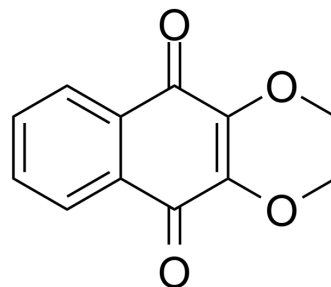


## DMNQ

<b>Cat. No.:</b>	HY-121026
<b>CAS No.:</b>	6956-96-3
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>10</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	218.21
<b>Target:</b>	Reactive Oxygen Species
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
<b>Storage:</b>	Powder    -20°C    3 years In solvent   -80°C    6 months -20°C    1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 50 mg/mL (229.14 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	4.5827 mL	22.9137 mL	45.8274 mL
5 mM	0.9165 mL	4.5827 mL	9.1655 mL
10 mM	0.4583 mL	2.2914 mL	4.5827 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: 2.5 mg/mL (11.46 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 2.5 mg/mL (11.46 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (11.46 mM); Clear solution

## BIOLOGICAL ACTIVITY

### Description

DMNQ is a redox cycling agent that generates both superoxide and hydrogen peroxide intracellularly in a concentration dependent manner. DMNQ increases ROS generation<sup>[1]</sup>.

## CUSTOMER VALIDATION

- Mediat Inflamm. 2020 Jun 6;2020:4321912.

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

## REFERENCES

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[1]. Chacko BK, et al. The Bioenergetic Health Index is a sensitive measure of oxidative stress in human monocytes. Redox Biol. 2016 Aug;8:43-50.

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

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