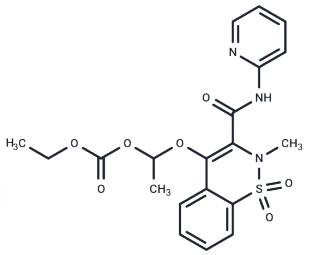
Data Sheet (Cat.No.T6387)

TargetMol

Ampiroxicam

Chemical Properties



CAS No. : 99464-64-9

Formula: C20H21N3O7S

Molecular Weight: 447.46

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Ampiroxicam (Flucam) is a nonselective cyclooxygenase inhibitor uesd as anti-inflammatory drug.
Targets(IC50)	COX
In vitro	Ampiroxicam (<150 μM) dose-dependently decreases the proliferation of Panc-1 cells. [1] Ampiroxicam (50 μM) results in decreased expression of Sp1, Sp3, Sp4, and VEGFR1 proteins in Panc-1 cells and L3.6pl cells as determined by Western blot analysis. Ampiroxicam (50 μM) results in increased phosphorylation of MAPK1/2 in Panc-1 cells and L3.6pl cells. [2]
In vivo	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. [3] 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. [4]
Cell Research	Panc-1 cells are plated in DME/F12 medium with 5% fetal bovine serum and treated on the next day with vehicle (0.1% DMSO) or various concentrations of Ampiroxicam. Cells are counted at the indicated times with a Coulter Z1 cell counter. Each experiment is done in triplicate, and results are expressed as means, with error bars representing 95% confidence intervals (CIs).(Only for Reference)

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 83 mg/mL (185.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (7.37 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2348 mL	11.1742 mL	22.3484 mL
5 mM	0.447 mL	2.2348 mL	4.4697 mL
10 mM	0.2235 mL	1.1174 mL	2.2348 mL
50 mM	0.0447 mL	0.2235 mL	0.447 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Abdelrahim M, et al. J Natl Cancer Inst, 2006, 98(12), 855-868.
Abdelrahim M, et al. Cancer Res, 2007, 67(7), 3286-3294.
Carty TJ, et al. Agents Actions, 1993, 39(3-4), 157-165.
Sasaki T, et al. J Dermatol Sci, 1999, 21(3), 170-175.