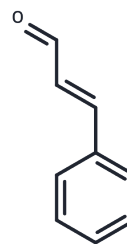


## trans-Cinnamaldehyde

## Chemical Properties

CAS No. :	14371-10-9
Formula:	C <sub>9</sub> H <sub>8</sub> O
Molecular Weight:	132.16
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	1. trans-Cinnamaldehyde (Phenylacrolein) exhibits excellent anti-inflammatory activities and antidepressant-like effects in stressed mid-aged rats as a COX-2 inhibitor. 2. Cinnamic aldehyde induces apoptosis of CML cells in vitro, down-regulation of the expression and function of BCR-ABL may be one of its most important anti-leukemia mechanisms. 3. Cinnamic aldehyde and cinnamic acid are cardioprotective in a rat model of ischemic myocardial injury, the mechanism is related to anti-oxidative and anti-inflammatory properties.
Targets(IC50)	Endogenous Metabolite, COX, TRP/TRPV Channel

## Solubility Information

Solubility	DMSO: 250 mg/mL (1891.65 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 (15.13 mM), Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (75.67 mM), Solution. <i>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.</i>

### Preparing Stock Solutions

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	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

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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

Liu L Q , Liu Z L , Wang X , et al. [Mechanism of cinnamic aldehyde-inducing apoptosis of chronic myeloid leukemic cells in vitro]]. Zhongguo shi yan xue ye xue za zhi / Zhongguo bing li sheng li xue hui = Journal of experimental hematology / Chinese Association of Pathophysiology, 2011, 19(3):617-620.

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