



MRS 2578

Catalog No: tcsc0416



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

711019-86-2

Formula:

 $C_{20}H_{20}N_{6}S_{4}$

Pathway:

GPCR/G Protein

Target:

P2Y Receptor

Purity / Grade:

>98%

Solubility:

DMSO : \geq 80 mg/mL (169.25 mM)

Observed Molecular Weight:

472.67

Product Description

MRS2578 is a potent P2Y6 receptor antagonist with IC50 of 37 nM, exhibits insignificant activity at P2Y1, P2Y2, P2Y4, and P2Y11 receptors.

IC50 value: 37 nM [1]

Target: P2Y6 receptor





in vitro: MRS2578 selectively blocks P2Y6 receptor activity versus activity at P2Y1, P2Y2, P2Y4 or P2Y11 receptors. MRS2578 (1 μ M) completely blocks the protection by UDP undergoing TNFalpha-induced apoptosis in 1321N1 astrocytoma cells [1]. MRS 2578 inhibits basal NF- κ B activity in time and dose dependent manner in HMEC-1 cells transfected with 0.25 μ g NF- κ B promoter reporter. MRS 2578 (10 μ M) completely abolishes TNF- α induced NF- κ B reporter activity in HMEC-1 cells. MRS 2578 (10 μ M) significant reduces TNF- α -induced proinflammatory gene expression in HMEC-1 cells [2]. MRS2578-treated mice shows reduced bronchial hyperresponsiveness toward methacholine in OVA-sensitized mice. MRS2578 completely blocks UDP-induced the release of IL-6, KC, and IL-8 in lung epithelial cells [3].

in vivo: MRS 2578 (10 μ M) attenuates Keratinocyte-derived chemokine serum protein levels in LPS-induced vascular inflammation in C57BL/6 mice [2]. MRS2578 (10 μ M, intratracheally) reduces BALF eosinophilia and the levels of IL-5 and IL-13 in the BALF in OVA-sensitized mice and leads to a markedly attenuated change in methacholine responsiveness after OVA challenge. MRS2578 (10 μ M, intratracheally) inhibits house dust mite-induced allergic airway inflammation in OVA-sensitized mice. MRS2578 (10 μ M, intratracheally) reduces of IL-6 and KC levels in BALF in OVA-sensitized mice [4].

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