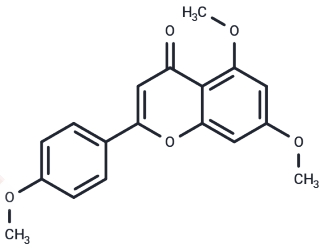
Data Sheet (Cat.No.T8296)

TargetMol

5,7,4'-Trimethoxyflavone

Chemical Properties



CAS No. : 5631-70-9

Formula: C18H16O5

Molecular Weight: 312.32

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	5,7,4'-Trimethoxyflavone (4',5,7-Trimethoxyflavone) is isolated from Kaempferia parviflora (KP) which is a medicinal plant from Thailand.
Targets(IC50)	Apoptosis,Caspase,Endogenous Metabolite,CFTR,PARP
In vitro	5,7,4'-Trimethoxyflavone induces apoptosis, as evidenced by increments of sub-G1 phase, DNA fragmentation, annexin-V/PI staining, the Bax/Bcl-xL ratio, proteolytic activation of caspase-3, and degradation of PARP protein. 5,7,4'-Trimethoxyflavone is significantly effective at inhibiting the proliferation of SNU-16 human gastric cancer cells in a concentration-dependent manner.

Solubility Information

Solubility	DMSO: 45.4 mg/mL (145.36 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 (6.4 mM),Sonication is recommended. 10% DMSO+90% Saline: 4.55 mg/mL (14.57 mM),Suspension. *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	3.2018 mL	16.0092 mL	32.0184 mL
5 mM	0.6404 mL	3.2018 mL	6.4037 mL
10 mM	0.3202 mL	1.6009 mL	3.2018 mL
50 mM	0.064 mL	0.3202 mL	0.6404 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 H, et al. Induction of ER Stress-Mediated Apoptosis by the Major Component 5,7,4'-TrimethoxyflavoneIsolated from Kaempferia parviflora Tea Infusion. Nutr Cancer. 2018 Aug-Sep;70(6):984-996.