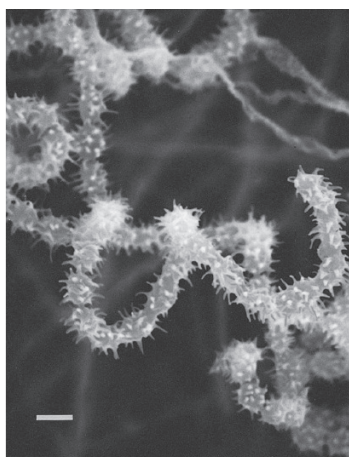


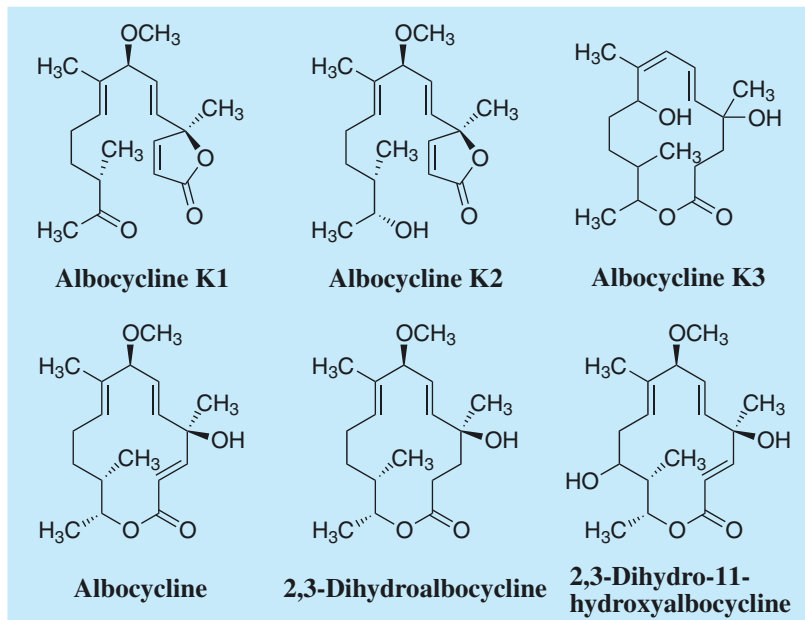
Albocycline

1. Discovery, producing organism and structures¹⁻⁵⁾

Albocyclines were isolated from the culture broth of the actinomycete strain OH-3984 and found to inhibit of the melanogenesis of B16 melanoma cells. The absolute stereochemistry of albocyclines K1 and K2 were determined by chemical conversion from albocycline⁴⁾.



Streptomyces sp. OH-3984



2. Physical data (Albocycline K1)

Colorless oil. C₁₈H₂₆O₄; mol wt 306.18. Sol. in MeOH, CHCl₃.

3. Biological activity^{1,3)}

1) Inhibitory effect on melanin synthesis of B16 melanoma cells

Compound	MIC*	Cytotoxicity**
Arbutin	9.4	>100
Kojic acid	15.0	>100
Albocycline K1	7.5	>100
Albocycline K2	3.8	>100
Albocycline K3	15.0	>100
Albocycline	0.12	0.24
2,3-Dihydro albocycline	15	30
2,3-Dihydro-11-hydroxy albocycline	30	60

*μg/ml, **μg/ml against B 16 melanoma cell.

2) Albocyclines K1 and K2 did not show inhibitory activity against tyrosinase or antimicrobial activity at a concentration of 1 mg/ml.

4. References

- [517] K. Komiyama *et al.*, *J. Antibiot.* **46**, 1520-1525 (1993)
- [518] S. Takamatsu *et al.*, *J. Antibiot.* **46**, 1526-1529 (1993)
- [616] S. Takamatsu *et al.*, *J. Antibiot.* **49**, 485-486 (1996)
- [545] T. Sunazuka *et al.*, *Tetrahedron Lett.* **35**, 2635-2636 (1994)
- N. Nagahama *et al.*, *J. Antibiot.* **20**, 217-222 (1967)