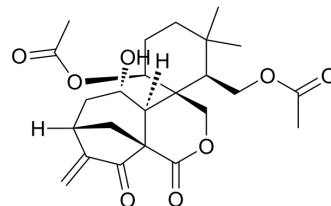


Rabdosin B

Cat. No.:	HY-N7229
CAS No.:	84304-92-7
Molecular Formula:	C ₂₄ H ₃₂ O ₈
Molecular Weight:	448.51
Target:	DNA/RNA Synthesis
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Rabdosin B is an ent-kaurene diterpenoid with anticancer effects. Rabdosin B induces DNA damage in cells, and inhibits lettuce root hair development of seedlings ^{[1][2]} .								
In Vitro	<p>Rabdosin B (200 μM; 3-12 h) induces cell cycle retardation of the G2 phase and S phase in root meristematic cells. Rabdosin B shows a time- and dose-dependent increase in DNA damage^[1].</p> <p>Rabdosin B shows a biphasic, dose-dependent effect on root growth and a strong inhibitory effect on root hair development in lettuce seedlings (<i>Lactuca sativa</i> L.). Lower concentrations of Rabdosin B (20-80 μM) significantly promotes root growth, but its higher levels at 120-200 μM, by contrast, has inhibitory effects. Additionally, all tested concentrations (10-40 μM) inhibits root hair development of seedlings in a dose-dependent manner^[1].</p> <p>Rabdosin B has cytotoxic against human tumour HepG2, GLC-82 and HL-60 cell lines with IC₅₀ values of 8.95 μM, 4.47 μM and 10.22 μM, respectively^[2].</p> <p>Rabdosin B (6 μM, 9 μM, 12 μM, 15 μM; 24-48 hours) induces significant DNA damage to HepG2 cells in a time- and dose-dependent manner^[2].</p> <p>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>Root meristematic cells<</td> </tr> <tr> <td>Concentration:</td> <td>200 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>3 h, 6 h, 9 h, and 12 h</td> </tr> <tr> <td>Result:</td> <td>Induced cell cycle retardation of the G2 phase and S phase.</td> </tr> </table>	Cell Line:	Root meristematic cells<	Concentration:	200 μM	Incubation Time:	3 h, 6 h, 9 h, and 12 h	Result:	Induced cell cycle retardation of the G2 phase and S phase.
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Concentration:	200 μM								
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Result:	Induced cell cycle retardation of the G2 phase and S phase.								

REFERENCES

[1]. Lan Ding, et al. Regulation of cell division and growth in roots of *Lactuca sativa* L. seedlings by the Ent-Kaurene diterpenoid rabdosin B. *J Chem Ecol.* 2010 May;36(5):553-63.

[2]. Lan Ding, et al. Comparison of cytotoxicity and DNA damage potential induced by ent-kaurene diterpenoids from *Isodon* plant. *Nat Prod Res.* 2011 Sep;25(15):1402-11.

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

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