

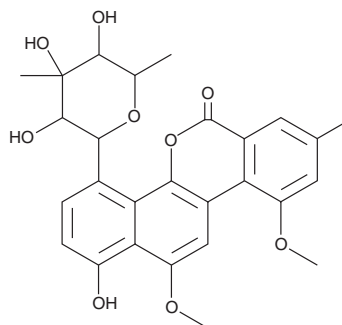
PRODUCT INFORMATION



Chrysomycin B

Item No. 14189

CAS Registry No.: 83852-56-6
Formal Name: 4-(6-deoxy-3-C-methyl-β-gulopyranosyl)-1-hydroxy-10,12-dimethoxy-8-methyl-6H-benzo[d]naphtho[1,2-b]pyran-6-one
Synonyms: Albacarcin M, Virenomycin M
MF: C₂₇H₂₈O₉
FW: 496.5
Purity: ≥98%
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

Chrysomycin B is supplied as a solid. A stock solution may be made by dissolving the chrysomycin B in the solvent of choice, which should be purged with an inert gas. Chrysomycin B is soluble in DMSO and dimethyl formamide, and slightly soluble in ethanol and methanol.

Description

Chrysomycin B is an antibiotic isolated from a strain of *Streptomyces*.¹ It differs from its analog chrysomycin A (Item No. 14188)^{2,3} by having a methyl, rather than vinyl, group in the 8-position of the chromophore. Like its analog, chrysomycin B suppresses the growth of transplantable tumors in mice, an effect that may be related to its ability to bind DNA.³⁻⁵ It also causes DNA damage in the human lung adenocarcinoma A549 cell line and inhibits topoisomerase II.⁵ Chrysomycin B is structurally very similar to gilvocarcin V, which promotes DNA cross-linking with histone 3 and GRP78 when photoactivated by near-UV light.⁶

References

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3. Matson, J.A., Rose, W.C., Bush, J.A., *et al.* Antitumor activity of chrysomycins M and V. *J. Antibiot. (Tokyo)* **42**(9), 1446-1448 (1989).
4. Burres, N.S., Frigo, A., Rasmussen, R.R., *et al.* A colorimetric microassay for the detection of agents that interact with DNA. *J. Nat. Prod.* **55**(11), 1582-1587 (1992).
5. Lorico, A. and Long, B.H. Biochemical characterisation of elsamicin and other coumarin-related antitumour agents as potent inhibitors of human topoisomerase II. *Eur. J. Cancer* **29A**(14), 1985-1991 (1993).
6. Matsumoto, A. and Hanawalt, P.C. Histone H3 and heat shock protein GRP78 are selectively cross-linked to DNA by photoactivated gilvocarcin V in human fibroblasts. *Cancer Res.* **60**(14), 3921-3926 (2000).

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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