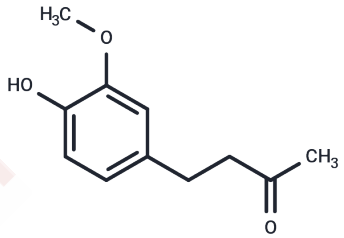
Data Sheet (Cat.No.T6718)

TargetMol

Zingerone

Chemical Properties



CAS No. : 122-48-5

Formula: C11H14O3

Molecular Weight: 194.23

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	Zingerone (Vanillylacetone) is a nontoxic methoxyphenol isolated from Zingiber officinale, with potent anti-inflammatory, antidiabetic, antidiarrhoeic, antilipolytic, antispasmodic, and anti-tumor properties. Zingerone (Gingerone) alleviates oxidative stress and inflammation, down-regulates NF-κB mediated signaling pathways, acts as an anti-mitotic agent, and inhibits the growth of neuroblastoma cells.
Targets(IC50)	NF-κB
In vitro	Zingeroneis similar in chemical structure to other flavor chemicals such as vanillin and eugenol. It is used as a flavor additive in spice oils and in perfumery to introduce spicy aromas. Fresh ginger does not contain vanillylacetone; cooking the ginger transforms gingerol, which is present, into Zingeronethrough a retro-aldol reaction. Zingeroneis likely the active constituent responsible for the antidiarrheal efficacy of ginger. [1]

Solubility Information

Solubility	Ethanol: 36 mg/mL (185.35 mM),Sonication is recommended. H2O: 10 mg/mL (51.49 mM),Heating is recommended. DMSO: 245 mg/mL (1261.39 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (51.49 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (10.3 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	5.1485 mL	25.7427 mL	51.4854 mL
5 mM	1.0297 mL	5.1485 mL	10.2971 mL
10 mM	0.5149 mL	2.5743 mL	5.1485 mL
50 mM	0.103 mL	0.5149 mL	1.0297 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 JC, et al. J Agric Food Chem, 2007, 55(21), 8390-8397.