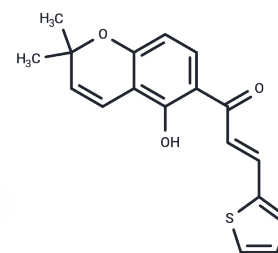


SYP-5

Chemical Properties

CAS No. : 1384268-04-5
 Formula: C₁₈H₁₆O₃S
 Molecular Weight: 312.38
 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	SYP-5 is a novel inhibitor of HIF-1, suppresses tumor cells invasion and angiogenesis.
Targets(IC50)	HIF/HIF Prolyl-Hydroxylase,HIF
In vitro	A novel HIF-1 inhibitor SYP-5 was first observed by the luciferase reporter assay. Western blots results showed SYP-5 inhibited hypoxia-induced upregulation of HIF-1. Moreover, the proteins of vascular endothelial growth factor (VEGF) and matrix metalloproteinases (MMP)-2 that are targets of HIF-1, were down-regulated by SYP-5. Furthermore, in the tube formation assay, SYP-5 suppressed angiogenesis induced by hypoxia and VEGF in vitro. Additionally, using Transwell and RTCA assays, we found that SYP-5 also retarded the Hep3B and Bcap37 cells migration and invasion induced by hypoxia and FBS. Detected the upstream pathways related to HIF-1 and found both PI3K/AKT and MAPK/ERK were involved in the SYP-5 mediated invasive inhibition of Bcap37 cells. SYP-5 inhibits tumor cell migration and invasion, as well as tumor angiogenesis, which are mediated by suppressing PI3K/AKT- and MAPK/ERK-dependent HIF-1 pathway. It suggests that SYP-5 might be a potential HIF-1 inhibitor as an anticancer agent.

Solubility Information

Solubility	DMSO: 33.33 mg/mL (106.7 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. <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

	1mg	5mg	10mg
1 mM	3.2012 mL	16.0061 mL	32.0123 mL
5 mM	0.6402 mL	3.2012 mL	6.4025 mL
10 mM	0.3201 mL	1.6006 mL	3.2012 mL
50 mM	0.064 mL	0.3201 mL	0.6402 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

Wang LH, et al. SYP-5, a novel HIF-1 inhibitor, suppresses tumor cells invasion and angiogenesis. Eur J Pharmacol. 2016 Nov 15;791:560-568.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481