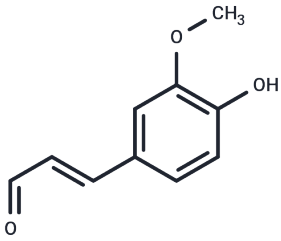
Data Sheet (Cat.No.T2S1907)

TargetMol

Coniferaldehyde

Chemical Properties



CAS No. : 458-36-6

Formula: C10H10O3

Molecular Weight: 178.18

Storage: Keep away from moisture
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	Coniferaldehyde (Ferulaldehyde) is a member of the class of cinnamaldehydes that is cinnamaldehyde substituted by a hydroxy group at position 4 and a methoxy group at position 3. It has a role as an antifungal agent and a plant metabolite. It is a member of cinnamaldehydes, a phenylpropanoid and a member of guaiacols. It derives from a cinnamaldehyde.
Targets(IC50)	Apoptosis,Antioxidant,Nrf2

Solubility Information

Solubility	DMSO: 250 mg/mL (1403.08 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: 1 mg/mL (5.61 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	5.6123 mL	28.0615 mL	56.123 mL
5 mM	1.1225 mL	5.6123 mL	11.2246 mL
10 mM	0.5612 mL	2.8062 mL	5.6123 mL
50 mM	0.1122 mL	0.5612 mL	1.1225 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

Kim, K., Heo, D., Kim, Y., Lee, J., Kim, N., & Bang, O. (2016). Coniferaldehyde inhibits LPS-induced apoptosis through the PKC α/β II/Nrf-2/HO-1 dependent pathway in RAW264.7 macrophage cells. Environmental Toxicology And Pharmacology, 48, 85-93. doi: 10.1016/j.etap.2016.10.016