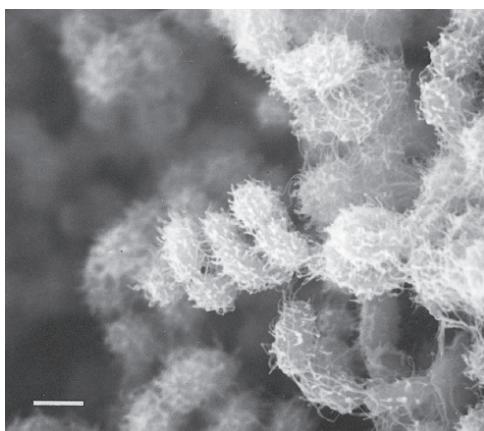


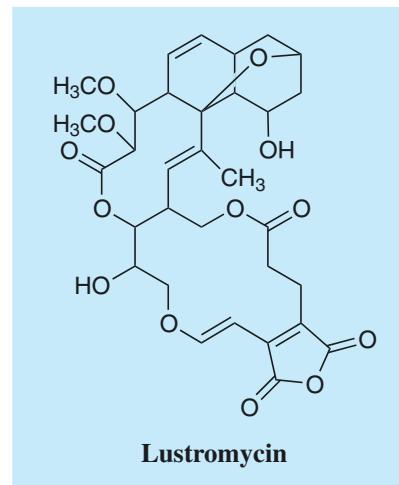
# Lustromycin

## 1. Discovery, producing organism<sup>1)</sup> and structure<sup>2)</sup>

Lustromycin was isolated from the culture broth of the actinomycete strain SK-1071. It exhibits selective antibacterial activity against anaerobic bacteria such as *Clostridium* sp.



*Streptomyces* sp. SK-1071



## 2. Physical data<sup>1)</sup>

Colorless needles.  $C_{32}H_{38}O_{13}$ ; mol wt 630.23. Sol. in MeOH, acetone, EtOAc. Slightly sol. in CHCl<sub>3</sub>, Et<sub>2</sub>O, benzene. Insol. in H<sub>2</sub>O, hexane.

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

Antimicrobial activity

Test organism	MIC ( $\mu\text{g}/\text{ml}$ )	
	Lustromycin	Vancomycin
<i>Staphylococcus aureus</i> ATCC 6538P	>100	0.4
<i>Bacillus subtilis</i> ATCC 6633	>100	0.2
<i>Micrococcus luteus</i> ATCC 9341	25	0.4
<i>Escherichia coli</i> NIHJ	>100	50
<i>Klebsiella pneumoniae</i> ATCC 10031	>100	50
<i>Salmonella typhimurium</i> KB 20	>100	50
<i>Proteus vulgaris</i> IFO 3167	>100	50
<i>Pseudomonas aeruginosa</i> IFO 3080	>100	50
<i>Clostridium perfringens</i> ATCC 3624	6.25	1.56
<i>C. kainantoi</i> IFO 3353	25	1.56
<i>C. difficile</i> ATCC 9689	6.25	1.56
<i>Bacteroides fragilis</i> ATCC 23745	50	50
<i>Fusobacterium varium</i> ATCC 8501	100	100

## 4. Reference

- [346] H. Tomoda *et al.*, *J. Antibiot.* **39**, 1205-1210 (1986)
- [828] M. Handa *et al.*, *Heterocycles* **59**, 497-500 (2003)