

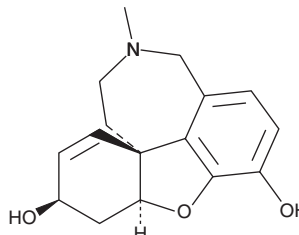
PRODUCT INFORMATION



O-desmethyl Galantamine

Item No. 35080

CAS Registry No.: 60755-80-8
Formal Name: (4aS,6R,8aS)-4a,5,9,10,11,12-hexahydro-11-methyl-6H-benzofuro[3a,3,2-ef][2]benzazepine-3,6-diol
Synonym: Sanguinine
MF: C₁₆H₁₉NO₃
FW: 273.3
Purity: ≥90%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

O-desmethyl Galantamine is supplied as a solid. A stock solution may be made by dissolving the O-desmethyl galantamine in the solvent of choice, which should be purged with an inert gas. O-desmethyl Galantamine is soluble in DMSO.

Description

O-desmethyl Galantamine is an active metabolite of the alkaloid galantamine (Item No. 17559).¹ It is formed from galantamine by the cytochrome P450 (CYP) isoform CYP2D6.² O-desmethyl Galantamine inhibits erythrocyte and brain acetylcholinesterase (AChE) and plasma butyrylcholinesterase (BChE; IC₅₀s = 0.12, 0.5, and 24 μM, respectively). It also prevents decreases in the viability of SH-SY5Y cells induced by hydrogen peroxide, amyloid-β (25-35) (Item No. 24155), or cobalt chloride when used at concentrations ranging from 6.25 to 100 μM.³

References

1. Maláková, J., Nobilis, M., Svoboda, Z., *et al.* High-performance liquid chromatographic method with UV photodiode-array, fluorescence and mass spectrometric detection for simultaneous determination of galantamine and its phase I metabolites in biological samples. *J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci.* **853**(1-2), 265-274 (2007).
2. Bachus, R., Bickel, U., Thomsen, T., *et al.* The O-demethylation of the antidementia drug galanthamine is catalysed by cytochrome P450 2D6. *Pharmacogenetics* **9**(6), 661-668 (1999).
3. Zhu, Y.-Y., Li, X., Yu, H.-Y., *et al.* Alkaloids from the bulbs of *Lycoris longituba* and their neuroprotective and acetylcholinesterase inhibitory activities. *Arch. Pharm. Res.* **38**(5), 604-613 (2015).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/06/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM