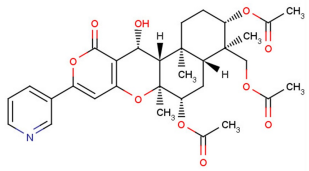
Data Sheet (Cat.No.T12592)

TargetMol
A DRUG SCREENING EXPERT

Pyripyropene A

Chemical Properties



CAS No.:	147444-03-9
Formula:	C31H37NO10
Molecular Weight:	583.63
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Pyripyropene A is a potent and selective inhibitor of sterol O-acyltransferase 2 (SOAT2)/acyl-coenzyme A:cholesterol acyltransferase 2 (ACAT2)(IC50 of 0.07 μM).
Targets(IC_{50})	ACAT2: 0.07 μM
In vitro	Pyripyropene A inhibits VEGF (20 ng/ml)-induced migration and tubular formation of HUVECs in dose-dependent fashion. Pyripyropene A do not show growth inhibitory effects against KB3-1, K562 and Neuro2A cells.Pyripyropene A exhibits anti-proliferative activity against HUVECs(IC50 value of 1.8 μM)[1].
In vivo	Pyripyropene A-treated mice display reduction of atherogenic lesion areas in the aortae and heart. Pyripyropene A inhibits the hepatic e acyl–coenzyme A:cholesterol acyltransferase 2 (ACAT2) activity in vivo[3]. Pyripyropene A displays a half-life (t1/2) of 0.693/λ, where λ represented the terminal slope of the log-linear portion of concentration time profile[4].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.713 mL	8.567 mL	17.134 mL
5 mM	0.343 mL	1.713 mL	3.427 mL
10 mM	0.171 mL	0.857 mL	1.713 mL
50 mM	0.034 mL	0.171 mL	0.343 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Hayashi A, et al. Pyripyropenes, fungal sesquiterpenes conjugated with alpha-pyrone and pyridine moieties, exhibits anti-angiogenic activity against human umbilical vein endothelial cells. Biol Pharm Bull. 2009 Jul;32(7):1261-5.

2. Ohtawa M, et al. Design and Synthesis of A-Ring Simplified Pyripyropene A Analogues as Potent and Selective Synthetic SOAT2 Inhibitors. ChemMedChem. 2018 Mar 6;13(5):411-421.

3. Ohshiro T, et al. Pyripyropene A, an acyl-coenzyme A:cholesterol acyltransferase 2-selective inhibitor, attenuates hypercholesterolemia and atherosclerosis in murine models of hyperlipidemia. Arterioscler Thromb Vasc Biol. 2011 May;31(5):1108-15.

4. Lee KR , et al. Determination of Penicillium griseofulvum-oriented pyripyropene A, a selective inhibitor of acyl-coenzyme A:cholesterol acyltransferase 2, in mouse plasma using liquid chromatography-tandem mass spectrometry and its application to pharmacokinetic studies. Biomed Chromatogr. 2019 Feb;33(2):e4388.

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