

Product Data Sheet

Product Name: Arecoline-d 5 hydrobromide

Cat. No.: GC80840

Chemical Properties

Cas. No. 131448-18-5

Formula $C_8H_9D_5BrNO_2$

M.Wt 241.14

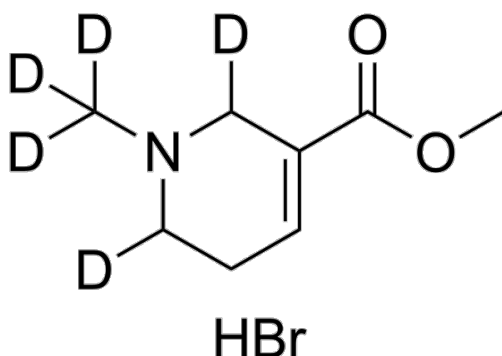
Solubility

Storage Store at $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ 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

Arecoline-d 5 hydrobromide is the deuterium labeled Arecoline hydrobromide. Arecoline hydrobromide, a naturally occurring psychoactive alkaloid, is a partial agonist of nicotinic and muscarinic acetylcholine receptor. Arecoline hydrobromide exhibits stimulation, alertness, anxiolysis and anti-parasitic effects. Arecoline hydrobromide also can induce oxidative stress [1] [2] [3] [4].

In Vitro, 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

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drugs.

References:

- [1]. Thangjam GS, et, al. Regulation of oxidative-stress responsive genes by arecoline in human keratinocytes. J Periodontal Res. 2009 Oct;44(5):673-82.
- [2]. Liu YJ, et, al. The pharmacology, toxicology and potential applications of arecoline: a review. Pharm Biol. 2016 Nov;54(11):2753-2760.
- [3]. Volgin AD, et, al. DARK Classics in Chemical Neuroscience: Arecoline. ACS Chem Neurosci. 2019 May 15;10(5):2176-2185.
- [4]. Kuo TM, et, al. Arecoline induces TNF-alpha production and Zonula Occludens-1 redistribution in mouse Sertoli TM4 cells. J Biomed Sci. 2014 Sep 9;21(1):93.

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