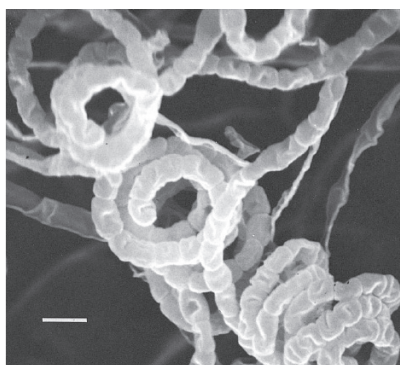


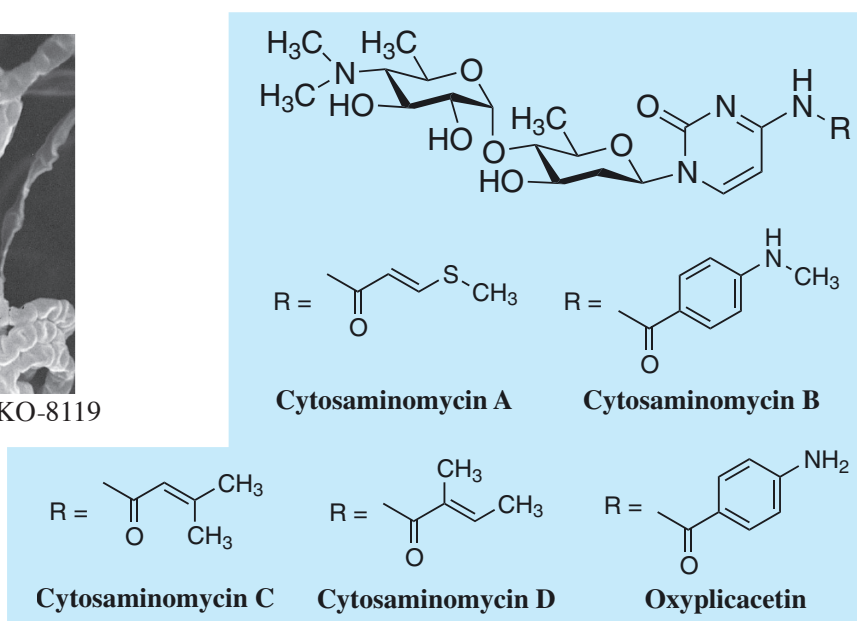
Cytosaminomycin

1. Discovery, producing organism and structures¹⁻³⁾

Cytosaminomycins were isolated from the culture broth of *Streptomyces amakusaensis* strain KO-8119 and identified as anticoccidial substances. The structurally-related compound, oxypliacetin, a known antibiotic³⁾, was also isolated.



Streptomyces amakusaensis KO-8119



2. Physical data (Cytosaminomycin A)

Pale yellow powder. $\text{C}_{22}\text{H}_{34}\text{N}_4\text{O}_8\text{S}$; mol wt 514.21. Sol. in DMSO, MeOH, CHCl_3 . Insol. in H_2O , hexane.

3. Anticoccidial activity¹⁾

Anticoccidial activity was evaluated by an *in vitro* assay using chicken embryonic and BHK-21 cells as hosts and monensin-resistant *Eimeria tenella* as a parasitic protozoan.

Compound	Minimum effective concentration (μM)			
	Chicken embryonic cells		BHK-21 cells	
	Anticoccidial* activity (A)	Cytotoxicity** (C)	Anticoccidial* activity (A)	Cytotoxicity** (C)
Cytosaminomycin A	0.6	19	0.3	0.6
B	1.1	9.1	2.3	4.6
C	1.3	10	2.5	10
D	5.0	20	20	>20
Oxypliacetin	9.4	>19	2.3	9.4

* No mature shizonts were observed in the cells at the indicated drug concentration or higher.

**No host cells were observed at the indicated drug concentration or higher.

4. References

- [549] K. Haneda *et al.*, *J. Antibiot.* **47**, 774–781 (1994)
- [550] K. Shiomi *et al.*, *J. Antibiot.* **47**, 782–786 (1994)
- C. Yong-Le *et al.*, *Kangshengsu* **10**, 285–295 (1985)