

# Valdecoxib

**Catalog No: tcsc1674**



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

181695-72-7

**Formula:**

$C_{16}H_{14}N_2O_3S$

**Pathway:**

Immunology/Inflammation

**Target:**

COX

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 34$  mg/mL (108.16 mM)

**Alternative Names:**

SC 65872

**Observed Molecular Weight:**

314.36

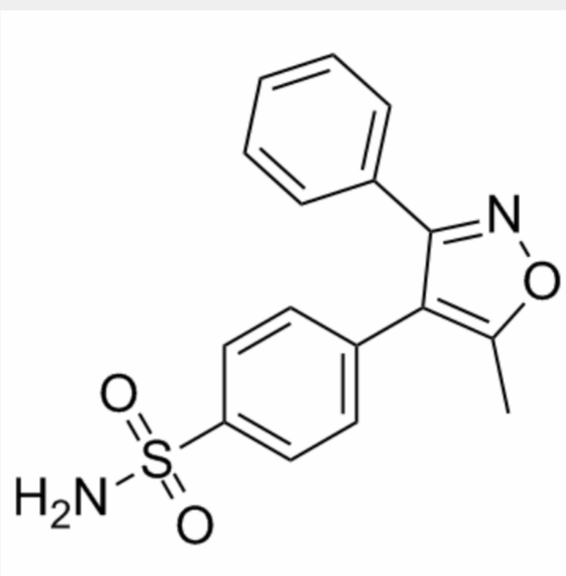
## Product Description

Valdecoxib is a highly potent and selective inhibitor of **COX-2**, with **IC<sub>50</sub>**s of 5 nM and 140  $\mu$ M for COX-2 and COX-1, respectively. Valdecoxib can be used in the research of arthritis and pain.

IC50 & Target: IC50: 5 nM (COX-2), 140  $\mu$ M (COX-1)<sup>[1]</sup>

**In Vitro:** Valdecoxib (Compound 2) is a highly potent, selective and orally active inhibitor of COX-2, with IC<sub>50</sub>s of 5 nM and 140  $\mu$ M for COX-2 and COX-1, respectively<sup>[1]</sup>. Valdecoxib (10, 100  $\mu$ M) inhibits LPS-induced proliferation of endothelial cells and bFGF secretion in a dose-dependent manner. Valdecoxib stimulates VEGF formation via HMEC-1 under inflammatory conditions<sup>[2]</sup>.

**In Vivo:** Valdecoxib (Compound 2) shows potent oral activity in an acute antiinflammatory assay (rat carrageenan foot pad edema; ED<sub>50</sub> = 10.2  $\pm$  1.4 mg/kg). Valdecoxib also has chronic antiinflammatory activity in the rat adjuvant arthritis model, with an ED<sub>50</sub> of 0.032  $\pm$  0.002 mg/kg/day<sup>[1]</sup>. Valdecoxib (10 mg/kg, i.p.) significantly attenuates the behavioral and biochemical (oxidative damage) alterations in chronic-stressed mice<sup>[3]</sup>.



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