

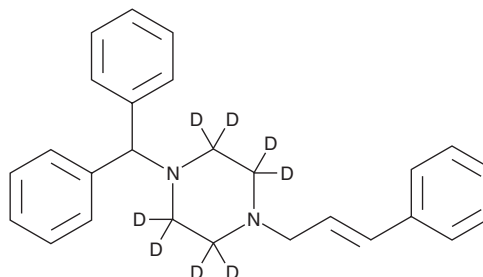
PRODUCT INFORMATION



Cinnarizine-d₈

Item No. 33977

CAS Registry No.: 1185242-27-6
Formal Name: 1-(diphenylmethyl)-4-(3-phenyl-2-propen-1-yl)-piperazine-2,2,3,3,5,5,6,6-d₈
MF: C₂₆H₂₀D₈N₂
FW: 376.6
Chemical Purity: ≥98% (Cinnarizine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₈); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cinnarizine-d₈ is intended for use as an internal standard for the quantification of cinnarizine (Item No. 21001) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Cinnarizine-d₈ is supplied as a solid. A stock solution may be made by dissolving the cinnarizine-d₈ in the solvent of choice, which should be purged with an inert gas. Cinnarizine-d₈ is soluble in methanol.

Description

Cinnarizine is a calcium channel inhibitor and histamine H₄ receptor antagonist (K_i = 142 nM).¹⁻³ 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.³ Formulations containing cinnarizine have been used in the treatment of nausea and vomiting due to vertigo, Meniere's disease, or chemotherapy.

References

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 Schmiedebergs Arch. Pharmacol.* **369(6)**, 570-575 (2004).
3. Nguyen, T., Shapiro, D.A., 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 No**, C91-C92 (1994).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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