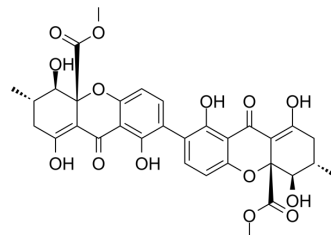


Secalonic acid D

Cat. No.:	HY-N11576
CAS No.:	35287-69-5
Molecular Formula:	C ₃₂ H ₃₀ O ₁₄
Molecular Weight:	638.57
Target:	GSK-3; Apoptosis; c-Myc; β-catenin
Pathway:	PI3K/Akt/mTOR; Stem Cell/Wnt; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Secalonic acid D is a toxic compound against tumor cells. Secalonic acid D can be isolated from the metabolites of <i>Aspergillus aculeatus</i> . Secalonic acid D activates GSK3-β, and degrades β-catenin. Thus, Secalonic acid D down-regulates c-Myc expression, arrests cell cycle at G1 phase, induces cell apoptosis ^{[1][2]} .																
In Vitro	<p>Secalonic acid D (0.1-1 μM; 72 h) inhibits cell proliferation in a concentration-dependent manner in both HL60 and K562, with IC₅₀s of 0.38 μM and 0.43 μM, respectively^[1].</p> <p>Secalonic acid D (0.3 μM; 12 h, 24 h) causes cell cycle arrest of G1 phase and (1.2 μM; 0-72 h) induces apoptosis in HL60 and K562 cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Apoptosis Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HL60 and K562 cells</td> </tr> <tr> <td>Concentration:</td> <td>1.2 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>0, 24, 48 and 72 h</td> </tr> <tr> <td>Result:</td> <td>Induced cell apoptosis via arresting cell cycle at G1 phase. As well as, down-regulated the expression level of c-Myc.</td> </tr> </table> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HL60 and K562 cells</td> </tr> <tr> <td>Concentration:</td> <td>1.2 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>0, 24, 48 and 72 h</td> </tr> <tr> <td>Result:</td> <td>Dose-dependently decreases the level of Caspase-1.</td> </tr> </table>	Cell Line:	HL60 and K562 cells	Concentration:	1.2 μM	Incubation Time:	0, 24, 48 and 72 h	Result:	Induced cell apoptosis via arresting cell cycle at G1 phase. As well as, down-regulated the expression level of c-Myc.	Cell Line:	HL60 and K562 cells	Concentration:	1.2 μM	Incubation Time:	0, 24, 48 and 72 h	Result:	Dose-dependently decreases the level of Caspase-1.
Cell Line:	HL60 and K562 cells																
Concentration:	1.2 μM																
Incubation Time:	0, 24, 48 and 72 h																
Result:	Induced cell apoptosis via arresting cell cycle at G1 phase. As well as, down-regulated the expression level of c-Myc.																
Cell Line:	HL60 and K562 cells																
Concentration:	1.2 μM																
Incubation Time:	0, 24, 48 and 72 h																
Result:	Dose-dependently decreases the level of Caspase-1.																

REFERENCES

[1]. Andersen R, et al. Secalonic acids D and F are toxic metabolites of *Aspergillus aculeatus*. *J Org Chem*. 1977 Jan 21;42(2):352-3.

[2]. Zhang JY, et al. Secalonic acid D induced leukemia cell apoptosis and cell cycle arrest of G(1) with involvement of GSK-3beta/beta-catenin/c-Myc pathway. Cell Cycle. 2009 Aug;8(15):2444-50.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA