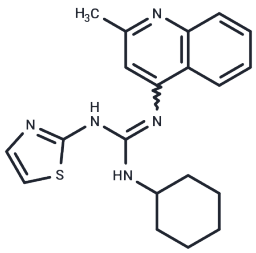
Data Sheet (Cat.No.T13160)

TargetMol

Timegadine

Chemical Properties



CAS No. : 71079-19-1

Formula: C20H23N5S

Molecular Weight: 365.5

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	Timegadine is a competitive inhibitor of COX and lipo-oxygenase, with IC50s ranging from 5 nM (washed rabbit platelets) to 20 μM (rat brain) for COX and 100 μM for lipo-oxygenase both in the cytosol fraction of horse platelet homogenates and in washed rabbit platelets.
Targets(IC50)	COX
In vitro	Timegadine is a potent, competitive COX and lipo-oxygenase inhibitor, with IC50s ranging from 5 nM (washed rabbit platelets) to 20 μM (rat brain) for COX and 100 μM for lipo-oxygenase both in the cytosol fraction of horse platelet homogenates, and in washed rabbit platelets[2],and is a new antiinflammatory agent,
In vivo	Timegadine, a new anti-inflammatory agent, is a potent, competitive inhibitor of prostaglandin synthetase, additionally inhibiting cyclo-oxygenase (COX) and lipoxygenase. Administering Timegadine orally at doses ranging from 10 to 30 mg/kg daily effectively suppresses both the initial and subsequent lesions of adjuvant arthritis, particularly when treatment commences on the induction day and extends for 28 days. Notably, Timegadine can prevent the swelling of the non-injected paw for up to 28 days post-adjuvant injection, especially when administered five days before and after disease onset, mirroring the impact of cyclophosphamide[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.736 mL	13.6799 mL	27.3598 mL
5 mM	0.5472 mL	2.736 mL	5.472 mL
10 mM	0.2736 mL	1.368 mL	2.736 mL
50 mM	0.0547 mL	0.2736 mL	0.5472 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

George S, et al. The influence of food intake on the bioavailability of timegadine, a novel non-steroidal anti-inflammatory drug. Br J Clin Pharmacol. 1983 Apr;15(4):495-8.
Ahnfelt-Rønne I, et al. A new antiinflammatory compound, timegadine (N-cyclohexyl-N"-4-[2-methylquinolyl]-N'-2-thiazolylguanidine), which inhibits both prostaglandin and 12-hydroxyeicosatetraenoic acid (12-HETE) formation. Biochem Pharmacol. 1980 Dec;29(24):3265-9.