(S)-Flurbiprofen

Cat. No.: HY-15123

CAS No.: 51543-39-6

Molecular Formula: $C_{15}H_{13}FO_2$

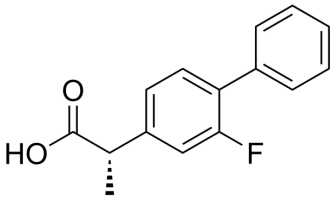
Molecular Weight: 244.26

Target: COX; PGE synthase

Pathway: Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (409.40 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	4.0940 mL	20.4700 mL	40.9400 mL
5 mM	0.8188 mL	4.0940 mL	8.1880 mL
10 mM	0.4094 mL	2.0470 mL	4.0940 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (10.23 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (10.23 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(S)-Flurbiprofen is an active enantiomer of Flurbiprofen, with IC_{50} values of 0.48 μM and 0.47 μM for COX-1 and COX-2, respectively[1].

IC_{50} & Target

COX-1	COX-2
0.48 μM (IC_{50})	0.47 μM (IC_{50})

In Vitro

(S)-Flurbiprofen (10^{-7} M) results in a total suppression of basal and stimulated PGE2 release in rat skin[2].

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

REFERENCES

[1]. A Carabaza, et al. Stereoselective Inhibition of Inducible Cyclooxygenase by Chiral Nonsteroidal Antiinflammatory Drugs. J Clin Pharmacol. 1996 Jun;36(6):505-12.

[2]. B Averbeck, et al. Inflammatory Mediators Do Not Stimulate CGRP Release if Prostaglandin Synthesis Is Blocked by S(+)-flurbiprofen in Isolated Rat Skin. Inflamm Res. 2003 Dec;52(12):519-23.

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