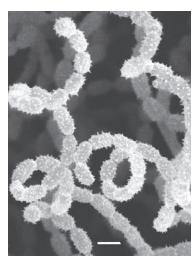
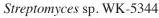
# **Ferroverdin**

# $\textbf{1. Discovery, producing organism and structures}^{\text{1-2}\text{)}}$

Ferroverdins A, B and C were isolated from the culture broth of the actinomycete strain WK-5344 and found to be inhibitors of the cholesteryl ester transfer protein (CETP)<sup>1,2)</sup>. Ferroverdin A was identified as a known compound, which was originally isolated as a green pigment<sup>3)</sup>.





R <sub>1</sub> R <sub>2</sub>	R <sub>1</sub> R <sub>2</sub> 0 CH <sub>2</sub> 0 CH <sub>2</sub>		
Ferroverdin R <sub>1</sub>	$R_2$ 0 0		
<u>А</u> Н	H		
в он	Н		
<u> </u>	COOH H <sub>2</sub> C		

### 2. Physical data (Ferroverdin B)<sup>2)</sup>

Green powder.  $C_{45}H_{30}N_3O_{13}Fe$ ; mol wt 876.11. Sol. in MeOH, EtOH, acetone, CH<sub>3</sub>CN, EtOAc, CHCl<sub>3</sub>. Insol. in H<sub>2</sub>O, hexane.

### 3. Biological activity<sup>2)</sup>

1) CETP inhibition

CETP inhibitory activity (See also "Erabulenol" (p. 97)) was tested. The IC<sub>50</sub> values versus *in vitro* CETP activity for ferroverdins A, B, and C were 21.0, 0.62 and 2.2  $\mu$ M, respectively.

2) Antimicrobial activity

Ferroverdins B and C (10  $\mu$ g/6 mm disk) showed no antimicrobial activity against 16 standard microorganisms, whereas ferroverdin A showed very weak antimicrobial activity against *Achole-plasma laidlawii*.

#### 4. References

- 1. [733] H. Tomoda et al., J. Antibiot. **52**, 1101-1107 (1999)
- 2. [734] N. Tabata et al., J. Antibiot. **52**, 1108-1113 (1999)
- 3. E. B. Chain et al., Nature **176**, 645 (1955)