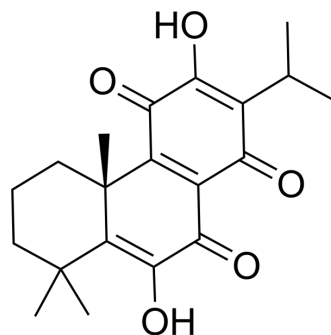


Coleon-U-quinone

Cat. No.:	HY-N10563
CAS No.:	65714-83-2
Molecular Formula:	C ₂₀ H ₂₄ O ₅
Molecular Weight:	344.4
Target:	P-glycoprotein
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Coleon-U-quinone is a potent P-gp inhibitor. Coleon-U-quinone can inhibit cancer cells viability and sensitize multidrug resistance cancer cells to Doxorubicin (HY-15142A) ^[1] .																
IC₅₀ & Target	P-glycoprotein ^[1]																
In Vitro	<p>Coleon-U-quinone (0-50 μM; 72 h) has inhibitory activity against NCI-H460, NCI-H460/R and MRC-5^[1]. Coleon-U-quinone (1-5 μM; 72 h) sensitize NCI-H460/R cells to Doxorubicin (HY-15142A)^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>NCI-H460, NCI-H460/R and MRC-5</td> </tr> <tr> <td>Concentration:</td> <td>0-50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Exhibited inhibitory activity against NCI-H460, NCI-H460/R and MRC-5 with IC₅₀s of 22.96 ± 0.56 μM, 20.37 ± 0.43 μM and 44.13 ± 1.19 μM.</td> </tr> </table> <p>Cell Proliferation Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>NCI-H460/R</td> </tr> <tr> <td>Concentration:</td> <td>1, 2 and 5 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Sensitized NCI-H460/R cells to Doxorubicin (HY-15142A) with IC₅₀s of 0.565 μM, 0.482 μM and 0.217 μM at 1 μM, 2 μM and 5 μM, respectively.</td> </tr> </table>	Cell Line:	NCI-H460, NCI-H460/R and MRC-5	Concentration:	0-50 μM	Incubation Time:	72 h	Result:	Exhibited inhibitory activity against NCI-H460, NCI-H460/R and MRC-5 with IC ₅₀ s of 22.96 ± 0.56 μM, 20.37 ± 0.43 μM and 44.13 ± 1.19 μM.	Cell Line:	NCI-H460/R	Concentration:	1, 2 and 5 μM	Incubation Time:	72 h	Result:	Sensitized NCI-H460/R cells to Doxorubicin (HY-15142A) with IC ₅₀ s of 0.565 μM, 0.482 μM and 0.217 μM at 1 μM, 2 μM and 5 μM, respectively.
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REFERENCES

[1]. Ntungwe EN, et al. C20-nor-Abietane and Three Abietane Diterpenoids from *Plectranthus mutabilis* Leaves as P-Glycoprotein Modulators. ACS Med Chem Lett. 2022 Mar

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

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