



# 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

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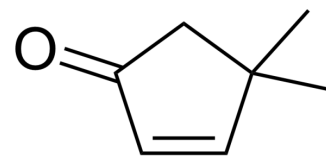
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## 4,4-Dimethyl-2-cyclopenten-1-one

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)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	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

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (22.70 mM); Clear solution

### 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.

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## 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.

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

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