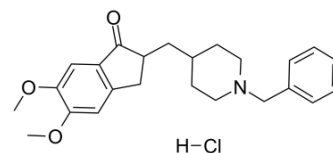


Donepezil Hydrochloride

Cat. No.:	HY-B0034		
CAS No.:	120011-70-3		
Molecular Formula:	C ₂₄ H ₃₀ ClNO ₃		
Molecular Weight:	415.95		
Target:	AChE		
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

H₂O : 33.33 mg/mL (80.13 mM; Need ultrasonic)
DMSO : 6.2 mg/mL (14.91 mM; Need warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.4041 mL	12.0207 mL	24.0414 mL
5 mM	0.4808 mL	2.4041 mL	4.8083 mL
10 mM	0.2404 mL	1.2021 mL	2.4041 mL

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

BIOLOGICAL ACTIVITY

Description

Donepezil (Hydrochloride) (E-2020) is a noncompetitive acetylcholinesterase inhibitor, which can readily cross the blood brain barrier and increases the concentration of cortical acetylcholine. IC₅₀ Value:Target: AChEIt is known that Donepezil Hydrochloride is a useful tool in the study of Alzheimer's disease. Studies indicate that Donepezil Hydrochloride protects the brain against diisopropylfluorophosphate-induced effects. Studies indicate that Donepezil Hydrochloride selectively inhibits acetylcholinesterase, whereas it has little effect on butyrylcholinesterase. Alternate studies suggest that Donepezil Hydrochloride increases the concentration of extracellular acetylcholine in the cerebral cortex and hippocampus of rats.

REFERENCES

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[3]. Tsuno N. Donepezil in the treatment of patients with Alzheimer's disease. *Expert Rev Neurother*. 2009 May;9(5):591-8.

[4]. Halabe Bucay A. Donepezil (aricept) as a treatment for anorexia nervosa: a very feasible therapeutic possibility. *Expert Opin Investig Drugs*. 2009 May;18(5):569-71.

Caution: Product has not been fully validated for medical applications. For research use only.

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: customerservice@lifetechindia.com Website: www.lifetechindia.com