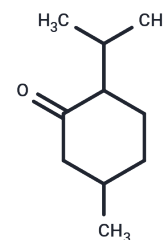


Menthone

Chemical Properties

CAS No. :	10458-14-7
Formula:	C ₁₀ H ₁₈ O
Molecular Weight:	154.25
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	Menthone has anti-inflammatory activity,, it can suppress the lipopolysaccharide (LPS)-induced proinflammatory cytokines, interleukin-1beta (IL-1beta) and tumor necrosis factor-alpha (TNF-alpha),as well as nuclear factor kappaB (NF-kB).
Targets(IC50)	NF-κB,Parasite,IL Receptor,TNF
In vivo	Menthone and Vit C at higher dose have a good compensatory effect with significant reduction in DNA damages in sperm cells by reversing the adverse effect of ACV on the reproductive system in male rat.
Animal Research	Adult male albino Wistar rats with average weight of 250±10 gr, were divided into six groups (n=18/each), as: ACV (15 mg/kg/day), ACV+Vit C (20 mg/kg/day), ACV+ menthone (100 µl/d), ACV+ menthone (250 µl/d), ACV+ menthone (400 µl/day) and control group without any treatment. At the end of experiment, the animals were sacrificed and sperm samples were collected and isolated in phosphate-buffered saline and examined by TUNEL staining process. The percentage of TUNEL positive spermatozoa was evaluated by fluorescence microscopy. Each experiment was performed in three repeats

Solubility Information

Solubility	DMSO: 250 mg/mL (1620.75 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 (12.97 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.483 mL	32.4149 mL	64.8298 mL
5 mM	1.2966 mL	6.483 mL	12.966 mL
10 mM	0.6483 mL	3.2415 mL	6.483 mL
50 mM	0.1297 mL	0.6483 mL	1.2966 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

Toghiani S, Hayati Roudbari N, Dashti GR, Rouzbehani S. The effects of vitamin C and menthone on acyclovir induced DNA damage in rat spermatozoa: An experimental study. [J]. Int J Reprod Biomed (Yazd). 2018 Nov;16(11): 703-710.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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