

## Sinensetin

## Chemical Properties

CAS No. : 2306-27-6

Formula: C<sub>20</sub>H<sub>20</sub>O<sub>7</sub>

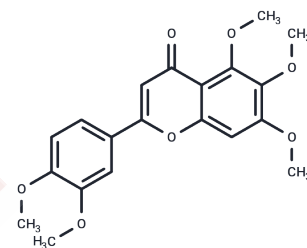
Molecular Weight: 372.37

Keep away from direct sunlight, Keep away from moisture

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	Sinensetin (Pedalitin permethyl ether) is a methylated flavone found in certain citrus fruits. It is a potent antiangiogenesis and anti-inflammatory, sinensetin enhances adipogenesis and lipolysis.
Targets(IC50)	PGE Synthase, TNF
In vitro	Sinensetin promotes adipogenesis in 3T3-L1 preadipocytes growing in incomplete differentiation medium, sinensetin enhances adipogenesis and lipolysis by increasing cAMP levels. Sinensetin shows anti-inflammatory activity by regulating the protein level of inhibitor $\kappa$ B- $\alpha$ (I $\kappa$ B- $\alpha$ ).
In vivo	Sinensetin has the most potent antiangiogenesis activity and the lowest toxicity, inhibits angiogenesis by inducing cell cycle arrest in the G0/G1 phase in HUVEC culture and downregulating the mRNA expressions of angiogenesis genes flt1, kdrl, and hras in zebrafish.

## Solubility Information

Solubility	DMSO: 25.79 mg/mL (69.26 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 (2.69 mM), Sonication is recommended. <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	2.6855 mL	13.4275 mL	26.855 mL
5 mM	0.5371 mL	2.6855 mL	5.371 mL
10 mM	0.2686 mL	1.3428 mL	2.6855 mL
50 mM	0.0537 mL	0.2686 mL	0.5371 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

Kang SI et al. Sinensetin enhances adipogenesis and lipolysis by increasing cyclic adenosine monophosphate levels in 3T3-L1 adipocytes. *Biol Pharm Bull.* 2015;38(4):552-8.

Shin HS et al. Sinensetin attenuates LPS-induced inflammation by regulating the protein level of I $\kappa$ B- $\alpha$ . *Biosci Biotechnol Biochem.* 2012;76(4):847-9.

Lam IK et al. In vitro and in vivo structure and activity relationship analysis of polymethoxylated flavonoids: identifying sinensetin as a novel antiangiogenesis agent. *Mol Nutr Food Res.* 2012 Jun;56(6):945-56.

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