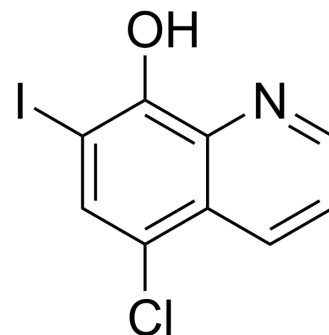


## Clioquinol

<b>Cat. No.:</b>	HY-14603		
<b>CAS No.:</b>	130-26-7		
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>5</sub> ClINO		
<b>Molecular Weight:</b>	305.5		
<b>Target:</b>	Fungal; Autophagy; Mitophagy; Antibiotic; Parasite		
<b>Pathway:</b>	Anti-infection; Autophagy		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 50 mg/mL (163.67 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.2733 mL	16.3666 mL	32.7332 mL
	5 mM	0.6547 mL	3.2733 mL	6.5466 mL
	10 mM	0.3273 mL	1.6367 mL	3.2733 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: 2.08 mg/mL (6.81 mM); Suspended solution; Need ultrasonic and warming
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.08 mg/mL (6.81 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Clioquinol (Iodochlorhydroxyquin) is a topical antifungal agent with anticancer activity. Clioquinol acts as an oral antimicrobial agent for the research of diarrhea and skin infections. Antibiotic<sup>[1]</sup>.

#### In Vitro

Clioquinol (0.01-1000 uM; 72 hours) shows anticancer activity against U251, and MV-4-11 cells<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.  
 Cell Viability Assay<sup>[1]</sup>

Cell Line:	The MV-4-11, and U-251 cell lines
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Concentration:	0.01, 0.1, 1, 10, 100, 1000 $\mu$ M
Incubation Time:	72 hours
Result:	The IC <sub>50</sub> s were 32 and 46 $\mu$ M in U251 and MV-4-11 cells, respectively.

## CUSTOMER VALIDATION

- Am J Respir Cell Mol Biol. 2021 Apr 16.
- Front Mol Neurosci. 12 January 2022.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Moe Wehbe, et al. Development of a copper-clioquinol formulation suitable for intravenous use. Drug Deliv Transl Res. 2018 Feb;8(1):239-251.

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

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