

Name: *Streptomyces aurantiacus*

Authors: (Rossi Doria 1891) Waksman 1953

Status: Approved Lists

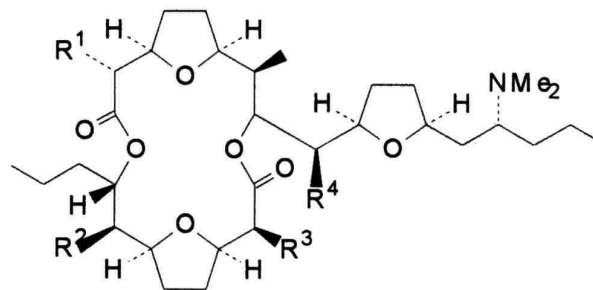
Reference(s): Int. J. Syst. Bacteriol. 30:372 (AL)

Risk group: 1 (German classification)

Type strain: ATCC 19822, DSM 40412

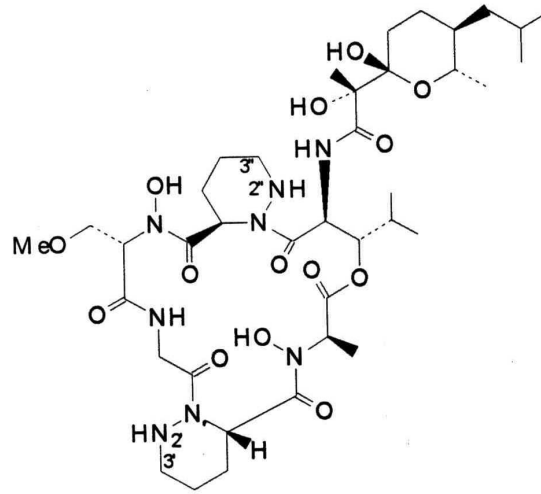
### Secondary metabolites of *Streptomyces aurantiacus*

Pamamycin (621), active against gram-positive bacteria and fungi, inhibits the membrane transportation of nucleosides

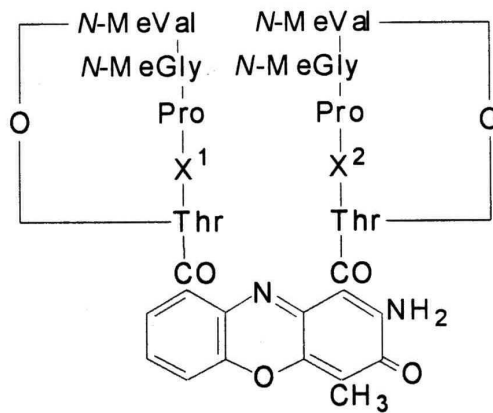


Pamamycin 607 R<sup>1</sup> = R<sup>3</sup> = R<sup>4</sup> = CH<sub>3</sub>, R<sup>2</sup> = H  
621 R<sup>1</sup> = R<sup>2</sup> = R<sup>3</sup> = R<sup>4</sup> = CH<sub>3</sub>  
635A R<sup>1</sup> = R<sup>2</sup> = R<sup>3</sup> = CH<sub>3</sub>, R<sup>4</sup> = CH<sub>2</sub>CH<sub>3</sub>  
635B R<sup>1</sup> = R<sup>2</sup> = R<sup>4</sup> = CH<sub>3</sub>, R<sup>3</sup> = CH<sub>2</sub>CH<sub>3</sub>  
649A R<sup>1</sup> = R<sup>3</sup> = R<sup>4</sup> = CH<sub>2</sub>CH<sub>3</sub>, R<sup>2</sup> = H  
649B R<sup>1</sup> = R<sup>4</sup> = CH<sub>2</sub>CH<sub>3</sub>, R<sup>2</sup> = R<sup>3</sup> CH<sub>3</sub>

Aurantimycin A, depsipeptide antibiotic, active against gram-positive bacteria, cytotoxic



Aurantin, cyclic peptide antibiotic complex, active against gram-positive bacteria



- (i)  $X^1 = X^2 = \text{D-Alloisoleucine}$
- (ii)  $X^1 = \text{D-Alloisoleucine}, X^2 = \text{D-Val}$
- (iii)  $X^1 = X^2 = \text{D-Val}$

**Genus:** *Streptomyces*

FH 2321

**Species:** *aurantiacus*

**Numbers in other collections:** DSM 40412

Morphology:

	G	R
<u>ISP 2</u>	good	grey
	A	SP
	red	beige
	G	R
<u>ISP 3</u>	good	colourless
	A	SP
	grey	none
	G	R
<u>ISP 4</u>	good	yellow
	A	SP
	grey	none
	G	R
<u>ISP 5</u>	good	red
	A	SP
	grey	red
	G	R
<u>ISP 6</u>	good	colourless
	A	SP
	none	none
	G	R
<u>ISP 7</u>	good	red
	A	SP
	grey	red

Spore chains: Sp

Spore surface: knobby

Sporangia:

Fragmentation:

