



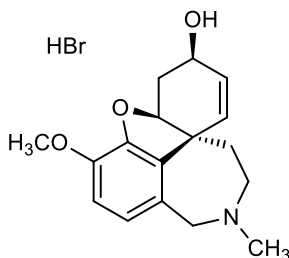
### Catalog # 10-1136

### Galanthamine HBr

1953-04-4

4a,5,9,10,11,12-Hexahydro-3-methoxy-11-methyl-6H-benzofuro[3a,3,2-ef][2]benzazepin-6-ol, hydrobromide

Lot # X101539



Long-acting, centrally active acetylcholinesterase inhibitor,  $IC_{50} = 410 \text{ nM}^1$ . Allosteric potentiator at neuronal nicotinic AChE receptors<sup>2</sup>. Prevents  $\beta$ -amyloid-induced apoptosis in SH-SY5Y and bovine chromaffin cells<sup>3</sup>. Clinically useful agent for symptomatic relief of Alzheimer's disease but fails to prevent progression of the disease<sup>4,5</sup>.

- 1) Racchi *et al.* (2004), *Acetylcholinesterase inhibitors: novel activities of old molecules*; Pharmacol. Res., **50** 441
- 2) Samochocki *et al.* (2003), *Galantamine is an allosterically potentiating ligand of neuronal nicotinic but not of muscarinic acetylcholine receptors*; J. Pharmacol. Exp. Ther., **305** 1024
- 3) Arias *et al.* (2004), *Galantamine prevents apoptosis induced by beta-amyloid and thapsigargin: involvement of nicotinic acetylcholine receptors*; Neuropharmacology, **46** 103
- 4) Rockwood *et al.* (2001), *Effects of a flexible galantamine dose in Alzheimer's disease: a randomized, controlled trial*; J. Neurol. Neurosurg. Psychiatry, **71** 589
- 5) Chen *et al.* (2007), *Current experimental therapy for Alzheimer's disease*; Curr. Neuropharmacol., **5** 127

### PHYSICAL DATA

Molecular Weight:	368.27
Molecular Formula:	$C_{17}H_{21}NO_3 \cdot HBr$
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml), water (up to 12 mg/ml)
Physical Description:	Lyophilized solid
Storage and Stability:	Store as supplied desiccated at $-20^{\circ}\text{C}$ for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at $-20^{\circ}\text{C}$ for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

[www.focusbiomolecules.com](http://www.focusbiomolecules.com)