

Product Data Sheet

Product Name: Galanthamine-d6

Cat. No.: GF11272

Chemical Properties

Cas. No. 1128109-00-1

Formula C₁₇H₁₅D₆NO₃ M.Wt 293.39

Solubility DMSO : 100 mg/mL (340.84 mM; ultrasonic and warming and heat to 60°C) Storage 2-8°C, sealed storage, away from moisture

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Galanthamine-d6 (Galantamine-d6) is the deuterium labeled Galanthamine. Galanthamine is a potent acetylcholinesterase (AChE) inhibitor with an IC₅₀ of 500 nM^{[1][2]}.

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

drugs^[1].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.

[2]. Melanie-Jayne R. Howes, et al. Acetylcholinesterase inhibitors of natural origin. *International Journal of Research in Pharmaceutical and Biomedical Sciences* 3(SI 1):67-86.

[3]. Kuryatov A, et al. Roles of accessory subunits in $\alpha 4\beta 2$ (*) nicotinic receptors. *Mol Pharmacol*. 2008 Jul;74(1):132-43.

[4]. Kita Y, et al. Galantamine increases hippocampal insulin-like growth factor 2 expression via 伪7 nicotinic acetylcholine receptors in mice. *Psychopharmacology (Berl)*. 2013 Feb;225(3):543-51.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA