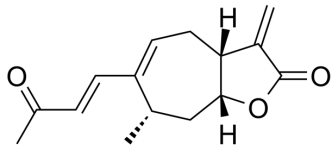
8-Epixanthatin

Cat. No.:	HY-137974
CAS No.:	30890-35-8
Molecular Formula:	$C_{15}H_{18}O_3$
Molecular Weight:	246.3
Target:	STAT; Apoptosis
Pathway:	JAK/STAT Signaling; Stem Cell/Wnt; Apoptosis
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (203.00 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.0601 mL	20.3004 mL	40.6009 mL
	5 mM	0.8120 mL	4.0601 mL	8.1202 mL
	10 mM	0.4060 mL	2.0300 mL	4.0601 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

8-Epixanthatin is a potential colchicine binding site inhibitor isolated from Xanthium chinese Mill. 8-Epixanthatin can inhibit the activation of STAT3, induce apoptosis, and has anti-tumor activity[1].

In Vitro

8-Epixanthatin(2-20 μM, 12 h) inhibits DU145 cell proliferation and p-STAT3 levels of DU145 cell in a dose-dependent manner with an IC_{50} value of 3.2 μM[1].

8-Epixanthatin can inhibit STAT3 activation and cell proliferation by inducing ROS production in DU145 cancer cells[1].

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

Cell Proliferation Assay[1]

Cell Line:	DU145 cell
Concentration:	2, 5, 10, and 20 μM
Incubation Time:	12 h or 48 h
Result:	Reduced STAT3 phosphorylation by 90% at a concentration of 20 μM but not p-JAK2-Y1007/1008.

	Significantly reduced the amount of BCL-2 and BCL-xL, and induces BCL-xL PARP cleavage, the percentage of cells in G0/G1 phase decreased.
In Vivo	8-Epixanthatin (i.p., 50 mg/kg, 5 days per week for 25 days) can inhibit tumor growth through STAT3 inactivation, the tumor volume of mice was reduced by 40.1%, the tumor weight was reduced by 40.0%, and the p-STAT3 level in the tumor was significantly reduced in the mouse xenograft model of DU145 cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yu-Jin Lee, et al. 8-Epi-xanthatin induces the apoptosis of DU145 prostate carcinoma cells through signal transducer and activator of transcription 3 inhibition and reactive oxygen species generation. Phytother Res. 2021 Mar;35(3):1508-1520.

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