# **PRODUCT** INFORMATION



6-O-desmethyl Donepezil

Item No. 27175

CAS Registry No.: Formal Name:	120013-56-1 2,3-dihydro-6-hydroxy-5-methoxy- 2-[[1-(phenylmethyl)-4-piperidinyl] methyl]-1H-inden-1-one	
MF:	C <sub>23</sub> H <sub>27</sub> NO <sub>3</sub>	
FW:	365.5	
Purity:	≥95%	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	0 ~

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

6-O-desmethyl Donepezil is supplied as a solid. A stock solution may be made by dissolving the 6-O-desmethyl donepezil in the solvent of choice, which should be purged with an inert gas. 6-O-desmethyl Donepezil is soluble in organic solvents such as chloroform and methanol.

## Description

6-O-desmethyl Donepezil is an active metabolite of the acetylcholinesterase inhibitor donepezil (Item No. 13245).<sup>1</sup> It is formed through dealkylation by the cytochrome P450 (CYP) isoform CYP2D6.<sup>2</sup> It inhibits human ether a go-go (hERG) channels (IC<sub>50</sub> = 1.5  $\mu$ M in HEK293 cells expressing hERG).<sup>1</sup>

## References

- 1. Chae, Y.J., Lee, H.J., Jeon, J.H., et al. Effects of donepezil on hERG potassium channels. Brain Res. 1597, 77-85 (2015).
- 2. Matsui, K., Taniguchi, S., and Yoshimura, T. Identitication of cytochrome P450 involved in the metabolism of donepezil and in vitro drug interaction study in human liver microsomes. Drug Metab. Pharmacokinet. 15(2), 101-111 (2000).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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