(S)-Donepezil

Cat. No.: HY-14566A

CAS No.: 142057-80-5

Molecular Formula: $C_{24}H_{29}NO_3$

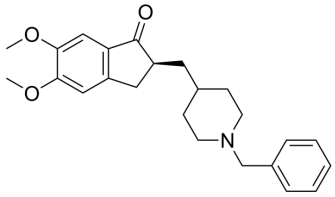
Molecular Weight: 379.49

Target: Cholinesterase (ChE)

Pathway: Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (263.51 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.6351 mL	13.1756 mL	26.3512 mL
5 mM	0.5270 mL	2.6351 mL	5.2702 mL
10 mM	0.2635 mL	1.3176 mL	2.6351 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 (6.59 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.59 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.59 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(S)-Donepezil is a S-enantiomer of Donepezil (HY-14566). Donepezil is a specific and potent AChE inhibitor[1][2].

REFERENCES

[1]. Lili W, et al. Steady-state plasma concentration of donepezil enantiomers and its stereoselective metabolism and transport in vitro. Chirality. 2013 Sep;25(9):498-505.

[2]. Ogura, H., et al., Comparison of inhibitory activities of donepezil and other cholinesterase inhibitors on acetylcholinesterase and butyrylcholinesterase in vitro. Methods Find Exp Clin Pharmacol, 2000. 22(8): p. 609-13.

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