



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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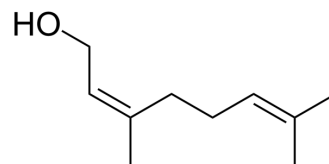
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## Nerol

<b>Cat. No.:</b>	HY-N7063												
<b>CAS No.:</b>	106-25-2												
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>18</sub> O												
<b>Molecular Weight:</b>	154.25												
<b>Target:</b>	Reactive Oxygen Species; Fungal; Mitochondrial Metabolism; Apoptosis; Endogenous Metabolite												
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Anti-infection; Apoptosis												
<b>Storage:</b>	<table border="0"> <tr> <td>Pure form</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Pure form	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
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	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : ≥ 100 mg/mL (648.30 mM)			
	* "≥" means soluble, but saturation unknown.			
		<b>Solvent</b>	<b>Mass</b>	
		<b>Concentration</b>	<b>1 mg</b>	<b>5 mg</b>
			<b>10 mg</b>	
<b>Preparing Stock Solutions</b>	<b>1 mM</b>	6.4830 mL	32.4149 mL	64.8298 mL
	<b>5 mM</b>	1.2966 mL	6.4830 mL	12.9660 mL
	<b>10 mM</b>	0.6483 mL	3.2415 mL	6.4830 mL
	Please refer to the solubility information to select the appropriate solvent.			
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (16.21 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (16.21 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (16.21 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

<b>Description</b>	Nerol is a constituent of neroli oil. Nerol Nerol triggers mitochondrial dysfunction and induces apoptosis via elevation of Ca <sup>2+</sup> and ROS. Antifungal activity <sup>[1][2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite

## In Vitro

Nerol induces apoptosis associated with the generation of ROS and Ca<sup>2+</sup> overload in saprotrophic fungus *Aspergillus flavus* [1].

The antifungal activity of Nerol (NEL) against *Candida albicans*, a pathogenic fungus, has a minimum inhibitory concentration (MIC) of 4.4 μM that causes noteworthy candidacidal activity through an apoptosis-like mechanism [2].

Nerol triggers mitochondrial dysfunction and disruption via elevation of Ca<sup>2+</sup> and ROS in *Candida albicans* [2].

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

## REFERENCES

[1]. Tian J, et al. Nerol-induced apoptosis associated with the generation of ROS and Ca<sup>2+</sup> overload in saprotrophic fungus *Aspergillus flavus*. *Appl Microbiol Biotechnol*. 2018 Aug;102(15):6659-6672.

[2]. Tian J, et al. Nerol triggers mitochondrial dysfunction and disruption via elevation of Ca<sup>2+</sup> and ROS in *Candida albicans*. *Int J Biochem Cell Biol*. 2017 Apr;85:114-122.

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

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