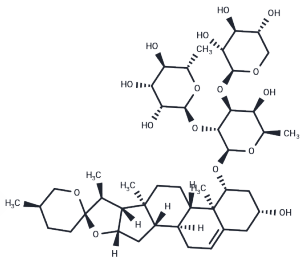
Data Sheet (Cat.No.T5701)

TargetMol

OPHIOPOGONIN D

Chemical Properties



CAS No. : 945619-74-9

Formula: C44H70O16

Molecular Weight: 855.02

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	Ophiopogonin D is a natural product,and is a CYP2J3 inducer that significantly inhibits Ang II induced NF-κB nuclear translocation.
Targets(IC50)	RAAS,ERK,Calcium Channel,NF-κB,PPAR,ROS
In vitro	OPHIOPOGONIN D(OP-D) significantly inhibited Ang II induced NF-κB nuclear translocation, IκBα down-regulation and activation of pro-inflammatory cytokines (TNF-α, IL-6 and VCAM-1) by increasing the expression of CYP2J2/EETs and PPARα in HUVECs.?Furthermore, treatment with exogenous 11,12-EET attenuated endothelial inflammation induced by Ang II as evidenced by inhibited NF-κB nuclear translocation, increased IκBα expression and decreased inflammation factor level.?Finally, the activation of NF-κB nuclear translocation induced by Ang II was also markedly suppressed by fenofibrate.?Co-incubation with 6-(2-proparglyloxyphenyl) hexanoic acid (PPOH) and PPARα inhibitor GW6471 before drug treatment abolished the endothelium protective effects of OP-D.?Suggest that OP-D has the endothelial protective effect through activation of CYP2J and increasing EETs, and PPARα involves in this process.

Solubility Information

Solubility	DMSO: 30 mg/mL (35.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (2.34 mM),Sonication is recommended. *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	1.1696 mL	5.8478 mL	11.6956 mL
5 mM	0.2339 mL	1.1696 mL	2.3391 mL
10 mM	0.117 mL	0.5848 mL	1.1696 mL
50 mM	0.0234 mL	0.117 mL	0.2339 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

Huang X , Wang Y , Zhang Z , et al. Ophiopogonin D and EETs ameliorate Ang II-induced inflammatory responses via activating PPARα in HUVECs[J]. Biochemical and Biophysical Research Communications, 2017: S0006291X17311166.