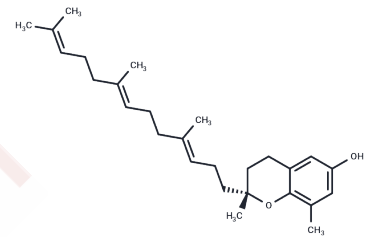


δ-Tocotrienol

Chemical Properties

CAS No. :	25612-59-3
Formula:	C ₂₇ H ₄₀ O ₂
Molecular Weight:	396.61
Storage:	Keep away from direct sunlight, Keep away from moisture, High Volatility Pure form: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	δ-Tocotrienol (Delta-Tocotrienol) is a potential angiogenic inhibitor. δ-Tocotrienol is also a nontoxic activator of mir-34a which can inhibit nonsmall cell lung cancer cells (NSC-LC) cell proliferation, induce apoptosis and inhibit invasion, and thus offering a potential starting point for the design of novel anticancer agents.
Targets(IC50)	Apoptosis, ERK, Bcl-2 Family, Others, NF-κB, Akt, Caspase, PDK, DNA/RNA Synthesis, p53, PI3K, VEGFR
In vitro	δ-Tocotrienol induced apoptosis and cell cycle arrest at G ₀ /G ₁ and M phases in nasopharyngeal carcinoma cells. After CNE1 cells were treated with δ-Tocotrienol, 169 genes were up-regulated and 167 down-regulated. ERK1/2 was shown to play a vital role in cell cycle arrest by gene chips. δ-Tocotrienol induces cell cycle arrest in CNE1 cells via the p16/CDK4/cyclin D1 signaling pathway. CNE1 apoptosis was related to dysregulated expression of Bax-2 and Bcl-2. Furthermore, caspase-3, -8, -9 up-regulation was related to the apoptotic effect of δ-Tocotrienol[1].

Solubility Information

Solubility	DMSO: 100 mg/mL (252.14 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (8.32 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	2.5214 mL	12.6068 mL	25.2137 mL
5 mM	0.5043 mL	2.5214 mL	5.0427 mL
10 mM	0.2521 mL	1.2607 mL	2.5214 mL
50 mM	0.0504 mL	0.2521 mL	0.5043 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

Shen J , et al. δ -Tocotrienol induces apoptosis and inhibits proliferation of nasopharyngeal carcinoma cells. Food Funct. 2021 Jul 21;12(14):6374-6388.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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