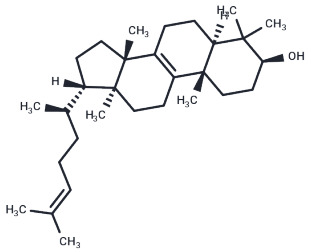
Data Sheet (Cat.No.T5737)

TargetMol
YOUR TARGET MOLECULES

euphol

Chemical Properties



CAS No. : 514-47-6

Formula: C30H50O

Molecular Weight: 426.72

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Euphol, an alcohol tetracyclic triterpene, has a wide range of pharmacological properties and is considered to have anti-inflammatory action.
Targets(IC50)	Others,Lipase,Endogenous Metabolite
In vivo	Oral treatment with euphol (30 and 100 mg/kg) reduced carrageenan-induced mechanical hyperalgesia. Likewise, euphol given through the spinal and intracerebroventricular routes prevented mechanical hyperalgesia induced by carrageenan. Euphol consistently blocked the mechanical hyperalgesia induced by complete Freund's adjuvant, keratinocyte-derived chemokine, interleukin-1β, interleukin-6 and tumor necrosis factor-alpha associated with the suppression of myeloperoxidase activity in the mouse paw. Oral treatment with euphol was also effective in preventing the mechanical nociceptive response induced by ligation of the sciatic nerve and also significantly reduced the levels and mRNA of cytokines/chemokines in both paw and spinal cord tissues following i.pl. injection of complete Freund's adjuvant. In addition, the pre-treatment with either CB?R or CB?R antagonists, as well as the knockdown gene of the CB?R and CB?R, significantly reversed the antinociceptive effect of euphol.
Animal Research	For the induction of inflammatory pain, mice received an intraplantar injection of 20 ml of carrageenan (300 ug/paw) under the surface of the right hindpaw.?To assess the systemic effect of drug treatment, mice received euphol (3, 30 or 100 ug/kg) or its vehicle (5% Tween 80 solution made in saline e 0.9% NaCl solution), 1 h before carrageenan injection.?Other group of mice received dexamethasone (0.5 mg/kg.) 1 h before carrageenan?injection that was used as positive control drug.?The development of mechanical hyperalgesia was evaluated at 1, 2, 4, 6, 8, 24 and 48 h time points, after drug pre-treatments.?In order to evaluate the possible site of action of euphol (central or peripheral), a separate group of animals received an i.pl.?injection of euphol (5, 10 or 30 ug/paw) 15 min prior carrageenan (300 ug/paw) administration.?Additional groups of animals received an intrathecal (1, 3 and 10 ug/site) or intracerebroventricular ?(0.3, 3 or 10 ug/site) injection of 5 ml of euphol, 15 min before the paw injection of carrageenan.?Compared the analgesic efficacy of euphol with different groups of standard analgesic drugs, as described previously: indomethacin (2 mg/kg), morphine (5 mg/kg.), gabapentin (70 mg/kg) and dipyrone (120 mg/kg).?All drugs were administered 1 h before i.pl.?carrageenan injection (300 ug/paw).?Mechanical hyperalgesia was evaluated at 1, 2, 4, 6, 8 and 24 h time points after carrageenan

	injection, and measured with VFH.

Solubility Information

Solubility	DMSO: 4.27 mg/mL (10 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3435 mL	11.7173 mL	23.4346 mL
5 mM	0.4687 mL	2.3435 mL	4.6869 mL
10 mM	0.2343 mL	1.1717 mL	2.3435 mL
50 mM	0.0469 mL	0.2343 mL	0.4687 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.

Reference

Dutra R C , Bento A F , Marcon R , et al. Euphol, a tetracyclic triterpene produces antinociceptive effects in inflammatory and neuropathic pain: The involvement of cannabinoid system[J]. Neuropharmacology, 2012, 63(4):