

# Montelukast (sodium)

Catalog No: tcsc0548



## Available Sizes

**Size:** 50mg

**Size:** 100mg

**Size:** 500mg



## Specifications

**CAS No:**

151767-02-1

**Formula:**

$C_{35}H_{35}ClNaO_3S$

**Pathway:**

GPCR/G Protein;Autophagy

**Target:**

Leukotriene Receptor;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O : ≥ 70 mg/mL (115.10 mM)

**Alternative Names:**

MK0476

**Observed Molecular Weight:**

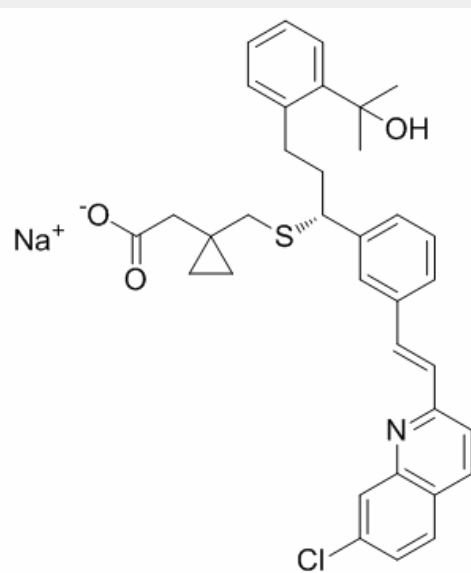
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## Product Description

Montelukast (sodium) is a potent, selective **CysLT<sub>1</sub>** receptor antagonist.

**In Vitro:** Montelukast may contribute to the reduction of eosinophilic inflammation in upper-airway inflammatory diseases such as rhinitis and nasal polyposis. Montelukast has a significant inhibitory effect on FBS-induced GM-CSF, IL-6, and IL-8 secretion, but not SICAM-1, in nasal mucosa and polyp epithelial cells. Montelukast also shows an inhibitory effect (p[1].

**In Vivo:** Montelukast significantly reduces mild, moderate, and part of severe exacerbations in chronic mild to moderate asthma, but it has inferior efficacy to ICS or ICS plus LABA<sup>[2]</sup>. Rats with induced asthma have up-regulated NK1R expression in the airway, and montelukast can down regulate NK1R expression during airway remodeling<sup>[3]</sup>. Blockade of CysLT<sub>1</sub>R by repeated treatment with montelukast (1 or 2 mg/kg, ig, 4 weeks) reduces Aβ<sub>1-42</sub>-induced CysLT<sub>1</sub>R expression and also suppresses Aβ<sub>1-42</sub>-induced increments of NF-κB p65, TNF-α, IL-1β and caspase-3 activation, and Bcl-2 downregulation in the hippocampus and cortex. Correspondingly, montelukast treatment significantly improves Aβ<sub>1-42</sub>-induced memory impairment in mice, but has little effect on normal mice<sup>[4]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!