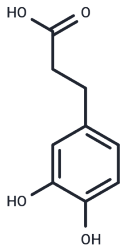
Data Sheet (Cat.No.T0539)

TargetMol

Dihydrocaffeic acid

Chemical Properties



CAS No. : 1078-61-1

Formula: C9H10O4

Molecular Weight: 182.17

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	Dihydrocaffeic acid is a metabolite of chlorogenic acid, a well-known antioxidant component with antioxidant, anti-Alzheimer's disease, neuroprotective, arousal and lipid-lowering effects.
Targets(IC50)	Antioxidant,Endogenous Metabolite,NO Synthase,p38 MAPK,ROS

Solubility Information

Solubility	DMSO: 250 mg/mL (1372.34 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (10.98 mM),Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (54.89 mM),Suspension. *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	5.4894 mL	27.4469 mL	54.8938 mL
5 mM	1.0979 mL	5.4894 mL	10.9788 mL
10 mM	0.5489 mL	2.7447 mL	5.4894 mL
50 mM	0.1098 mL	0.5489 mL	1.0979 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

Pérez-Alvarez V, et al. Structure-hepatoprotective activity relationship of 3,4-dihydroxycinnamic acid (caffeic acid) derivatives. J Appl Toxicol. 2001 Nov-Dec;21(6):527-31.
Huang J, et al. Antioxidant effects of dihydrocaffeic acid in human EA.hy926 endothelial cells. J Nutr Biochem. 2004 Dec;15(12):722-9.
Poquet L, et al. Investigation of the metabolic fate of dihydrocaffeic acid. Biochem Pharmacol. 2008 Mar 1;75(5): 1218-29.
Aoki R, et al. J Neurosci. 2011 Nov 16; 31(46): 16603-10.