

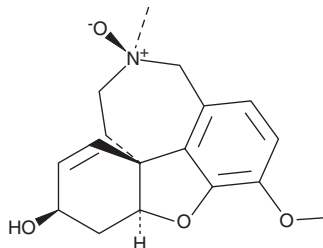
PRODUCT INFORMATION



Galanthamine N-oxide

Item No. 35413

CAS Registry No.: 134332-50-6
Formal Name: (4aS,6R,8aS,11R)-4a,5,9,10,11,12-hexahydro-3-methoxy-11-methyl-6H-Benzofuro[3a,3,2-ef][2]benzazepin-6-ol, 11-oxide
Synonym: Galantamine N-oxide
MF: C₁₇H₂₁NO₄
FW: 303.4
Purity: ≥95%
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

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

Description

Galanthamine N-oxide is an oxidized alkaloid originally found in *L. sanguinea* and active metabolite of the acetylcholinesterase (AChE) inhibitor and nicotinic acetylcholine receptor (nAChR) potentiator galantamine (Item Nos. 17559 | 35247).¹⁻⁴ It is an inhibitor of AChE *in vitro* (EC₅₀ = 26.2 μM for the eel enzyme).³ Galanthamine N-oxide decreases cell death induced by cobalt chloride in SH-SY5Y neuroblastoma cells when used at a concentration of 6.25 μM.⁴

References

1. Kobayashi, S., Satoh, K., Numata, A., *et al.* Alkaloid N-oxides from *Lycoris sanguinea*. *Phytochem.* **30**(2), 675-677 (1991).
2. Mannens, G.S.J., Snel, C.A.W., Hendrickx, J., *et al.* The metabolism and excretion of galantamine in rats, dogs, and humans. *Drug Metab. Dispos.* **30**(5), 553-563 (2002).
3. Reyes-Chilpa, R., Berkov, S., Hernández-Ortega, S., *et al.* Acetylcholinesterase-inhibiting alkaloids from *Zephyranthes concolor*. *Molecules* **16**(11), 9520-9533 (2011).
4. Li, X., Yu, H.-Y., Wang, Z.-Y., *et al.* Neuroprotective compounds from the bulbs of *Lycoris radiata*. *Fitoterapia* **88**, 82-90 (2013).

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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