PRODUCT INFORMATION



Donepezil N-oxide

Item No. 27174

CAS Registry No.: 120013-84-5

Formal Name: 2,3-dihydro-5,6-dimethoxy-2-

[[1-oxido-1-(phenylmethyl)-4-

piperidinyl]methyl]-1H-inden-1-one

MF: C₂₄H₂₉NO₄ 395.5 FW: ≥98% **Purity:** Supplied as: A solid Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

Donepezil N-oxide is supplied as a solid. A stock solution may be made by dissolving the donepezil N-oxide in the solvent of choice, which should be purged with an inert gas. Donepezil N-oxide is slightly soluble in chloroform and methanol.

Description

Donepezil N-oxide is an active metabolite of the acetylcholinesterase inhibitor donepezil (Item No. 13245).¹ Donepezil N-oxide inhibits cholinesterase (ChE) activity in human erythrocytes in a concentration-dependent manner, exhibiting 45.5% inhibition when used at a concentration of 20 µM.²

References

- 1. Groppa, F., Coin, A., De Rosa, G., et al. Monitoring plasma levels of donepezil, 5-O-desmethyl-donepezil, 6-O-desmethyl-donepezil, and donepezil-N-oxide by a novel HPLC method in patients with Alzheimer disease. Ther. Drug Monit. 38(1), 108-113 (2016).
- 2. Atto, R.A., Behnan, A.B., and Abachi, F.T. In vitro kinetic study of donepezil N-oxide metabolites Irq. J. Pharm. 11(2), 93-101 (2011).

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

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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