

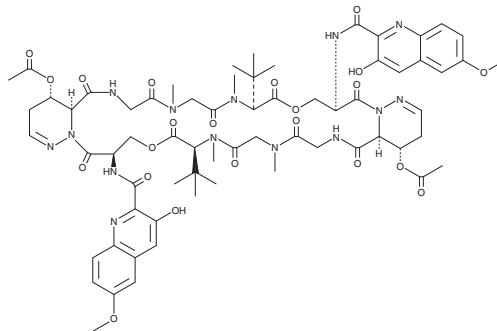
PRODUCT INFORMATION



Luzopeptin A

Item No. 18444

CAS Registry No.: 75580-37-9
Formal Name: Luzopeptin A
Synonym: BBM-928A
MF: C₆₄H₇₈N₁₄O₂₄
FW: 1,427.4
Purity: ≥95%
Supplied as: A tan solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Actinomadura*



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

Laboratory Procedures

Luzopeptin A is supplied as a tan solid. A stock solution may be made by dissolving the luzopeptin A in the solvent of choice, which should be purged with an inert gas. Luzopeptin A is soluble in DMSO and dimethyl formamide.

Description

Luzopeptin A is a cyclic depsipeptide antibiotic first isolated from an actinomycete strain.^{1,2} It displays antitumor activity, as it is highly active in mice against a variety of experimental tumors.¹ Luzopeptin A acts as a bifunctional DNA intercalator that strongly binds DNA and forms crosslinks between DNA molecules.³ It also inhibits reverse transcriptases from HIV-1 and HIV-2 (IC₅₀s = 7 and 68 nM, respectively), as well as cellular DNA polymerases.^{4,5}

References

1. Ohkuma, H., Sakai, F., Nishiyama, Y., *et al.* BBM-928, a new antitumor antibiotic complex. I. Production, isolation, characterization and antitumor activity. *J. Antibiot (Tokyo)*. **33(10)**, 1087-1097 (1980).
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3. Huang, C.-H., Mirabelli, C.K., Mong, S., *et al.* Intermolecular cross-linking of DNA through bifunctional intercalation of an antitumor antibiotic, luzopeptin A (BBM-928A). *Cancer Res.* **43(6)**, 2718-2724 (1983).
4. Lingham, R.B., Hsu, A.H.M., O'Brien, J.A., *et al.* Quinoxapeptins: A novel chromodepsipeptide inhibitors of HIV-1 and HIV-2 reverse transcriptase I. The producing organism and biological activity. *J. Antibiot (Tokyo)*. **49(3)**, 254-259 (1996).
5. Take, Y., Inouye, Y., and Nakamura, S. Comparative studies of the inhibitory properties of antibiotics on human immunodeficiency virus and avian myeloblastosis virus reverse transcriptases and cellular DNA polymerases. *J. Antibiot (Tokyo)*. **42(1)**, 107-115 (1989).

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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