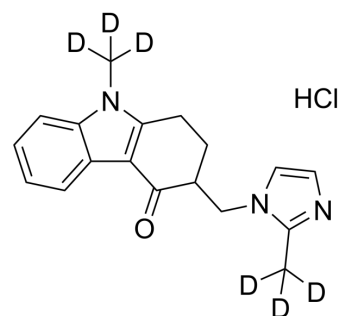


Ondansetron-d6 hydrochloride

Cat. No.:	HY-B0002S1
CAS No.:	1225442-22-7
Molecular Formula:	C ₁₈ H ₁₄ D ₆ ClN ₃ O
Molecular Weight:	335.86
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ondansetron-d ₆ (hydrochloride) is the deuterium labeled Ondansetron hydrochloride[1]. Ondansetron hydrochloride is a serotonin 5-HT ₃ receptor antagonist used mainly as an antiemetic (to treat nausea and vomiting), often following chemotherapy[2][3][4][5][6][7].
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 drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019 Feb;53(2):211-216.
- [2]. Brown AM, et al. Ion permeation and conduction in a human recombinant 5-HT₃ receptor subunit (h5-HT_{3A}). *J Physiol.* 1998 Mar 15;507 (Pt 3):653-65.
- [3]. Barann M, et al. Recombinant human 5-HT_{3A} receptors in outside-out patches of HEK 293 cells: basic properties and barbiturate effects. *Naunyn Schmiedebergs Arch Pharmacol.* 2000 Sep362(3):255-65.
- [4]. Wildeboer KM, et al. Ondansetron results in improved auditory gating in DBA/2 mice through a cholinergic mechanism. *Brain Res.* 2009 Dec 11300:41-50.
- [5]. Khedhaier A, et al. Circadian rhythms in toxic effects of the serotonin antagonist ondansetron in mice. *Chronobiol Int.* 2003 Nov20(6):1103-16.
- [6]. Umathe SN, et al. The 5-HT₃ receptor antagonist, ondansetron, blocks the development and expression of ethanol-induced locomotor sensitization in mice. *Behav Pharmacol.* 2009 Feb20(1):78-83.
- [7]. Doggrell SA, et al. Cardiac safety concerns for ondansetron, an antiemetic commonly used for nausea linked to cancer treatment and following anaesthesia. *Expert Opin Drug Saf.* 2013 May12(3):421-31.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA