



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) 

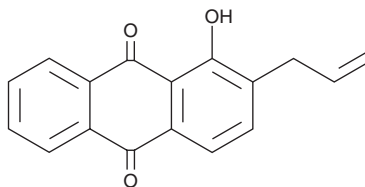
PRODUCT INFORMATION



R162

Item No. 30922

CAS Registry No.: 64302-87-0
Formal Name: 1-hydroxy-2-(2-propen-1-yl)-9,10-anthracenedione
MF: C₁₇H₁₂O₃
FW: 264.3
Purity: ≥98%
UV/Vis.: λ_{max}: 223, 253 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

R162 is supplied as a solid. A stock solution may be made by dissolving the R162 in the solvent of choice, which should be purged with an inert gas. R162 is soluble in the organic solvent dimethyl formamide at a concentration of approximately 1 mg/ml. R162 is slightly soluble in ethanol and DMSO.

Description

R162 is an inhibitor of glutamate dehydrogenase 1 (GDH1; IC₅₀ = 23 μM).¹ It decreases intracellular fumarate levels and increases the production of mitochondrial reactive oxygen species (ROS) in human H1299 lung and MDA-MB-231 breast cancer cells. R162 (10-40 μM) inhibits proliferation in a panel of human cancer cell lines, including lung, breast, and leukemia cells, but not normal human HaCaT keratinocytes, MRC-5 lung fibroblasts, or foreskin fibroblasts. It reduces tumor growth and intratumoral GDH1 activity in an H1299 mouse xenograft model when administered at a dose of 20 mg/kg. R162 also reduces liver metastasis in a liver kinase B1-deficient lung cancer patient-derived xenograft (PDX) mouse model when administered at the same dose.²

References

1. Jin, L., Li, D., Alesi, G.N., *et al.* Glutamate dehydrogenase 1 signals through antioxidant glutathione peroxidase 1 to regulate redox homeostasis and tumor growth. *Cancer Cell* **27**(2), 257-270 (2015).
2. Jin, L., Chun, J., Pan, C., *et al.* The PLAG1-GDH1 axis promotes anoikis resistance and tumor metastasis through CamKK2-AMPK signaling in LKB1-deficient lung cancer. *Mol. Cell* **69**(1), 87-99 (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, 12/13/2022

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