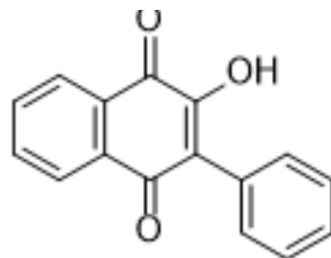


Antimalarial agent 14

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:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (499.50 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.9960 mL	19.9800 mL	39.9600 mL
5 mM	0.7992 mL	3.9960 mL	7.9920 mL
10 mM	0.3996 mL	1.9980 mL	3.9960 mL

Please refer to the solubility information to select the appropriate solvent.

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

Antimalarial agent 14 (Compound N3) (0-400 μM, 48 h) inhibits *P. falciparum* with limited cytotoxicity against human cells^[1]. Antimalarial agent 14 inhibits *P. falciparum* mitochondrial membrane potential with an IC₅₀ΔΨ_{mit} of 16 μM^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Cytotoxicity Assay^[1]

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.

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