## Overview

### Product name
Donepezil hydrochloride

### Description
Acetylcholinesterase inhibitor

### Biological description
Potent, selective acetylcholinesterase inhibitor ($IC_{50} = 5.7$ nM). Displays >1250 times selectivity for AChE over butyrylcholinesterase. Centrally active. Neuroprotective activity *in vitro* and *in vivo*.

### Purity
> 99%

## Properties

### Chemical name
2,3-Dihydro-5,6-dimethoxy-2-[[1-(phenylmethyl)-4-piperidinyl)methyl]-1H-inden-1-one hydrochloride

### Molecular weight
415.96

### Chemical structure

![Chemical structure diagram](image)

### Molecular formula
C$_{24}$H$_{26}$NO$_3$.HCl

### CAS Number
120011-70-3

### Storage instructions
Store at Room Temperature. The product can be stored for up to 12 months.

### Solubility overview
Soluble in water to 100 mM

### Handling
Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Toxic, refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our [frequently asked questions (FAQ) page](#) for more details.

### Source
Synthetic

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