Product Data Sheet

Buntanetap

Cat. No.: HY-16009 CAS No.: 116839-68-0 Molecular Formula: $C_{20}H_{23}N_3O_2$ Molecular Weight: 337.42

Cholinesterase (ChE); Amyloid- β ; α -synuclein; Huntingtin Target:

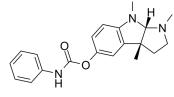
Pathway: **Neuronal Signaling**

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO: 230 mg/mL (681.64 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9637 mL	14.8183 mL	29.6367 mL
	5 mM	0.5927 mL	2.9637 mL	5.9273 mL
	10 mM	0.2964 mL	1.4818 mL	2.9637 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: ≥ 5.75 mg/mL (17.04 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5.75 mg/mL (17.04 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Buntanetap ((+)-Phenserine) is a multiple neurotoxic protein translation inhibitor with oral activity, including amyloid precursor protein (APP), α -synuclein (α SYN) and huntingtin protein (HTT). Buntanetap has anti-inflammatory effects and can be used in the study of Alzheimer's disease and Parkinson's disease ^{[1][2]} .
IC ₅₀ & Target	AChE
In Vitro	Buntanetap (1-25 μ M; 24 h) significantly reduces the expression of APP, α SYN, and HTT in SH-SY5Y cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES
[1]. 1 Pang C, et al. Buntanetap, a Novel Translational Inhibitor of Multiple Neurotoxic Proteins, Proves to Be Safe and Promising in Both Alzheimer's and Parkinson's Patients. J Prev Alzheimers Dis. 2023;10(1):25-33.
[2]. 2\textbf{\textit{Z}} Chen XQ, et al. Posiphen Reduces the Levels of Huntingtin Protein through Translation Suppression. Pharmaceutics. 2021 Dec 7;13(12):2109.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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