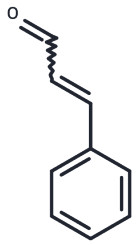
Data Sheet (Cat.No.T4S1551)

TargetMol

Cinnamaldehyde

Chemical Properties



CAS No. : 104-55-2

Formula: C9H8O

Molecular Weight: 132.16

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	1. Cinnamaldehyde (Cinnamic Aldehyde) has antipyretic activity. 2. Cinnamaldehyde is a sedative agent. 3. Cinnamaldehyde inhibits invasive capabilities of MDA-MB-435S cells was correlated with down-regulating the expression of miR-27a. 4. Cinnamaldehyde induces the generation of reactive oxygen species and exerts vasodilator and anticancer effects. 5. Cinnamaldehyde appears to be a promising candidate as an adjuvant in combination therapy with 5-fluorouracil (5-FU) and oxaliplatin (OXA), two chemotherapeutic agents used in CRC treatment. The possible mechanisms of its action may involve the regulation of drugmetabolizing genes. 6. Cinnamaldehyde plays a certain role in inhibiting the occurrence and progression of melanoma and its action mechanism may be manifested by inhibiting expression of VEGF and HIF-α, thus blood vessel simulation and formation of new blood vessels of melanoma cells, and growth of tumors accordingly.
Targets(IC50)	HIF

Solubility Information

Solubility	DMSO: 255 mg/mL (1929.48 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.5666 mL	37.8329 mL	75.6659 mL
5 mM	1.5133 mL	7.5666 mL	15.1332 mL
10 mM	0.7567 mL	3.7833 mL	7.5666 mL
50 mM	0.1513 mL	0.7567 mL	1.5133 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

Raffai, Gábor, Kim B , Park S , et al. Cinnamaldehyde and cinnamaldehyde-containing micelles induce relaxation of isolated porcine coronary arteries: role of nitric oxide and calcium[J]. International Journal of Nanomedicine, 2014.

Cao L, Xu E, Zheng R, et al. Traditional Chinese medicine Lingguizhugan decoction ameliorate HFD-induced hepatic-lipid deposition in mice by inhibiting STING-mediated inflammation in macrophages. Chinese Medicine. 2022, 17(1): 1-16.