Imrecoxib

Cat. No.: HY-114200

CAS No.: 395683-14-4

Molecular Formula: $C_{21}H_{23}NO_3S$

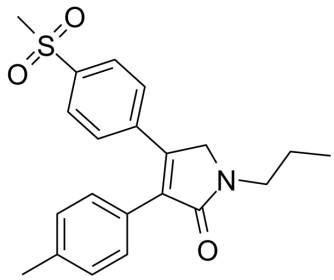
Molecular Weight: 369.48

Target: COX

Pathway: Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (270.65 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.7065 mL	13.5325 mL	27.0651 mL
5 mM	0.5413 mL	2.7065 mL	5.4130 mL
10 mM	0.2707 mL	1.3533 mL	2.7065 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.63 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.63 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Imrecoxib (BAP-909) is a novel and selective cyclooxygenase 2 (COX-2) inhibitor with an IC_{50} value of 18 nM, it also inhibits COX1- activity with an IC_{50} value of 115 nM. Imrecoxib (BAP-909) has anti-inflammatory effect[1].

IC_{50} & Target

Human COX-1	Human COX-2
115 nM (IC_{50})	18 nM (IC_{50})

In Vitro

Imrecoxib (BAP-909) (0.1-10 μM; 24 hours) decreases COX-2 mRNA level induced by PMA+LPS at a dose dependent manner in U937 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR[1]

Cell Line:	U937 cells
Concentration:	0.1 μM; 1 μM; 10 μM
Incubation Time:	24 hours
Result:	Decreased COX-2 mRNA level.

In Vivo

Imrecoxib (BAP-909) (gastrointestinal administration; 5-20 mg/kg; 1 hour before carrageenan injection) inhibits carrageenan-induced acute inflammation, and the inhibitory effect is maximal at 4 hours[1].
Imrecoxib (BAP-909) (gastrointestinal administration; 5-20 mg/kg; started on day 7; 26 days) diminishes the secondary paw swelling and inhibits heat-inactivated BCG induced-inflammtory polyarthritis[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Rat carrageenan-induced edema model[1]
Dosage:	5 mg/kg, 10 mg/kg, 20 mg/kg
Administration:	Gastrointestinal administration; 5-20 mg/kg; 1 hour before carrageenan injection
Result:	Inhibited the edema response with different doses.

Animal Model:	Rat adjuvant-induced arthritis (AIA) model[1]
Dosage:	5 mg/kg, 10 mg/kg, 20 mg/kg
Administration:	Gastrointestinal administration; 5-20 mg/kg; started on day 7; 26 days
Result:	Inhibited adjuvant-induced chronic inflammation at the doses of 10 and 20 mg/kg.

REFERENCES

[1]. Chen XH, et al. Imrecoxib: a novel and selective cyclooxygenase 2 inhibitor with anti-inflammatory effect. Acta Pharmacol Sin. 2004 Jul;25(7):927-31.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA