PRODUCT INFORMATION



Concanamycin C

Item No. 19616

CAS Registry No.: 81552-34-3

Formal Name: (3Z,5E,7R,8R,9S,10S,11R,13E,15E,17S,

18R)-18-[(1S,2R,3S)-3-[(2R,4R,5S,6R)-4-[(2,6-dideoxy-β-D-arabino-hexopyranosyl) oxyltetrahydro-2-hydroxy-5-methyl-6-(1E)-1-propen-1-yl-2H-pyran-2-yl]-2hydroxy-1-methylbutyl]-9-ethyl-8,10dihydroxy-3,17-dimethoxy-5,7,11,13tetramethyl-oxacyclooctadeca-3,5,13,15-

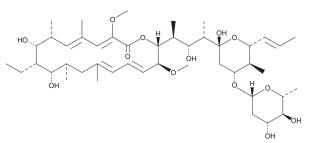
tetraen-2-one

Synonym: 4'-O-de(aminocarbonyl)-Concanamycin A

MF: $C_{45}H_{74}O_{13}$ FW: 823.1 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Bacterium/Streptomyces sp. Item Origin: Special Conditions: Protect from light when in solution

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



Laboratory Procedures

Concanamycin C is supplied as a solid. A stock solution may be made by dissolving the concanamycin C in the solvent of choice, which should be purged with an inert gas. Concanamycin C is soluble in organic solvents such as methanol and DMSO.

Description

Concanamycin C is a natural macrolide antibiotic first isolated from Streptomyces and identified as an inhibitor of T cell proliferation in response to concanavalin A (Item No. 14951).^{1,2} Concanamycin C is cytotoxic to fungi, including yeasts, through its ability to inhibit vacuolar-type ATPases.^{3,4}

References

- 1. Kinashi, H., Someno, K., and Sakahguchi, K. Isolation and characterization of concanamycins A, B and C. J. Antibiot. (Tokyo) 37(11), 1333-1343 (1984).
- 2. Dröse, S. and Altendorf, K. Bafilomycins and concanamycins as inhibitors of V-ATPases and P-ATPases. J. Exp. Biol. 200, 1-8 (1997).
- 3. Bowman, E.J. and Bowman, B.J. Cellular role of the V-ATPase in Neurospora crassa: Analysis of mutants resistant to concanamycin or lacking the catalytic subunit A. J. Exp. Biol. 203(Pt 1), 97-106 (2000).
- 4. Bowman, E.J., Graham, L.A., Stevens, T.H., et al. The bafilomycin/concanamycin binding site in subunit C of the V-ATPases from Neurospora crassa and Saccharomyces cerevisiae. J. Biol. Chem. 279(32), 33131-33138 (2004).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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