Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329 Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID G0246 CAS No. 1953-04-4

Chemical Name (4aS,6R,8aS)-4a,5,9,10,11,12-Hexahydro-3-methoxy-11-

methyl-6H-benzofuronyl

Synonym Nivalin, Galanthamine Hydrobromide

Formula $C_{17}H_{21}NO_3 \cdot HBr$

Formula Wt. 368.27

Melting Point 246-247°C (dec.)

Purity ≥98%

Solubility Soluble in water.

Н ОН	
• HBr	

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
G0246	5 mg	\$61.10
G0246	25 mg	\$122.70
G0246	100 mg	\$204.30

Store Temp -20°C Ship Temp Ambient

Description Galantamine is an alkaloid originally found in species of *Galanthus*, *Narcissus*, *Leucojum*, and *Lycoris*; it exhibits

neuroprotective and cognition enhancing activities. Galantamine inhibits acetylcholinesterase (AChE) and acts as an allosteric agonist on nicotinic acetylcholine receptors (nAChRs) and muscarinic acetylcholine receptors (mAChRs); it is somewhat selective for a7 nAChRs. Galantamine is clinically used to improve cognitive deficits in subjects with Alzheimer's disease. Galantamine is neuroprotective and promotes neurogenesis in an IGF-2-dependent manner. Galantamine may also inhibit P2X7 receptors, increasing Bcl-2 expression and inhibiting apoptosis.

References Kita Y, Ago Y, Higashino K, et al. Galantamine promotes adult hippocampal neurogenesis via M1 muscarinic and a7 nicotinic receptors in mice. Int J Neuropsychopharmacol. 2014 Dec;17(12):1957-68. PMID: 24818616.

> Tsvetkova D, Obreshkova D, Zheleva-Dimitrova D, et al. Antioxidant activity of galantamine and some of its derivatives. Curr Med Chem. 2013;20(36):4595-608. PMID: 23834167.

> Ago Y, Koda K, Takuma K, et al. Pharmacological aspects of the acetylcholinesterase inhibitor galantamine. J Pharmacol Sci. 2011;116(1):6-17. PMID: 21498956.

> Woodruff-Pak DS, Vogel RW 3rd, Wenk GL. Galantamine: effect on nicotinic receptor binding, acetylcholinesterase inhibition, and learning. Proc Natl Acad Sci U S A. 2001 Feb 13;98(4):2089-94. PMID: 11172080.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.