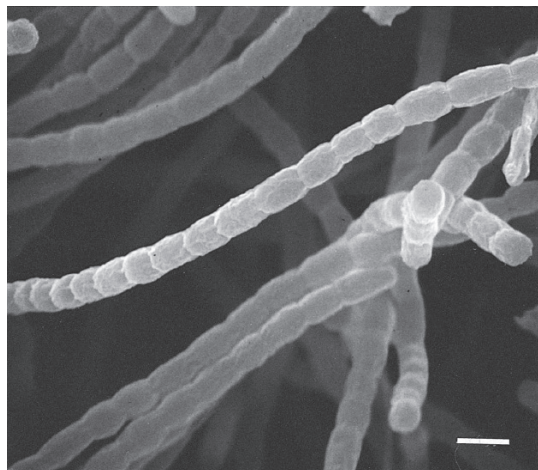


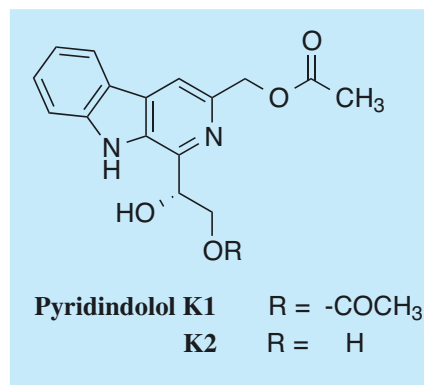
# Pyridindolol

## 1. Discovery, producing organism and structures<sup>1)</sup>

Over the course of selective screening for amines using special staining reagents on TLC, pyridindolols K1 and K2 were isolated from the culture broth of *Streptomyces nitrosporeus* strain K93-0711. Their absolute structures were determined by chemical transformation to the acetate and by the benzoate chirality method.



*Streptomyces nitrosporeus* K93-0711



## 2. Physical data (pyridindolol K2)<sup>1)</sup>

Colorless oil. C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>; mol wt 300.11. Sol. in MeOH, EtOH, BuOH, DMSO, DMF, 0.5 N HCl. Slightly sol. in H<sub>2</sub>O. Insol. in benzene, CHCl<sub>3</sub>, Et<sub>2</sub>O, petroleum ether.

## 3. Biological activity<sup>1)</sup>

Pyridindolol K2 showed inhibitory activity against adhesion of HL-60 cells to an LPS-activated HUVEC monolayer (IC<sub>50</sub> = 75 μg/ml).

## 4. Total synthesis<sup>2-4)</sup>

The total synthesis of pyridindolols have been reported by two groups (See Appendix-I).

## 5. Reference

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- K. Kanekiyo *et al.*, *Heterocycles* **53**, 1877-1880 (2000)
- K. Kanekiyo *et al.*, *J. Org. Chem.* **66**, 8793-8798 (2001)
- Q. Zhang *et al.*, *Tetrahedron: Asymmetry* **24**, 633-637 (2013)