



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

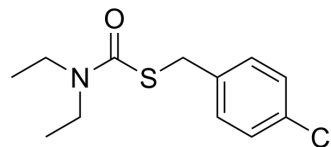
mail@szabo-scandic.com

www.szabo-scandic.com

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

Thiobencarb

Cat. No.:	HY-129792
CAS No.:	28249-77-6
Molecular Formula:	C ₁₂ H ₁₆ ClNOS
Molecular Weight:	257.78
Target:	Others
Pathway:	Others
Storage:	-20°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (387.93 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.8793 mL	19.3964 mL	38.7928 mL	
		5 mM	0.7759 mL	3.8793 mL	7.7586 mL	
		10 mM	0.3879 mL	1.9396 mL	3.8793 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (9.70 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.70 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.70 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	Thiobencarb is an herbicide, can reduce growth, photosynthetic activity, and amount of rieske iron-sulfur protein in the diatom <i>Thalassiosira pseudonana</i> ^[1] .
In Vitro	<p>Thiobencarb (0.078-5 mg/L, 72 h) concentrations producing 10%, 20%, and 50% growth inhibition are calculated to be 0.55, 0.79, and 1.26 mg/L, respectively^[1].</p> <p>Thiobencarb (5, 2.5 mg/L, 6 h) is drastically decreased in the Fv/Fm ratio, after exposure of cells for up to 6 h under light and in darkness and three representative inhibitors of the photosynthetic electron transport chain^[1].</p> <p>Thiobencarb (5 mg/L, 24 h) increase expression levels of 13 proteins significantly and those of 11 proteins decreased significantly in <i>Thalassiosira pseudonana</i>. Among these proteins, the level of the Rieske iron-sulfur protein was decreased to</p>

less than half of the control level^[1].

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

REFERENCES

[1]. Shimasaki Y, et al. Thiobencarb herbicide reduces growth, photosynthetic activity, and amount of Rieske iron-sulfur protein in the diatom *Thalassiosira pseudonana*. *J Biochem Mol Toxicol*. 2013 Sep;27(9):437-44.

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

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