

Montelukast Sodium

货号: M1455

储存条件: 粉末-20°C 可保存 3 年; 液体-80°C 可保存 12 月。

产品描述

Cysteinyl leukotrienes (CysLTs, including LTC₄, LTD₄, and LTE₄), mainly produced by eosinophils, mast cells, and macrophages in response to a variety of stimuli activating arachidonate 5-lipoxygenase pathway, are important inflammatory mediators. CysLT₁ receptor (LTR1) expresses in human lung smooth muscle cells, lung macrophages, most peripheral blood eosinophils and pregranulocytic CD34+ cells, and in subsets of monocytes and B lymphocytes. Montelukast Sodium is a potent, selective and competitive LTR1 antagonist with IC₅₀ value < 5 nM and are currently used in the treatment of asthma. Nonsmoking patients with asthma treated with Montelukast Sodium(200mg, three times daily for 10 1/3 days) showed improvements in FEV₁, compared with placebo-treated patients. In C57BL/6 mice with asthma induced by chronic exposure to ovalbumin, Montelukast (6 mg/kg, once daily for 20 days) treatment significantly suppressed the increased eosinophils in bronchoalveolar lavage (BAL) fluid and lung tissue, and increased IL-5 level in BAL fluid in models. It was also proved that Montelukast inhibited the diabetes-induced capillary and neuronal degeneration in streptozotocin-induced diabetes mouse model.

作用机制

Montelukast Sodium is a potent competing ligand for high affinity [³H]LTD₄ specific binding.

产品信息

CAS 号	151767-02-1	
分子式	C ₃₅ H ₃₅ ClNaO ₃ S	
分子量	608.17	
溶解度	DMSO	50.0 mg/mL (82.2 mM) warming
	Water	22.0 mg/mL (36.2 mM) warming

