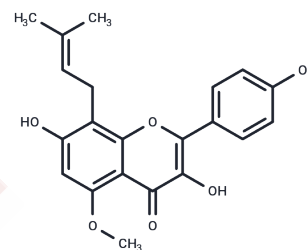


## Sophoflavescenol

## Chemical Properties

CAS No. :	216450-65-6
Formula:	C <sub>21</sub> H <sub>20</sub> O <sub>6</sub>
Molecular Weight:	368.38
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	Sophoflavescenol is a mixed inhibitor of PDE5 with a K(i) value of 0.005 microM. Sophoflavescenol has antioxidant, anti-inflammatory, and apoptotic effects, these effects might contribute to the antitumor activity without severe side effects. Sophoflavescenol exerts notable anti-inflammatory activity by inhibiting nitric oxide generation and tert-butylhydroperoxide-induced ROS generation rather than inhibiting nuclear factor kappa B activation in RAW 264.7 cells.
Targets(IC50)	Beta-Secretase, BACE, AChR, Cholinesterase (ChE), PDE
In vitro	Despite the small effect on human breast adenocarcinoma (MCF-7), Sophoflavescenol showed cytotoxicity against human leukaemia (HL-60), Lewis lung carcinoma (LLC), and human lung adenocarcinoma epithelial (A549) cells. Interestingly, it also exerted potent in vivo antitumor activity by tumor growth inhibition in the LLC tumor model as well as apoptotic activity by caspase-3 activation in HL-60 cells. In addition, it exhibited potent antioxidant activities in 1,1-diphenyl-2-picrylhydrazyl, 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt radicals and lipid peroxidation assays. Sophoflavescenol exerted notable anti-inflammatory activity by inhibiting nitric oxide generation and tert-butylhydroperoxide-induced ROS generation rather than inhibiting nuclear factor kappa B activation in RAW 264.7 cells[1]

## Solubility Information

Solubility	DMSO: 20 mg/mL (54.29 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 (5.43 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	2.7146 mL	13.5729 mL	27.1459 mL
5 mM	0.5429 mL	2.7146 mL	5.4292 mL
10 mM	0.2715 mL	1.3573 mL	2.7146 mL
50 mM	0.0543 mL	0.2715 mL	0.5429 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

Anti-tumorigenic activity of sophoflavescenol against Lewis lung carcinoma in vitro and in vivo. Arch Pharm Res. 2011 Dec;34(12):2087-99.

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