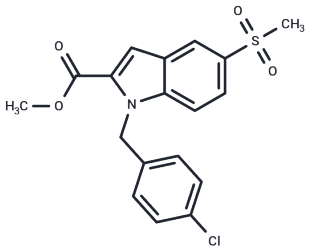
Data Sheet (Cat.No.T32824)

LM-1685

Chemical Properties



CAS No. : 416901-58-1

Formula: C18H16ClNO4S

Molecular Weight: 377.84

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	LM-1685 is a potent and selective inhibitor of COX-2 IN human monocytes and whole blood with IC50 of 0.65μM and IC50 = 4.3μM, respectively, and is a potential compound for the treatment of inflammation.
Targets(IC50)	COX
In vitro	We found that continuous exposure to cytostatic doses of CAI and LM-1685, a celecoxib analog, reduced the proliferation and survival of seven human cancer cell lines by at least one log (P < or = 0.001) over either agent alone. The supra-additive antiproliferative effects occurred throughout a range of LM-1685 doses (5-25 micromol/L) and paralleled a decrease in COX-2 activity as measured by prostaglandin E2 production. In these cells, treatment with LM-1685/CAI suppressed the extracellular signal-regulated kinase pathway within the first hour but ultimately results in high, sustained activation of ERK over a 9-day period (P = 0.0005). [1]

Solubility Information

Solubility	DMSO: 90 mg/mL (238.2 mM),Sonication is recommended. Methanol: 0.9 mg/mL (2.38 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6466 mL	13.2331 mL	26.4662 mL
5 mM	0.5293 mL	2.6466 mL	5.2932 mL
10 mM	0.2647 mL	1.3233 mL	2.6466 mL
50 mM	0.0529 mL	0.2647 mL	0.5293 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

Winters ME, et al. Supra-additive growth inhibition by a celecoxib analogue and carboxyamido-triazole is primarily mediated through apoptosis. Cancer Res. 2005;65(9):3853-3860.
Collins C, et al. Potential for control of detrusor smooth muscle spontaneous rhythmic contraction by cyclooxygenase products released by interstitial cells of Cajal. J Cell Mol Med. 2009;13(9B):3236-3250.
Huang KH, et al. Down-regulation of glucose-regulated protein (GRP) 78 potentiates cytotoxic effect of celecoxib in human urothelial carcinoma cells. PLoS One. 2012;7(3):33615.
Palomer A, et al. Identification of novel cyclooxygenase-2 selective inhibitors using pharmacophore models. J Med Chem. 2002;45(7):1402-1411.