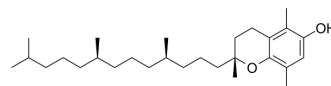


β-Tocopherol

Cat. No.:	HY-133680
CAS No.:	16698-35-4
Molecular Formula:	C ₂₈ H ₄₈ O ₂
Molecular Weight:	416.68
Target:	Tyrosinase
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (239.99 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	
				5 mg	
				10 mg	
				10 mg	
			1 mg	5 mg	10 mg
	1 mM		2.3999 mL	11.9996 mL	23.9992 mL
	5 mM		0.4800 mL	2.3999 mL	4.7998 mL
	10 mM		0.2400 mL	1.2000 mL	2.3999 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	β-Tocopherol is an analogue of vitamin E, exhibits antioxidant properties. β-Tocopherol can inhibit tyrosinase activity and melanin synthesis. β-Tocopherol also can prevent the inhibition of cell growth and of PKC activity caused by d-alpha-tocophero[1][2][3].
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REFERENCES

[1]. Azzi A, et, al. d-alpha-tocopherol control of cell proliferation. Mol Aspects Med. 1993; 14(3): 265-71.

[2]. Tasinato A, et, al. d-alpha-tocopherol inhibition of vascular smooth muscle cell proliferation occurs at physiological concentrations, correlates with protein kinase C inhibition, and is independent of its antioxidant properties. Proc Natl Acad Sci U S A.

[3]. Kamei Y, et, al. Comparison of the inhibitory effects of vitamin E analogues on melanogenesis in mouse B16 melanoma cells. Cytotechnology. 2009 Apr; 59(3): 183-90.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA