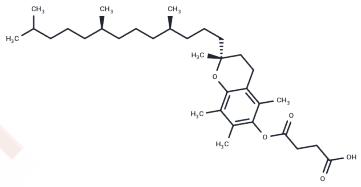
Data Sheet (Cat.No.T64914)

TargetMol

Vitamin E succinate

Chemical Properties



CAS No. : 4345-03-3

Formula: C33H54O5

Molecular Weight: 530.78

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	Vitamin E succinate (D-alpha-Tocopherol Succinate) is an antioxidant tocopherol that belongs to the vitamin E class of compounds Vitamin E succinate has antitumor activity, induces apoptosis, and is used as an adjuvant in the treatment of cancer and in the synthesis of INVITE, a biocoupling compound.
Targets(IC50)	Apoptosis
In vitro	In the HEI-OC1 cell line,Vitamin E succinate (1-20 μM; 24 hours) significantly induced cytotoxicity at a concentration of 20 μM and showed a higher cytotoxic potency compared to 10 μM[1].
In vivo	In female C57BL/6 mice aged 6-8 weeks with TC-1 tumor cells,Vitamin E succinate (2 mg/kg; intraperitoneal injection; three times every 2 days, starting from the injection of TC-1 tumor cells and continuing for 10 to 14 days) decreased tumor volume[2].

Solubility Information

Solubility	DMSO: 120 mg/mL (226.08 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.884 mL	9.4201 mL	18.8402 mL
5 mM	0.3768 mL	1.884 mL	3.768 mL
10 mM	0.1884 mL	0.942 mL	1.884 mL
50 mM	0.0377 mL	0.1884 mL	0.3768 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

Kim SK, et al. The effects of the antioxidant α-tocopherol succinate on cisplatin-induced ototoxicity in HEI-OC1 auditory cells. Int J Pediatr Otorhinolaryngol. 2016 Jul;86:9-14.
Kang TH, et al. Treatment of tumors with vitamin E suppresses myeloid derived suppressor cells and enhances CD8+ T cell-mediated antitumor effects. PLoS One. 2014 Jul 29;9(7):e103562.