

Montelukast (sodium)

Catalog No: tcsc0548



Available Sizes

Size: 50mg

Size: 100mg

Size: 500mg



Specifications

CAS No:

151767-02-1

Formula:

$C_{35}H_{35}ClNNaO_3S$

Pathway:

GPCR/G Protein;Autophagy

Target:

Leukotriene Receptor;Autophagy

Purity / Grade:

>98%

Solubility:

H₂O : ≥ 70 mg/mL (115.10 mM)

Alternative Names:

MK0476

Observed Molecular Weight:

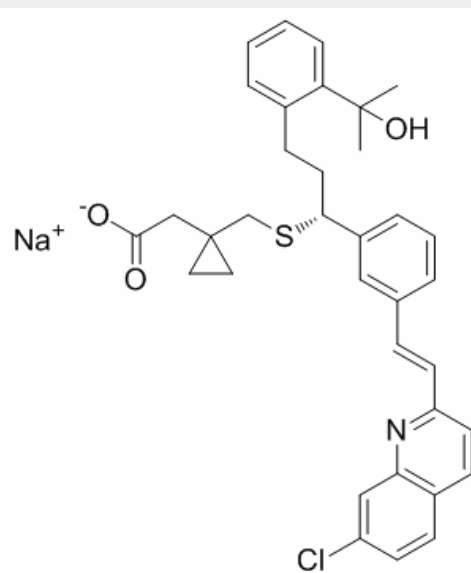
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Product Description

Montelukast (sodium) is a potent, selective **CysLT₁** 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^[2]. Rats with induced asthma have up-regulated NK1R expression in the airway, and montelukast can down regulate NK1R expression during airway remodeling^[3]. Blockade of CysLT₁R by repeated treatment with montelukast (1 or 2 mg/kg, ig, 4 weeks) reduces Aβ₁₋₄₂-induced CysLT₁R expression and also suppresses Aβ₁₋₄₂-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 Aβ₁₋₄₂-induced memory impairment in mice, but has little effect on normal mice^[4].



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