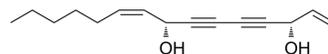


Araliadiol

Cat. No.:	HY-N2887
CAS No.:	1354638-93-9
Molecular Formula:	C ₁₅ H ₂₀ O ₂
Molecular Weight:	232.32
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Araliadiol is a polyacetylenic compound isolated from the leaves of <i>Aralia cordata</i> Thunb. Araliadiol inhibits MCF-7 cells growth with an IC ₅₀ value of 6.41 µg/mL ^[1] .																
IC₅₀ & Target	IC ₅₀ : 6.41 µg/mL (MCF-7 cells growth) ^[1]																
In Vitro	<p>Araliadiol (20-80 µM; 0-48 hours; MCF-7 cells) treatment inhibits cell cycle progression of MCF-7 at the G1-S transition^[1]. Araliadiol (20-80 µM; 0-48 hours; MCF-7 cells) treatment inhibits phosphorylation of retinoblastoma protein (Rb) in MCF-7 cells, accompanied by a decrease in the levels of cyclin D₃ and cdk4 and an increase in the expression of p21 (WAF-1/Cip1)^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cycle Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MCF-7 cells</td> </tr> <tr> <td>Concentration:</td> <td>20 µM, 40 µM, and 80 µM</td> </tr> <tr> <td>Incubation Time:</td> <td>0 hour, 6 hours, 12 hours, 18 hours, 24 hours, and 48 hours</td> </tr> <tr> <td>Result:</td> <td>The proportion of cells in the G1 phase of the cell cycle increased in a dose-dependent manner (from 54.7 % to 72.0 %).</td> </tr> </table> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MCF-7 cells</td> </tr> <tr> <td>Concentration:</td> <td>20 µM, 40 µM, and 80 µM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Phosphorylation of retinoblastoma protein (Rb) in MCF-7 cells was inhibited, accompanied by a decrease in the levels of cyclin D₃ and cyclin-dependent kinase 4 (cdk4) and an increase in the expression of p21 (WAF-1/Cip1).</td> </tr> </table>	Cell Line:	MCF-7 cells	Concentration:	20 µM, 40 µM, and 80 µM	Incubation Time:	0 hour, 6 hours, 12 hours, 18 hours, 24 hours, and 48 hours	Result:	The proportion of cells in the G1 phase of the cell cycle increased in a dose-dependent manner (from 54.7 % to 72.0 %).	Cell Line:	MCF-7 cells	Concentration:	20 µM, 40 µM, and 80 µM	Incubation Time:	48 hours	Result:	Phosphorylation of retinoblastoma protein (Rb) in MCF-7 cells was inhibited, accompanied by a decrease in the levels of cyclin D ₃ and cyclin-dependent kinase 4 (cdk4) and an increase in the expression of p21 (WAF-1/Cip1).
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REFERENCES

[1]. Cheng WL, et al. Inhibitory effect of human breast cancer cell proliferation via p21-mediated G1 cell cycle arrest by araliadiol isolated from *Aralia cordata* Thunb. *Planta Med.* 2011 Jan;77(2):164-8.

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

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