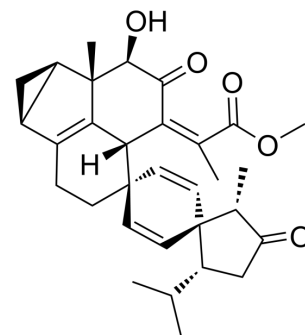


Chlorfortunone A

Cat. No.:	HY-N10577
Molecular Formula:	C ₃₁ H ₃₈ O ₅
Molecular Weight:	490.63
Target:	TGF-beta/Smad
Pathway:	Stem Cell/Wnt; TGF-beta/Smad
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Chlorfortunone A is a novel sesquiterpenoid dimers, can be isolated from the roots of Chloranthus fortunei. Chlorfortunone A inhibits transforming growth factor (TGF)-β activity ^[1] .																
In Vitro	<p>Chlorfortunone A (compound 1) (10-40 μM; 4 h) downregulates TGF-β-induced Smad2 phosphorylation (A) and the expression of vimentin (B) in MDA-MB-231 cells^[1].</p> <p>Chlorfortunone A (25 μM; 48 h) significantly downregulated the expression of vimentin, a Smad-regulated EMT-marker^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MDA-MB-231 cells</td> </tr> <tr> <td>Concentration:</td> <td>10, 20, 40 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>4 hours; accompanied with 10 ng/mL TGF-β1 for 30 min</td> </tr> <tr> <td>Result:</td> <td>Significantly downregulated the TGF-β-induced p-Smad2 expression in a concentration-dependent manner without any impact on the expression of Smad2/3 protein.</td> </tr> </table> <p>Immunofluorescence^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MDA-MB-231 cells</td> </tr> <tr> <td>Concentration:</td> <td>25 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Significantly downregulated the expression of vimentin.</td> </tr> </table>	Cell Line:	MDA-MB-231 cells	Concentration:	10, 20, 40 μM	Incubation Time:	4 hours; accompanied with 10 ng/mL TGF-β1 for 30 min	Result:	Significantly downregulated the TGF-β-induced p-Smad2 expression in a concentration-dependent manner without any impact on the expression of Smad2/3 protein.	Cell Line:	MDA-MB-231 cells	Concentration:	25 μM	Incubation Time:	48 hours	Result:	Significantly downregulated the expression of vimentin.
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REFERENCES

[1]. Wu xujia, et al. Chlorfortunones A and B, Two Sesquiterpenoid Dimers, Possessing Dispiro[4,2,5,2]pentadecane-6,10,14-tren Moiety from Chloranthus fortunei. ACS Omega 2022.

Caution: Product has not been fully validated for medical applications. For research use only.

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