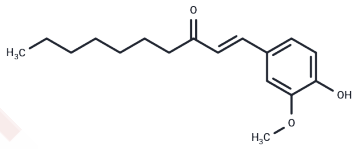
Data Sheet (Cat.No.T13436)

TargetMol

(E)-[6]-Dehydroparadol

Chemical Properties



CAS No. : 878006-06-5

Formula: C17H24O3

Molecular Weight: 276.37

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	(E)-[6]-Dehydroparadol ((6)-Dehydroparadol), an oxidative metabolite of [6]-Shogaol, is a potent Nrf2 activator.
Targets(IC50)	Apoptosis,Nrf2
In vitro	(E)-[6]-Dehydroparadol (5-80 μM; 24 h) inhibits the growth of HCT-116 and H-1299 cells, with IC50s of 43.02 and 41.59 μM, respectively. (E)-[6]-Dehydroparadol (10-40 μM; 24 h) induces apoptosis in HCT-116 and H-1299 cells[1].
In vivo	(E)-[6]-Dehydroparadol at a concentration of 5 μM for 24 hours increases the fluorescence signal of Tg[glutathione S-transferase pi 1 (gstp1):green fluorescent protein (GFP)] in Tg(gstp1:GFP) transgenic zebrafish embryos.

Solubility Information

Solubility	DMSO: 120 mg/mL (434.2 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: 4 mg/mL (14.47 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	3.6183 mL	18.0917 mL	36.1834 mL
5 mM	0.7237 mL	3.6183 mL	7.2367 mL
10 mM	0.3618 mL	1.8092 mL	3.6183 mL
50 mM	0.0724 mL	0.3618 mL	0.7237 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

Chen H, et, al. Metabolism of ginger component [6]-shogaol in liver microsomes from mouse, rat, dog, monkey, and human. Mol Nutr Food Res. 2013 May;57(5):865-76.
Zhu Y, et, al. Synthesis, evaluation, and metabolism of novel [6]-shogaol derivatives as potent Nrf2 activators. Free Radic Biol Med. 2016 Jun;95:243-54.