
Product Data Sheet

Product Name: Cinnarizine D8

Cat. No.: GC60709

Chemical Properties

Cas. No. 1185242-27-6

SMILES [2H]C1([2H])C([2H])([2H])N(C/C=C/C2=CC=CC=C2)C([2H])([2H])C([2H])([2H])N1C(C3=CC=CC=C3)C4=CC=CC=C4

Formula C₂₆H₂₀D₈N₂

M.Wt 376.56

Solubility DMSO : 7.14 mg/mL (18.96 mM; Need ultrasonic) Storage Store at -20°C

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**

Cinnarizine-dg is intended for use as an internal standard for the quantification of cinnarizine by GC- or LC-MS. Cinnarizine is a calcium channel inhibitor and histamine H₄ receptor antagonist (K_i = 142 nM).^{1,2,3} It inhibits L- and T-type calcium channels in isolated guinea pig atrial cells in a voltage-dependent manner.¹ Cinnarizine inhibits L-type calcium currents in isolated guinea pig type II vestibular hair cells (IC₅₀ = 1.5 μM). *In vivo*, cinnarizine (10 mg/kg) inhibits ethanol-induced gastric ulcer formation in rats.⁴ Formulations containing cinnarizine have been used in the treatment of nausea and vomiting due to vertigo, Meniere's disease, or chemotherapy.

1.Cohen, C.J., Spires, S., and Van Skiver, D. Block of T-type Ca channels in guinea pig atrial cells by antiarrhythmic agents and Ca channel antagonists. *J. Gen. Physiol.* 100(4)703-728(1992)

2.Arab, S.F., Düwel, P., Jüngling, E., et al. Inhibition of voltage-gated calcium currents in type II vestibular hair cells by cinnarizine. *Naunyn-Schmiedeberg's Arch. Pharmacol.* 369(6)570-575(2004)

3.Nguyen, T., Shapiro, D.A.,

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

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George, S.R., et al. Discovery of a novel member of the histamine receptor family *Mol. Pharmacol.* 59(3)427-433(2001) 4. Lozeva, V., Marazova, K., and Belcheva, A. Gastric histamine content and ulcer formation in rats with ethanol-induced injury. Effects of cinnarizine and flunarizine *Agents Actions* 41 Spec NoC91-C92(1994)

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