

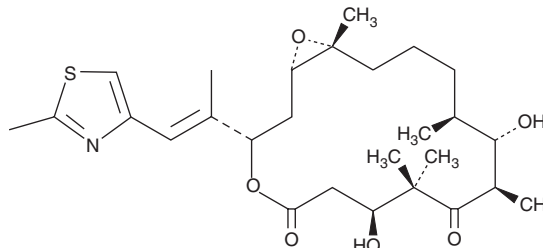
PRODUCT INFORMATION



Epothilone B

Item No. 10924

CAS Registry No.: 152044-54-7
Formal Name: 7S,11S-dihydroxy-8,8,10R,12S,16R-pentamethyl-3S-[(1E)-1S-methyl-2-(2-methyl-4-thiazolyl)ethenyl]-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione
Synonym: Epo B
MF: C₂₇H₄₁NO₆S
FW: 507.7
Purity: ≥95%
UV/Vis.: λ_{max}: 212, 250 nm
Supplied as: A crystalline 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

Epothilone B is supplied as a crystalline solid. A stock solution may be made by dissolving the epothilone B in the solvent of choice, which should be purged with an inert gas. Epothilone B is soluble in organic solvents such as ethanol and DMSO. The solubility of epothilone B in these solvents is approximately 30 mg/ml.

Description

Epothilone B (Epo B) is a macrolide that causes the formation of bundles of intracellular microtubules in non-mitotic cells, induces the formation of hyperstable tubulin polymers, and arrests cell cycling in mitosis.^{1,2} It induces mitotic arrest at the G₂-M transition in Hs578T and HeLa cells (IC₅₀ = 3 and 32 nM, respectively) as well as in multidrug resistant KB3-1 and KBV-1 cells (IC₅₀ = 16 and 92 nM, respectively).¹ Epo B causes cell cycle arrest at nanomolar IC₅₀ values in cell lines from ovarian, breast, lung, colon, prostate, and squamous cancer.³

References

1. 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).
2. 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(R)). *J. Biol. Chem.* **272**(4), 2534-2541 (1997).
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).

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.

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