



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

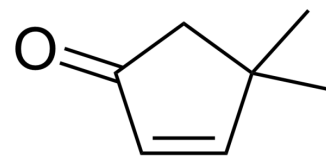
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## 4,4-Dimethyl-2-cyclopenten-1-one

Cat. No.:	HY-W024604		
CAS No.:	22748-16-9		
Molecular Formula:	C <sub>7</sub> H <sub>10</sub> O		
Molecular Weight:	110.15		
Target:	Others		
Pathway:	Others		
Storage:	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (907.85 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	9.0785 mL	45.3926 mL	90.7853 mL
		5 mM	1.8157 mL	9.0785 mL	18.1571 mL
10 mM		0.9079 mL	4.5393 mL	9.0785 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<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 (22.70 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 (22.70 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

Description	4,4-Dimethyl-2-cyclopenten-1-one, a natural compound from Apocyniveneti Folium, displays higher tumor-specific cytotoxicity <sup>[1]</sup> .
In Vitro	4,4-Dimethyl-2-cyclopenten-1-one selectively kills the tumor cells (HSC-2, HL-60). 4,4-Dimethyl-2-cyclopenten-1-one exhibits CC <sub>50</sub> (50% cytotoxic concentration) values of 43.8 μg/mL, 152 μg/mL, 118 μg/mL, 14.0 μg/mL, 177 μg/mL and 123 μg/mL in HSC-2, HSC-3, HSG, HL-60, HGF and normal cells (HPC), respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## REFERENCES

[1]. Tohru Nakayachi, et al. Structure-activity relationships of alpha, beta-unsaturated ketones as assessed by their cytotoxicity against oral tumor cells. *Anticancer Res.* Mar-Apr 2004;24(2B):737-42.

[2]. Wei-WeiZhu, et al. Cornstalk liquefaction in methanol/water mixed solvents. *Fuel Processing Technology* Volume 117, January 2014, Pages 1-7.

---

**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA