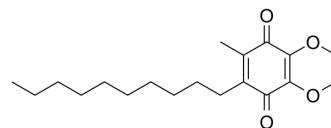


Decylubiquinone

Cat. No.:	HY-121134
CAS No.:	55486-00-5
Molecular Formula:	C ₁₉ H ₃₀ O ₄
Molecular Weight:	322.44
Target:	Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	Solution, -20°C, 2 years



BIOLOGICAL ACTIVITY

Description	Decylubiquinone is an analog of ubiquinone (coenzyme Q ₁₀). Decylubiquinone blocks reactive oxygen species (ROS) production in response to glutathione depletion and inhibits activation of the mitochondrial permeability transition ^[1] .								
In Vitro	<p>Decylubiquinone (dUb; 10 μM for 6 hours) exerts its effects on ROS by either inhibition of ROS production by cytochrome bc₁ or that it scavenged ROS produced^[1].</p> <p>Decylubiquinone inhibits both the dichlorofluorescein (DCF) fluorescence increase resulting from H₂O₂ treatment and the DCF fluorescence increase resulting after glutathione (GSH) depletion using diethylmaleate mitochondrially generated ROS^[1].</p> <p>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" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cell Line:</td> <td>HL60 cells transfected with bcl-2 (bcl-2) (HL60 B cells)</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>6 hours</td> </tr> <tr> <td>Result:</td> <td>Attenuated the ROS increase in HL60 (B) cells.</td> </tr> </table>	Cell Line:	HL60 cells transfected with bcl-2 (bcl-2) (HL60 B cells)	Concentration:	10 μM	Incubation Time:	6 hours	Result:	Attenuated the ROS increase in HL60 (B) cells.
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Incubation Time:	6 hours								
Result:	Attenuated the ROS increase in HL60 (B) cells.								

REFERENCES

[1]. Jeffrey S Armstrong, et al. The Coenzyme Q10 analog decylubiquinone inhibits the redox-activated mitochondrial permeability transition: role of mitochondrial [correction mitochondrial] complex III. J Biol Chem. 2003 Dec 5;278(49):49079-84.

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

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