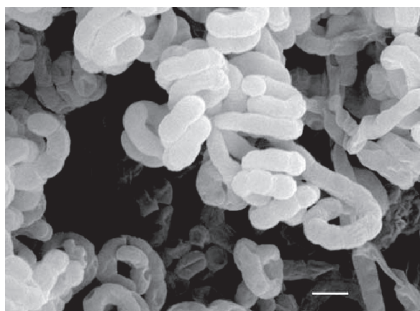
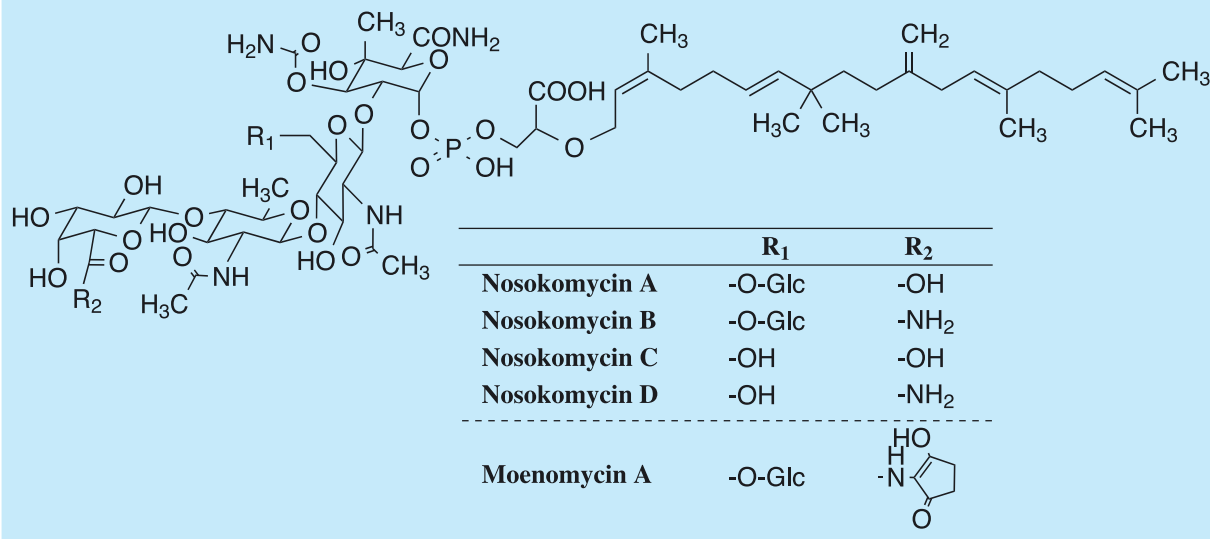


Nosokomycin

1. Discovery, producing organism and structure¹⁻³⁾

Nosokomycins A-D were isolated from a culture broth of *Streptomyces cyslabdanicus* strain K04-0144^T and shown to be anti-MRSA agents. Strain K04-0144^T is also a producer of cyslabdan. Nosokomycins are analogs of moenomycin consisting of an oligosaccharide moiety, a 2,3-dihydroxypropionic acid and an usual sesterterpenoid unit.



Streptomyces cyslabdanicus K04-0144^T

2. Physical data (Nosokomycin A)

White powder. C₆₄H₁₀₃N₄O₃₃P;
mol wt 1487.48. Sol. in H₂O, MeOH, DMSO.
Insol. in acetone, CHCl₃, *n*-hexane.

3. Biological activity¹⁾

1) Anti-MRSA activity

All nosokomycins showed potent anti-MRSA activity with MIC values of 0.125 μg/mL.

2) Other antimicrobial activity

Nosokomycins exhibited potent antibacterial activity against Gram-positive bacteria, but showed weak activity against Gram-negative bacteria. They displayed no antimycoplasma, antifungal or antiyeast activity.

4. References

- [1060] R. Uchida *et al.*, *J. Antibiot.* **63**, 151-155 (2010)
- [1061] R. Uchida *et al.*, *J. Antibiot.* **63**, 157-161 (2010)
- [1178] A. Take *et al.*, *J. Antibiot.* **68**, 322-327 (2015)