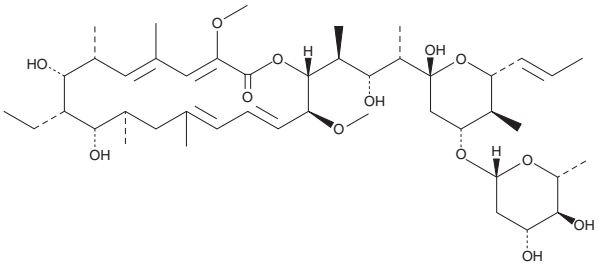
# PRODUCT INFORMATION

## 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)oxy]tetrahydro-2-hydroxy-5-methyl-6-(1E)-1-propen-1-yl-2H-pyran-2-yl]-2-hydroxy-1-methylbutyl]-9-ethyl-8,10-dihydroxy-3,17-dimethoxy-5,7,11,13-tetramethyl-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:** ≥95%
**Supplied as:** A solid
**Storage:** -20°C
**Stability:** ≥4 years
**Item Origin:** Bacterium/*Streptomyces* sp.
**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).





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