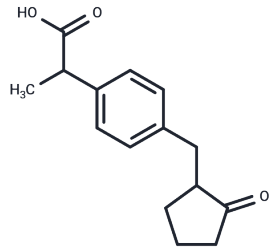
Data Sheet (Cat.No.T0463)

TargetMol

Loxoprofen

Chemical Properties



CAS No. : 68767-14-6

Formula: C15H18O3

Molecular Weight: 246.3

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	Loxoprofen (Koloxo) is an anti-inflammatory non-steroidal medicine.
Targets(IC50)	COX
In vitro	Loxoprofen sodium(LOX) does not affect the proliferation and viability of LLC cells in vitro. HUVECs treated with LOX results in the inhibition of the tubular formation. Treatment with 50 mg/ml LOX reveals a 33% decline in in vitro angiogenesis, compared with vehicle-treated HUVECs. This inhibition is presumably due to inhibition of VEGF activity[1].
In vivo	Loxoprofen sodium (LOX), inhibits in vivo growth of implanted Lewis lung carcinoma (LLC). Intratumoral vessel density in LOX-treated mice is significantly lower than that of mice without treatment. Intratumoral expressions of vascular endothelial growth factor (VEGF) mRNA are attenuated by the LOX treatment. LOX suppresses both intratumoral and systemic VEGF protein in LLC-implanted mice. LOX also inhibits tubular formation of primary cultured human umbilical vein endothelial cells, presumably due to the inhibition of VEGF. In patients with advanced non-small cell lung cancer, LOX medication (120 mg/day) for a week significantly decreases the plasma VEGF level[1].
Cell Research	To determine the proliferation of LLC cells with or without Loxoprofen, 2×104 cells are seeded into 100-mm dishes containing 10 ml culture medium supplemented with 50 μg/ml Loxoprofen or vehicle on day 0. On days 2, 3, 4 and 6, the cells are trypsinized and counted. (Only for Reference)

Solubility Information

Solubility	DMSO: 50 mg/mL (203 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 46 mg/mL (186.76 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: 2 mg/mL (8.12 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*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0601 mL	20.3004 mL	40.6009 mL
5 mM	0.812 mL	4.0601 mL	8.1202 mL
10 mM	0.406 mL	2.030 mL	4.0601 mL
50 mM	0.0812 mL	0.406 mL	0.812 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

Kanda A, et al. Acta Oncol. 2003, 42(1):62-70.