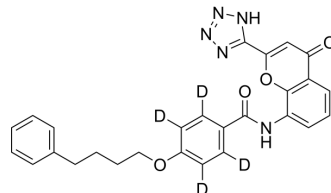


Pranlukast-d₄

Cat. No.:	HY-B0290S1
CAS No.:	2713172-43-9
Molecular Formula:	C ₂₇ H ₁₉ D ₄ N ₅ O ₄
Molecular Weight:	485.53
Target:	Leukotriene Receptor; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pranlukast-d ₄ is deuterium labeled Pranlukast. Pranlukast is a highly potent, selective and competitive antagonist of peptide leukotrienes. Pranlukast inhibits [3H]LTE ₄ , [3H]LTD ₄ , and [3H]LTC ₄ bindings to lung membranes with Kis of 0.63±0.11, 0.99±0.19, and 5640±680 nM, respectively.
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;53(2):211-216.
- [2]. Fang SH, et al. Nuclear translocation of cysteinyl leukotriene receptor 1 is involved in oxygen-glucose deprivation-induced damage to endothelial cells. *Acta Pharmacol Sin.* 2012 Dec;33(12):1511-7.
- [3]. Obata T, et al. In vitro antagonism of ONO-1078, a newly developed anti-asthma agent, against peptide leukotrienes in isolated guinea pig tissues. *Jpn J Pharmacol.* 1992 Nov;60(3):227-37.
- [4]. Ogata M, et al. Protective effects of a leukotriene inhibitor and a leukotriene antagonist on endotoxin-induced mortality in carrageenan-pretreated mice. *Infect Immun.* 1992 Jun;60(6):2432-7.

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