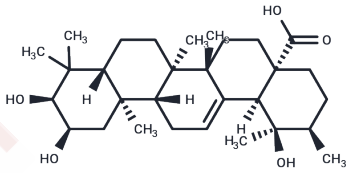
Data Sheet (Cat.No.TN1134)

TargetMol

Euscaphic acid

Chemical Properties



CAS No. : 53155-25-2

Formula: C30H48O5

Molecular Weight: 488.7

Storage: Store at low temperature,Keep away from direct sunlight
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	Euscaphic acid has anti-diabetic, and anti-inflammatory activities, it inhibits LPS-induced inflammatory responses by interference with the clustering of TRAF6 with IRAK1 and TAK1, resulting in blocking the activation of IKK and MAPKs signal transduction to downregulate NF-κB activations.
Targets(IC50)	Apoptosis,NO Synthase,DNA/RNA Synthesis,LDL,PI3K,Prostaglandin Receptor
In vitro	Isolated aorta was used to test the anti-contraction effects and the possible mode of action(s) of the EA (1*10 -7 M) and (3*10 -7 M) isolated from Crataegus azarolus var. aronia L. Euscaphic acid showed high anti-contraction effects on norepinephrin (NE), (1*10 -9 -10 -4 M) induced contraction in aortic smooth muscle cells in endothelium-intact, endothelium-denuded, and aortic rings pre-incubated with potassium (K +)-channels blocker (tetraethylammonium, TEA), prostaglandin I 2 (PGI) inhibitor (indomethacin) and cyclic guanosine monophosphate (cGMP) inhibitor (methylene blue). On the other hand, other K 2 channels subtype blockers glibenclamide (GLIB); barium chloride (BaCl) and 4-aminopyridine (4-AP) demonstrated that adenosine triphosphate sensitive K + (K ATP), inwardly rectifying K 2 + (K ir) and voltage-dependent K) channels played no role in anti-contraction induced by EA. Furthermore, the role of L-types calcium (Ca) channels in EA anti-contractile effects on aortic smooth muscle cells was proved, by using the Ca -channel blocker verapamil, as indicated by the production of a potent anti-contraction effect . The results of the current study indicate that the anti-contraction effects of EA may be due to the activation of calcium dependent, K) channels and blocking of L-type Ca ++ channels.

Solubility Information

Solubility	DMSO: 50 mg/mL (102.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.12 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	2.0462 mL	10.2312 mL	20.4625 mL
5 mM	0.4092 mL	2.0462 mL	4.0925 mL
10 mM	0.2046 mL	1.0231 mL	2.0462 mL
50 mM	0.0409 mL	0.2046 mL	0.4092 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

Mahmud S A . Anti-Contraction Effects of Euscaphic Acid Isolated from Crataegus azarolus var. aronia L on Rat's Aortic Smooth Muscle. 2015.