



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

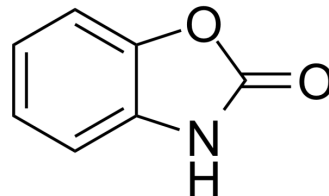
mail@szabo-scandic.com

www.szabo-scandic.com

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

2-Benzoxazolinone

Cat. No.:	HY-W015818		
CAS No.:	59-49-4		
Molecular Formula:	C ₇ H ₅ NO ₂		
Molecular Weight:	135.12		
Target:	Parasite		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (740.08 mM; Need ultrasonic)
 H₂O : 3.85 mg/mL (28.49 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		7.4008 mL	37.0041 mL	74.0083 mL
	5 mM		1.4802 mL	7.4008 mL	14.8017 mL
	10 mM		0.7401 mL	3.7004 mL	7.4008 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: PBS
Solubility: 5 mg/mL (37.00 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (18.50 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (18.50 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (18.50 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

2-Benzoxazolinone is an anti-leishmanial agent with an LC₅₀ of 40 µg/mL against *L. donovani*^[1]. A building block in chemical synthesis. 1,3-Benzoxazol-2(3H)-one derivatives have antimicrobial activity against a selection of Gram-positive, Gram-negative bacteria and yeasts^[3]. Derivatives as anti-quorum sensing agent^[4].

IC ₅₀ & Target	LC50: 40 µg/mL (L. donovani) ^[1]
In Vitro	2-Benzoxazolinone (0.1-5 mM) induces oxidative stress in mung bean through generation of ROS and upregulation of activities of various scavenging enzymes ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Research Square Preprint. 2021 Aug.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Kapil A, et al. Leishmanicidal activity of 2-benzoxazolinone from *Acanthus illicifolius* in vitro. *Planta Med.* 1994 Apr;60(2):187-8.
- [2]. Batish DR, et al. 2-Benzoxazolinone (BOA) induced oxidative stress, lipid peroxidation and changes in some antioxidant enzyme activities in mung bean (*Phaseolus aureus*). *Plant Physiology and Biochemistry* 44(11-12):819-27
- [3]. Krawiecka M, et al. Synthesis and biological activity of novel series of 1,3-benzoxazol-2(3H)-one derivatives. *Acta Pol Pharm.* 2013 Mar-Apr;70(2):245-53.
- [4]. Miandji AM, et al. Synthesis and biological activities of some 1,3-benzoxazol-2(3H)-one derivatives as anti-quorum sensing agents. *Arzneimittelforschung.* 2012 Jul;62(7):330-4.

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