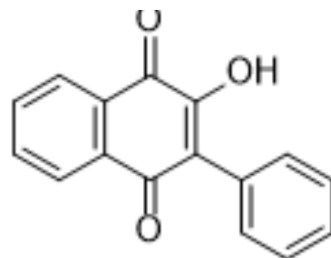


Antimalarial agent 14

Cat. No.:	HY-114197
CAS No.:	1150-59-0
Molecular Formula:	C ₁₆ H ₁₀ O ₃
Molecular Weight:	250.25
Target:	Mitochondrial Metabolism; Parasite
Pathway:	Metabolic Enzyme/Protease; Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Antimalarial agent 14 (Compound N3) is a potent inhibitor of mitochondrial electron transport. Antimalarial agent 14 can serve as an anti-malarial agent ^[1] .								
IC₅₀ & Target	Plasmodium								
In Vitro	<p>Antimalarial agent 14 (Compound N3) (0-400 μM, 48 h) inhibits <i>P. falciparum</i> with limited cytotoxicity against human cells^[1]. Antimalarial agent 14 inhibits <i>P. falciparum</i> mitochondrial membrane potential with an IC_{50ΔΨmit} of 16 μM^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td><i>P. falciparum</i> and HEK293T</td> </tr> <tr> <td>Concentration:</td> <td>0.128, 0.64, 3.2, 16, 80 and 400 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Showed inhibition with an IC₅₀ of 443 nM against <i>P. falciparum</i> and showed cytotoxicity with a CC₅₀ of 54.6 ± 0.23 μM.</td> </tr> </table>	Cell Line:	<i>P. falciparum</i> and HEK293T	Concentration:	0.128, 0.64, 3.2, 16, 80 and 400 μM	Incubation Time:	48 h	Result:	Showed inhibition with an IC ₅₀ of 443 nM against <i>P. falciparum</i> and showed cytotoxicity with a CC ₅₀ of 54.6 ± 0.23 μM.
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REFERENCES

[1]. Schuck DC, et al. Biological evaluation of hydroxynaphthoquinones as anti-malarials. *Malar J.* 2013 Jul 10;12:234.

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

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