Ondansetron-13C,d3

Cat. No.: HY-B0002BS2 CAS No.: 2699607-85-5 Molecular Formula: $C_{17}^{13}CH_{16}D_3N_3O$

Molecular Weight: 297.37

Target: 5-HT Receptor; Isotope-Labeled Compounds Pathway: GPCR/G Protein; Neuronal Signaling; Others

Please store the product under the recommended conditions in the Certificate of Storage:

Analysis.

Product Data Sheet

BIOLOGICAL ACTIVITY

Description	Ondansetron- 13 C,d $_3$ is the 13 C- and deuterium labeled Ondansetron[1].
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 ^[27] . 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;53(2):211-223.
- [2]. Barann M, et al. Recombinant human 5-HT3A receptors in outside-out patches of HEK 293 cells: basic properties and barbiturate effects. Naunyn Schmiedebergs Arch Pharmacol. 2000 Sep;362(3):255-65.
- [3]. Brown AM, et al. Ion permeation and conduction in a human recombinant 5-HT3 receptor subunit (h5-HT3A). J Physiol. 1998 Mar 15;507 (Pt 3):653-65.
- [4]. 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 May;12(3):421-31.
- [5]. Khedhaier A, et al. Circadian rhythms in toxic effects of the serotonin antagonist ondansetron in mice. Chronobiol Int. 2003 Nov;20(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 Feb;20(1):78-83.
- [7]. Wildeboer KM, et al. Ondansetron results in improved auditory gating in DBA/2 mice through a cholinergic mechanism. Brain Res. 2009 Dec 1;1300:41-50.

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

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