Ampiroxicam

Cat. No.: HY-17484

CAS No.: 99464-64-9

Molecular Formula: $C_{20}H_{21}N_3O_7S$

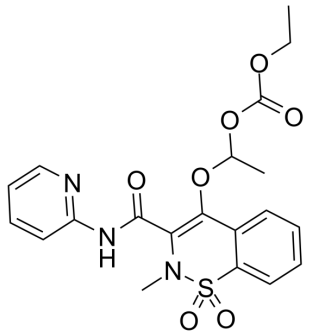
Molecular Weight: 447.46

Target: COX

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 : 50 mg/mL (111.74 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2348 mL	11.1742 mL	22.3484 mL
	5 mM	0.4470 mL	2.2348 mL	4.4697 mL
	10 mM	0.2235 mL	1.1174 mL	2.2348 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: ≥ 2.5 mg/mL (5.59 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.59 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ampiroxicam(CP65703) is a nonselective cyclooxygenase inhibitor uesd as anti-inflammatory drug.Target: COXAmpiroxicam is a non-steroidal anti-inflammatory drug. It is a prodrug of piroxicam. Ampiroxicam inhibits the stretching response in mice induced by phenylbenzoquinone (PBQ) with maximum protective effect (MPE) of 2 mg/kg. Ampiroxicam inhibits swelling in a dose-responsive manner in the rat foot edema (RFE) assay with ED50 of 28 mg/kg at single oral dose and 7.8 mg/kg at 5 daily oral dose. Ampiroxicam blocks primary and secondary lesion development in rat adjuvant arthritis with ED50 of 2.2 mg/kg and 0.5 mg/kg, respectively. Ampiroxicam (3.2 mg/kg) leads to a plasma concentration of 12 μg/mL at a Tmax of 2 hours for piroxicam derived from ampiroxicam in rats [1]. Ultraviolet-A (UVA)-irradiated 1% Ampiroxicam sensitized in guinea pigs shows positive reaction in the patch testing to UVA-irradiated 1% Ampiroxicam and 1% thiosalicylate (TOS). Concentration of Ampiroxicam is easily reduced by the increase in UVA irradiation doses, as compared with that of piroxicam [2].

IC_{50} & Target	COX

REFERENCES

[1]. Aoki T, et al. Premedication with cyclooxygenase-2 inhibitor meloxicam reduced postoperative pain in patients after oral surgery. Int J Oral Maxillofac Surg. 2006 Jul;35(7):613-7.

[2]. Sasaki, T., et al., Antigenic characterization in ampiroxicam-induced photosensitivity using an in vivo model of contact hypersensitivity. J Dermatol Sci, 1999. 21(3): p. 170-5.

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