
Product Data Sheet

Product Name: Montelukast-d6

Cat. No.: GC63296

Chemical Properties

Cas. No. 1093746-29-2

Formula C₃₅H₃₀D₆ClNO₃S

M.Wt 592.22

Solubility

Storage

Store at -20°C

General tips

For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

Montelukast-d6 (MK0476-d6 free acid) is the deuterium labeled Montelukast (sodium). Montelukast sodium is a potent, selective and orally active antagonist of cysteinyl leukotriene receptor 1 (Cys1r1). Montelukast sodium can be used for the research of asthma and liver injury. Montelukast sodium also has an antioxidant effect in intestinal ischemia-reperfusion injury, and could reduce cardiac damage[1].

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].

[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.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA