



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) 

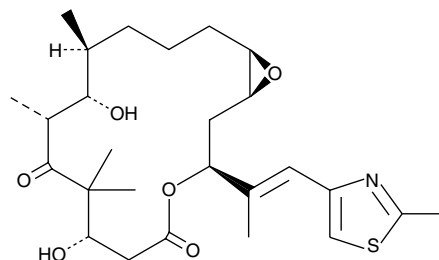
Product Information



Epothilone A

Item No. 16482

CAS Registry No.: 152044-53-6
Formal Name: (1S,16R)-7S,11S-dihydroxy-8,8,10R,12S-tetramethyl-3S-[(1E)-1-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione
Synonym: Epo A
MF: C₂₆H₃₉NO₆S
FW: 493.7
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 211, 250 nm



Laboratory Procedures

For long term storage, we suggest that epothilone A (Epo A) be stored as supplied at -20°C. It should be stable for at least two years.

Epo A is supplied as a crystalline solid. A stock solution may be made by dissolving the epo A in the solvent of choice. Epo A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of epo A in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

Epo A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, epo A should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Epo A has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Epo A is a biologically active macrolide produced from the fermentation of the soil bacteria *S. cellulosum* that was discovered as a potent antimicrotubule agent.¹⁻³ In competition assays, epo A binds to β-tubulin with a similar order of magnitude as the binding of paclitaxel (Item No. 10461) to β-tubulin (IC₅₀s = 2.3 and 3.6 μM, respectively).¹⁻⁴ Epo A is cytotoxic to human T-24 bladder carcinoma cells (IC₅₀ = 0.05 μM *in vitro*) but has poor pharmacological properties and is 2-fold less potent in stabilizing microtubules compared to epothilone B (Item No. 10924).¹

References

1. Cheng, K.L., Bradley, T., and Budman, D.R. Novel microtubule-targeting agents - the epothilones. *Biologics* **2**(4), 789-811 (2008).
2. Bollag, D.M., McQueney, P.A., Zhu, J., *et al.* Epothilones, a new class of microtubule-stabilizing agents with a taxol-like mechanism of action. *Cancer Res.* **55**(11), 2325-2333 (1995).
3. Goodin, S., Kane, M.P., and Rubin, E.H. Epothilones: Mechanism of action and biologic activity. *J. Clin. Oncol.* **22**(10), 2015-2025 (2011).
4. Kowalski, R.J., Giannakakou, P., and Hamel, E. Activities of the microtubule-stabilizing agents epothilones A and B with purified tubulin and in cells resistant to paclitaxel (Taxol®). *J. Biol. Chem.* **272**(4), 2534-2541 (1997).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16482

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog.**

Copyright Cayman Chemical Company, 09/08/2014

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com