

Product Data Sheet

Montelukast-d₆ sodium

Cat. No.: HY-13315S1
CAS No.: 2673270-26-1

Molecular Formula: C₃₅H₂₉D₆ClNNaO₃S

Molecular Weight: 614.2

Target: Leukotriene Receptor
Pathway: GPCR/G Protein

Storage: 4°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

BIOLOGICAL ACTIVITY

Description	Montelukast-d ₆ (sodium) is the deuterium labeled Montelukast (sodium). Montelukast sodium is a potent, selective and orally active antagonist of cysteinyl leukotriene receptor 1 (Cysltr1). Montelukast sodium can be used for the reseach of asthma and liver injury. Montelukast sodium also has an antioxidant effect in intestinal ischemia-reperfusion injury, and could reduce cardiac damage[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 ^[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]. Pu S, et, al. Montelukast Prevents Mice Against Acetaminophen-Induced Liver Injury. Front Pharmacol. 2019 Sep 18; 10:1070.; William RHJ, et, al. A role for cysteinyl leukotrienes in airway remodeling in a mouse asthma model. Am J Respir Crit Care Med. 2002 Jan 1; 165(1): 108-16.

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

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