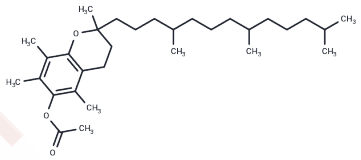
Data Sheet (Cat.No.TN1590)

TargetMol

DL-alpha-Tocopherylacetate

Chemical Properties



CAS No. : 7695-91-2

Formula: C31H52O3

Molecular Weight: 472.74

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	DL-alpha-Tocopherylacetate ((±)-Vitamin E acetate) is an oral tocopherol supplement with antioxidant activity.
Targets(IC50)	Antioxidant
In vivo	Rumen and duodenal fistula German dairy cows were treated with DL-alpha-Tocopherylacetate (138.6 IU/kg DM), which did not affect rumen protein synthesis and organic fermentation. [1] SD rats fed DL-alpha-Tocopherylacetate (500 mg/kg) and beta-carotene (30 mg/kg) could modulate the effect of dietary fat type on the response of rat aortic ring to drugs. [2]

Solubility Information

Solubility	DMSO: 80 mg/mL (169.23 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 (6.98 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	2.1153 mL	10.5766 mL	21.1533 mL
5 mM	0.4231 mL	2.1153 mL	4.2307 mL
10 mM	0.2115 mL	1.0577 mL	2.1153 mL
50 mM	0.0423 mL	0.2115 mL	0.4231 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

Schäfers S, et al. Influence of vitamin E on organic matter fermentation, ruminal protein and fatty acid metabolism, protozoa concentrations and transfer of fatty acids. J Anim Physiol Anim Nutr (Berl). 2018 Oct;102(5): 1111-1119.

Lutz M, et al. Effects of dietary fats, alpha-tocopherol and beta-carotene supplementation on aortic ring segment responses in the rat. Int J Vitam Nutr Res. 1995;65(4):225-30.