

# Donepezil

Catalog No: tcsc2866



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

120014-06-4

**Formula:**

$C_{24}H_{29}NO_3$

**Pathway:**

Neuronal Signaling

**Target:**

AChE

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 33.33 mg/mL (87.83 mM; Need ultrasonic)

**Alternative Names:**

E2020

**Observed Molecular Weight:**

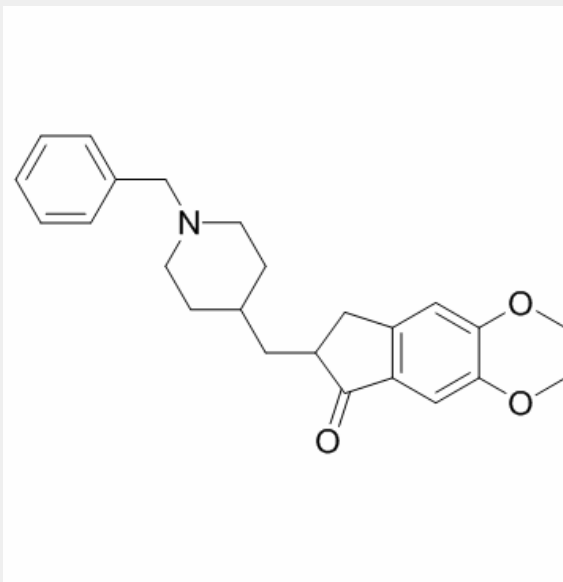
379.49

## Product Description

Donepezil(E 2020) is a specific and potent AChE inhibitor for bAChE and hAChE with IC<sub>50</sub> of 8.12 nM and 11.6 nM, respectively.

Target: AChE

Donepezil is a specific and potent AChE inhibitor for bAChE and hAChE with IC<sub>50</sub> of 8.12 nM and 11.6 nM , respectively [1]. Donepezil inhibits the carbachol-stimulated increase in intracellular Ca<sup>2+</sup> concentration in human SHSY5Y neuroblastoma cells in a concentration dependent manner, indicating that Donepezil have muscarinic antagonist activity. Intraperitoneal administration of Donepezil in rats produces a dose dependent increase in salivation and tremor, which are overt cholinergic behavioural signs, with an ED<sub>50</sub> of 6 µmol/kg. Donepezil is found to be somewhat less potent with a ED<sub>50</sub> of 50 µmol/kg following oral administration [2]. A recent study shows that Donepezil can protect human umbilical vein endothelial cells (HUVECs) against H<sub>2</sub>O<sub>2</sub>-induced cell injury. This may be useful as a potential therapy for oxidative stress in cardiovascular and cerebrovascular diseases [3].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!