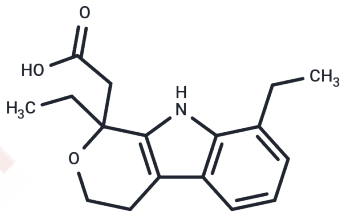
Data Sheet (Cat.No.T1002)

TargetMol

Etodolac

Chemical Properties



CAS No. : 41340-25-4

Formula: C17H21NO3

Molecular Weight: 287.35

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	Etodolac (AY-24236) inhibits the activity of cyclooxygenase I and II, thereby preventing the formation of prostaglandin which is involved in the induction of pain, fever, and inflammation. Etodolac is a pyranocarboxylic acid and non-steroidal anti-inflammatory drug (NSAID) with antipyretic and analgesic activities. It also inhibits platelet aggregation by blocking platelet cyclooxygenase and the subsequent formation of thromboxane A2.
Targets(IC50)	Retinoid Receptor,COX
In vitro	Etodolac markedly inhibits ICl, vol activation by TNFα as well as subsequent apoptotic events such as apoptotic cell volume decrease (AVD) and elevation of caspase-3/7 activity in isolated rabbit articular chondrocytes. [1]
In vivo	Etodolac attenuates paclitaxel-induced peripheral neuropathy by a COX-independent pathway in a mouse model of mechanical allodynia. [2] Etodolac and other NSAIDs inhibits paw swelling and causes gastric mucosal lesions in adjuvant arthritic rats in a dose-dependent manner. Etodolac shows the highest UD(50) value and safety index among these NSAIDs in arthritic rats. Etodolac also shows the highest UD(50) value and safety index, except when its effects are assessed by acetic acid-induced writhing in normal rats. [3] Etodolac dose-dependently inhibits the development of gastric cancer, and no cancer is detected at a dose of 30 mg/kg/day. Etodolac does not affect the extent of inflammatory cell infiltration or oxidative DNA damage, but it significantly inhibits mucosal cell proliferation and dose-dependently represses the development of intestinal metaplasia in the stomachs of Helicobacter pylori (Hp)-infected Mongolian gerbils (MGs). [4] Etodolac alleviates heat-evoked hyperalgesia in the CCI rats and the increase in number of TRAP-positive multinucleated osteoclasts on the CCI-side is abrogated, however, it does not inhibit the decrease of bone mineral content (BMC) and bone mineral density (BMD) on the CCI-side. [5]

Solubility Information

Solubility	Ethanol: 54 mg/mL (187.92 mM),Sonication is recommended. DMSO: 35 mg/mL (121.8 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 (6.96 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	3.4801 mL	17.4004 mL	34.8008 mL
5 mM	0.696 mL	3.4801 mL	6.9602 mL
10 mM	0.348 mL	1.740 mL	3.4801 mL
50 mM	0.0696 mL	0.348 mL	0.696 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

Kumagai K, et al. Int J Mol Sci,2013, 14(10), 19705-19715.
Ito S, et al. J Pharmacol Exp Ther,2012, 342(1), 53-60.
Tachibana M, et al. Pharmacology,2003, 68(2), 96-104.
Magari H, et al. Biochem Biophys Res Commun,2005, 334(2), 606-612.
Suyama H, et al. Brain Res,2004, 12010(1-2), 144-150.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481