2,3,4,6,8-Pentahydroxy-1-methylxanthone

Cat. No.: HY-N12166

CAS No.: 548740-87-0

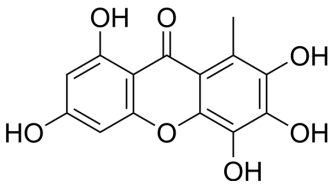
Molecular Formula: $C_{14}H_{10}O_7$

Molecular Weight: 290.23

Target: Others

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

2,3,4,6,8-Pentahydroxy-1-methylxanthone is a xanthone derivative of Wardomyces anomalus. 2,3,4,6,8-Pentahydroxy-1-methylxanthone shows significant antioxidant activities. 2,3,4,6,8-Pentahydroxy-1-methylxanthone is inhibitors of p56[lck] tyrosine kinase. 2,3,4,6,8-Pentahydroxy-1-methylxanthone can be used to treat cardiovascular disease[1].

IC_{50} & Target

p56 [lck][1]

In Vitro

2,3,4,6,8-Pentahydroxy-1-methylxanthone (1~50μM with 50 μg/mL ox-LDL, 6h) has protective effect on ox-LDL induced apoptosis in human umbilical vein endothelial cells[2].

2,3,4,6,8-Pentahydroxy-1-methylxanthone (1~50μM with 50 μg/mL ox-LDL, 6h) inhibits ox-LDL-induced adhesion molecules expression in human umbilical vein endothelial cells[2].

2,3,4,6,8-Pentahydroxy-1-methylxanthone (1~50μM with 50 μg/mL ox-LDL, 6h) has protective effect on ox-LDL-induced oxidative damage in human umbilical vein endothelial cells[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Apoptosis Analysis[2]

Cell Line:	Human umbilical vein endothelial cells
Concentration:	1μM, 5μM, 50μM (with 50 μg/mL ox-LDL)
Incubation Time:	6h
Result:	The percentage of apoptosis cells significantly decreased to around 20 ~ 40%.

Western Blot Analysis[2]

Cell Line:	Human umbilical vein endothelial cells
Concentration:	1μM, 5μM, 50μM (with 50 μg/mL ox-LDL)
Incubation Time:	6h
Result:	The level of pro-apoptotic protein Bax decreased significantly, while that of anti-apoptotic protein Bcl-2 increased significantly.

Apoptosis Analysis[2]

Cell Line:	Human umbilical vein endothelial cells
Concentration:	1μM, 5μM, 50μM (with 50 μg/mL ox-LDL)
Incubation Time:	6h
Result:	The protein level of VCAM-1 and ICAM-1 decreased.

Immunofluorescence[2]

Cell Line:	Human umbilical vein endothelial cells
Concentration:	1μM, 5μM, 50μM (with 50 μg/mL ox-LDL)
Incubation Time:	6h
Result:	Activated Nrf2 nuclear translocations and the expression of HO-1 was significantly increased.

REFERENCES

[1]. Abdel-Lateff A, et al. Two new xanthone derivatives from the algicolous marine fungus Wardomyces anomalus. J Nat Prod. 2003 May;66(5):706-8.

[2]. Hou JR, et al. Protective Effect of Flavonoids from a Deep-Sea-Derived Arthrinium sp. against ox-LDL-Induced Oxidative Injury through Activating the AKT/Nrf2/HO-1 Pathway in Vascular Endothelial Cells. Mar Drugs. 2021 Dec 18;19(12):712.

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