



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

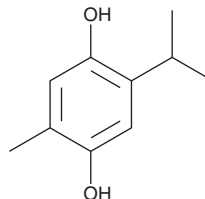
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PRODUCT INFORMATION

Thymohydroquinone

Item No. 27558

CAS Registry No.: 2217-60-9
 Formal Name: 2-methyl-5-(1-methylethyl)-1,4-benzenediol
 Synonym: NSC 34803
 MF: $C_{10}H_{14}O_2$
 FW: 166.2
 Purity: $\geq 98\%$
 UV/Vis.: λ_{max} : 204, 294 nm
 Supplied as: A crystalline solid
 Storage: $-20^{\circ}C$
 Stability: ≥ 2 years
 Item Origin: Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Thymohydroquinone is supplied as a crystalline solid. A stock solution may be made by dissolving the thymohydroquinone in the solvent of choice, which should be purged with an inert gas. Thymohydroquinone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of thymohydroquinone in ethanol is approximately 2 mg/ml and approximately 1 mg/ml in DMSO and DMF.

Thymohydroquinone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, thymohydroquinone should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Thymohydroquinone has a solubility of approximately 0.1 mg/ml in a 1:9 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Thymohydroquinone is a quinone that has been found in *N. sativa* seeds and has diverse biological activities.^{1,2} It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) free radicals in a cell-free assay ($IC_{50} = 2.4 \mu g/ml$) and has a Trolox equivalent value of 2.6 in an oxygen radical absorbance capacity (ORAC) assay when used at concentrations ranging from 1.6 to 6.4 $\mu g/ml$.¹ Thymohydroquinone inhibits growth of A2780, OVCAR-8, and CIS-A2780 ovarian cancer cells (IC_{50} s = 3.1, 8.9, and 9.8 μM , respectively), as well as immortalized human ovarian epithelial cells ($IC_{50} = 14 \mu M$).² It is also active against *P. falciparum* *in vitro* ($IC_{50} = 15.9 \mu M$).

References

1. Tesarova, H., Svobodova, B., Kokoska, L., *et al.* Determination of oxygen radical absorbance capacity of black cumin (*Nigella sativa*) seed quinone compounds. *Nat. Prod. Commun.* **6**(2), 213-216 (2011).
2. Johnson-Ajinwo, O.R., Ullah, I., Mbye, H., *et al.* The synthesis and evaluation of thymoquinone analogues as anti-ovarian cancer and antimalarial agents. *Bioorg. Med. Chem. Lett.* **28**(7), 1219-1222 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/06/2019

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
 ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
 [734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
 WWW.CAYMANCHEM.COM