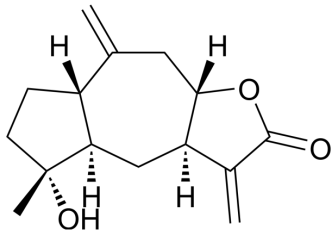
Inuviscolide

Cat. No.:	HY-N11110
CAS No.:	63109-30-8
Molecular Formula:	$C_{15}H_{20}O_3$
Molecular Weight:	248.32
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Inuviscolide is an apoptosis inducer. Inuviscolide can induce of G_2/M arrest in human melanoma cell lines. Inuviscolide exhibits antineoplastic and anti-inflammatory activities[1][2][3].

In Vitro

Inuviscolide (9-72 μM; 24 h) inhibits the proliferation of SK-28, 624 and 1363 melanoma cells, with IC_{50}s of 37, 41.1, and 39 μM, respectively[2].
Inuviscolide (36-54 μM; 4-24 h) leads to a dose-dependent accumulation of SK-28 cells at the G_2/M phase[2].
Inuviscolide (72 μM; 48 h) results in ~70% of SK-28 cells exhibiting markers of early apoptosis[2].
Inuviscolide inhibits the release of human leukocyte elastase by 51% at 100 μM[1].
Inuviscolide inhibits secretory PLA_2 ($sPLA_2$) from bee venom, with an IC_{50} of 80.5 μM[1].
Inuviscolide inhibits COX-1 at 50 μM (40%), while it is inactive on the inducible form, COX-2[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[2]

Cell Line:	SK-28, 624 and 1363 melanoma cells
Concentration:	9-72 μM
Incubation Time:	24 hours
Result:	Resulted in a dose-dependent inhibition of cellular proliferation, with no significant changes between the three cell lines.

In Vivo

Inuviscolide reduces the skin leukocyte infiltration in a murine model of dermatitis induced by repeated application of 12-O-tetradecanoylphorbol 13-acetate[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Máñez S, et, al. Inhibition of pro-inflammatory enzymes by inuviscolide, a sesquiterpene lactone from Inula viscosa. Fitoterapia. 2007 Jun;78(4):329-31.

[2]. Rozenblat S, et, al. Induction of G2/M arrest and apoptosis by sesquiterpene lactones in human melanoma cell lines. Biochem Pharmacol. 2008 Jan 15;75(2):369-82.

[3]. Hernández V, et, al. A mechanistic approach to the in vivo anti-inflammatory activity of sesquiterpenoid compounds isolated from Inula viscosa. Planta Med. 2001 Nov;67(8):726-31.

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