



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



2-(cyclohexylmethyl)-Plumbagin

Item No. 39143

Formal Name: 2-(cyclohexylmethyl)-5-hydroxynaphthalene-1,4-dione

MF: C₁₇H₁₈O₃

FW: 270.3

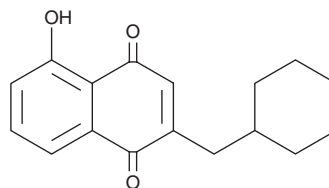
Purity: ≥95%

UV/Vis.: λ_{max}: 212 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

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

Description

2-(cyclohexylmethyl)-Plumbagin is a derivative of the naphthoquinone plumbagin (Item No. 14314).¹ It is selectively cytotoxic to PANC-1 human pancreatic cancer cells under nutrient-deprived conditions, which mimic the microenvironment of pancreatic cancer tumors, over PANC-1 cells under nutrient-rich conditions with 50% preferential cytotoxicity values (PC₅₀s) of 0.11 and 47.2 μM, respectively. It also induces apoptosis in PANC-1 cells when used at a concentration of 1 μM. 2-(cyclohexylmethyl)-Plumbagin also selectively reduces phosphorylation of Akt and mammalian target of rapamycin (mTOR) in PANC-1 cells under nutrient-deprived, but not nutrient-rich, conditions. It reduces tumor volume and weight in a MiaPaCa-2 pancreatic cancer mouse xenograft model when administered at doses of 50 and 250 μg/animal five times per week.

Reference

1. Awale, S., Baba, H., Phan, N.D., *et al.* Targeting pancreatic cancer with novel plumbagin derivatives: Design, synthesis, molecular mechanism, *in vitro* and *in vivo* evaluation. *J. Med. Chem.* **66(12)**, 8054-8065 (2023).

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, 07/26/2023

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