mL  | 4.3236 mL  |

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (8.99 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (8.99 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (8.99 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

| Description               | Isobutyryl-L-carnitine is a product of the acyl-CoA dehydrogenases <sup>[1]</sup> . |
|---------------------------|---|
| IC <sub>50</sub> & Target | Human Endogenous Metabolite   |

#### **REFERENCES**

| 1]. Cao C, et, al. Metabonomic a | analysis of toxic action of long-tern | n low-level exposure to acrylam                 | nide in rat serum. Hum Exp Toxicol. 2                  | 2018 Dec; 37(12): 1282-1292. |
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