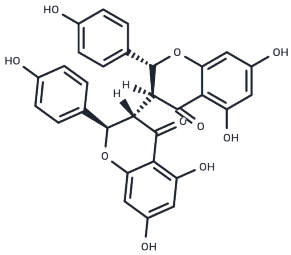
Data Sheet (Cat.No.TN6419)

TargetMol

Chamaejasmine

Chemical Properties



CAS No. : 69618-96-8

Formula: C30H22O10

Molecular Weight: 542.496

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	Chamaejasmine could be a candidate drug for osteosarcoma and breast cancer chemoprevention, induces apoptosis in MG63 and HEp-2 cells by Akt inactivation and dephosphorylation of BAD. It inhibits Bcl-2 expression and induces Bax expression to desintegrate the outer mitochondrial membrane and causes cytochrome c release.
Targets(IC50)	Apoptosis,Reactive Oxygen Species,AMPK,Autophagy,ROS
In vitro	Osteosarcoma cancer is one of the most lethal malignancies, and there is no effective preventive measure to date. Chamaejasmine is the major ingredient in Stellera chamaejasme L. Except its potent pain-relieving efficacy as reported, Chamaejasmine also exerted its anti-tumor activity in several tumor models. METHODS AND RESULTS: Here, we reported that Chamaejasmine had a profound anti-proliferative effect on human osteosarcoma cells in a concentration-dependent and time-dependent manner, which was associated with an increase of p21 and bax and a decrease of bcl-2 and consequently increased caspase-3 activity. The main mechanism of anti-tumor potency was mainly attributed to the induction of p53. Chamaejasmine hugely elevated the expression of p53. The results of p53 shRNA experiment further demonstrated that p53 knockdown severely impaired the sensitivity of tested cells to Chamaejasmine, implicating the important role of p53 played in Chamaejasmine's anti-tumor activity. CONCLUSIONS:In conclusion, results showed Chamaejasmine induced apoptosis in MG63 cells and could be a candidate drug for osteosarcoma cancer chemoprevention.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8433 mL	9.2166 mL	18.4332 mL
5 mM	0.3687 mL	1.8433 mL	3.6866 mL
10 mM	0.1843 mL	0.9217 mL	1.8433 mL
50 mM	0.0369 mL	0.1843 mL	0.3687 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

Apoptosis induced by chamaejasmine in human osteosarcoma cells through p53 pathway. Tumour Biol. 2015 Jul; 36(7):5433-9.