Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Navarixin

Catalog No: tcsc0609

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
473727-83-2

Formula:
$C_{21}H_{23}N_3O_5$

Pathway:
GPCR/G Protein;Immunology/Inflammation

Target:
CXCR;CXCR

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
SCH 527123; MK-7123

Observed Molecular Weight:
397.42

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Product Description

Navarixin is a potent, allosteric antagonist of both **CXCR1** and **CXCR2**, with **K_d** values of 41 nM for cynomolgus CXCR1 and 0.20 nM, 0.20 nM, 0.08 nM for mouse, rat and cynomolgus monkey CXCR2, respectivelly.

IC50 & Target: Kd: 41 nM (cynomolgus CXCR1), 0.20 nM (mouse CXCR2), 0.20 nM (rat CXCR2), 0.08 nM (cynomolgus monkey CXCR2) [1]

In Vitro: Navarixin is a potent, allosteric antagonist of both CXCR1 and CXCR2, with K_d values of 41 nM for cynomolgus CXCR1 and 0.20 nM, 0.20 nM, 0.08 nM for mouse, rat and cynomolgus monkey CXCR2, respectivelly[1]. Navarixin (1 nM) reduces CXCL8 potency in stimulating Ba/F3-hCXCR2 chemotaxis. Navarixin (3 nM) significantly inhibits the potency and efficacy of CXCL1-induced neutrophils (PMN) chemotaxis. Navarixin (300 nM) significantly decreases chemokine potency and slightly decreases maximal cell movement for Ba/F3-CXCR1 cells[2]. Navarixin (25 μM) is sufficient to block IL-8-mediated CXCR2 activation in HCT116, E2, Caco2, and IIIe cells, in which phosphorylation of downstream kinases of CXCR2 is reduced in a concentration-dependent manner[3].

In Vivo: Navarixin (0.1-10 mg/kg, p.o.) blocks pulmonary neutrophilia (ED_{50}=1.2 mg/kg) and goblet cell hyperplasia (32-38% inhibition at 1-3 mg/kg) in mice following the intranasal lipopolysaccharide (LPS) administration. In rats, Navarixin (0.1-3 mg/kg p.o.) suppresses the pulmonary neutrophilia (ED=1.8 mg/kg) and increase in bronchoalveolar lavage (BAL) mucin content (ED_{50} =0.1 mg/kg) induced by intratracheal (i.t.) LPS[1].