

# 1-BCP

Cat. No.: HY-101363 CAS No.: 34023-62-6 Molecular Formula: C<sub>13</sub>H<sub>15</sub>NO<sub>3</sub> Molecular Weight: 233.26 iGluR Target:

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month

$$\begin{pmatrix}
N & O \\
O & O
\end{pmatrix}$$

**Product** Data Sheet

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (428.71 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.2871 mL	21.4353 mL	42.8706 mL
	5 mM	0.8574 mL	4.2871 mL	8.5741 mL
	10 mM	0.4287 mL	2.1435 mL	4.2871 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: ≥ 2.5 mg/mL (10.72 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.72 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.72 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description 1-BCP (Piperonylic acid piperidide) is a centrally active agent that modulates AMPA receptor gated currents. 1-BCP is a memory-enhancing agent<sup>[1][2]</sup>.

AMPA receptor<sup>[1]</sup>. IC<sub>50</sub> & Target

### **REFERENCES**

[1]. Arai A, et al. A centrally active drug that modulates AMPA receptor gated currents. Brain Res. 1994 Feb 28;638(1-2):343-6.	
[2]. Desai MA, et al. 1-BCP, a memory-enhancing agent, selectively potentiates AMPA-induced release in rat hippocampal slices. Neuropharmacology. 1995 Feb;34(2):141	-7.
Caution: Product has not been fully validated for medical applications. For research use only.	
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