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

Nimesulide

Catalog No: tcsc2420

Available Sizes

Size: 100mg

Size: 500mg

Specifications

CAS No:
51803-78-2

Formula:
$C_{13}H_{12}N_2O_5S$

Pathway:
Immunology/Inflammation

Target:
COX

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
R805

Observed Molecular Weight:
308.31

Product Description

Nimesulide is a selective **COX-2** inhibitor, with **IC_{50}**s of 70 nM-70 μM in a time-dependent manner, but it shows no effect on COX-1 (IC_{50} >100 μM). Nimesulide has potent anti-inflammatory, analgesic and antipyretic properties.

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IC50 & Target: IC50: 70 nM-70 μM (COX-2)[1]

In Vitro: Nimesulide is a selective COX-2 inhibitor, with IC_{50}s of 70 nM-70 μM in a time-dependent manner, but it shows weak effect on COX-1 (IC_{50} >100 μM)[1]. Nimesulide (10 μM) effectively decreases VEGF in endometrium cancer cells, and shows no effect on that in normal cells. Nimesulide (10 and 50 μM) dramatically decreases MCP-1 levels in normal cell, and such an effect is also observed with 10 μM in cancer cells. In addition, Nimesulide (50 μM) potently affects IL-8 level in normal cells, but causes no changes in cancer cells[3].

In Vivo: Nimesulide (3 and 10 mg/kg, i.p.) effectively blocks fever induced by i.p. injection of LPS in rats. Nimesulide (3 mg/kg, i.p.) potently reduces fever response induced by IL-1β, IL-6 or TNF-α, but does not prevent the initial rise in the febrile response induced by arachidonic acid. Nimesulide also significantly reduces PGE2 levels and PGF2α levels in the cerebrospinal fluid of the LPS-stimulated animals, and inhibits the increase in plasma TNF-α by 97%[2].