**Melanoid pigment:** - - - -

**NaCl resistance:**

**Lysozyme resistance:**

**pH:** Value- Optimum-

**Temperature :** Value- Optimum- 28 °C

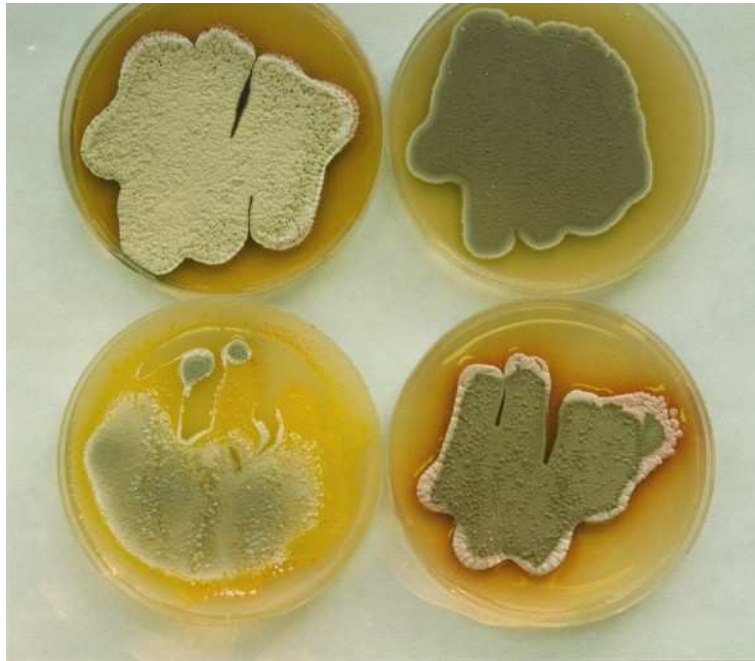
**Carbon utilization:**

Glu Ara Suc Xyl Ino Man Fru Rha Raf Cel

**Enzymes:**

Gel Cit Ure Arg Onp Trp Lys Odc VP Ind H2S  
+ - + - - - - + - -

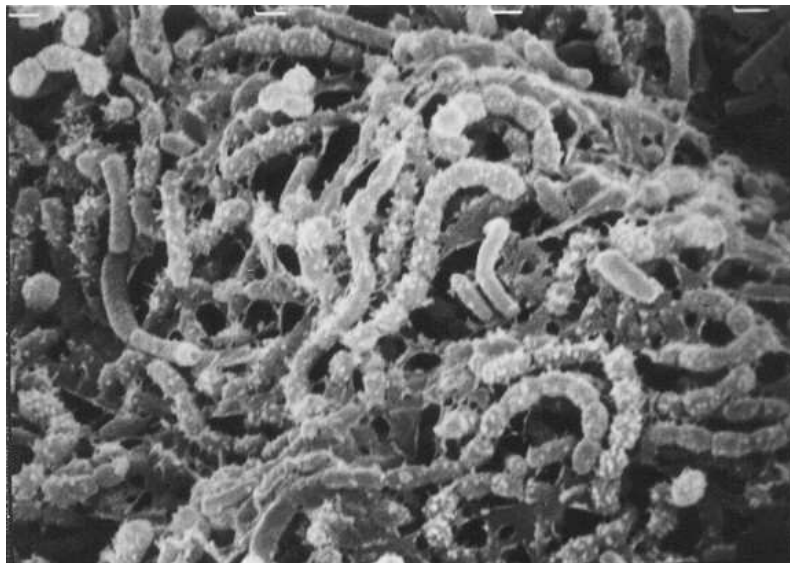
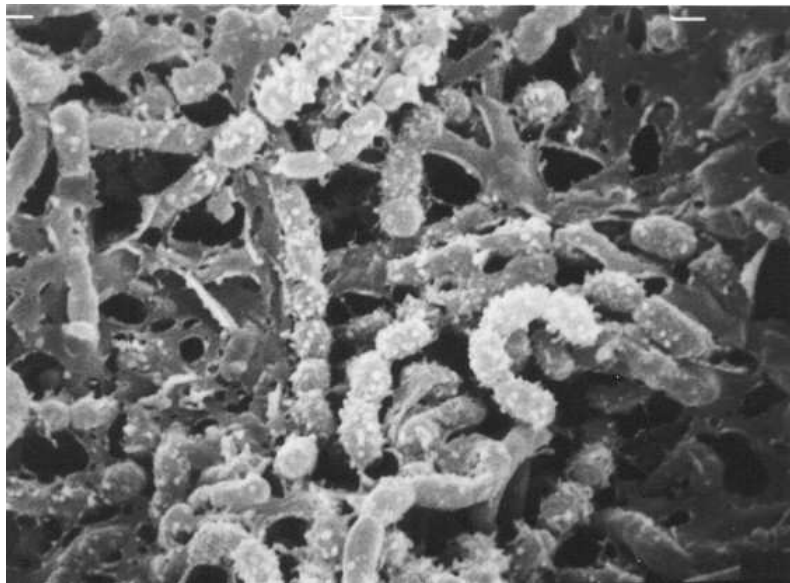
**Comments**



***Streptomyces aurantiacus***

A – Agar plates medium 5265, 5315, 5317 and 5323

B – Agar plates medium 5006, 5318, 5322, 5337 with and without tyrosine



***Streptomyces aurantiacus***

Spore chain morphology and knobby spores in SEM

C x 7.500 D x 3.500

Name: *Streptomyces albosporeus* subsp. *albosporeus*

Authors: (Krainsky 1914) Waksman and Henrici 1948

Status: Approved Lists

Reference(s): Int. J. Syst. Bacteriol. 30:370 (AL)

Risk group: 1 (German classification)

Type strain: ATCC 15394, CCM 3157, NRRL B-2372,  
RIA 482, DSM 40795

Synonym(s): *Streptomyces aurantiacus*

Author(s) Lanoot, B., Vancanneyt, M., Cleenwerck, I., Wang, L., Li, W.,  
Liu, Z., Swings, J.

Title The search for synonyms among streptomycetes by using  
SDS-PAGE of whole-cell proteins. Emendation of the species  
*Streptomyces aurantiacus*, *Streptomyces cacaoi* subsp.  
*cacaoi*, *Streptomyces caeruleus* and *Streptomyces violatus*.

Journal Int. J. Syst. Evol. Microbiol.

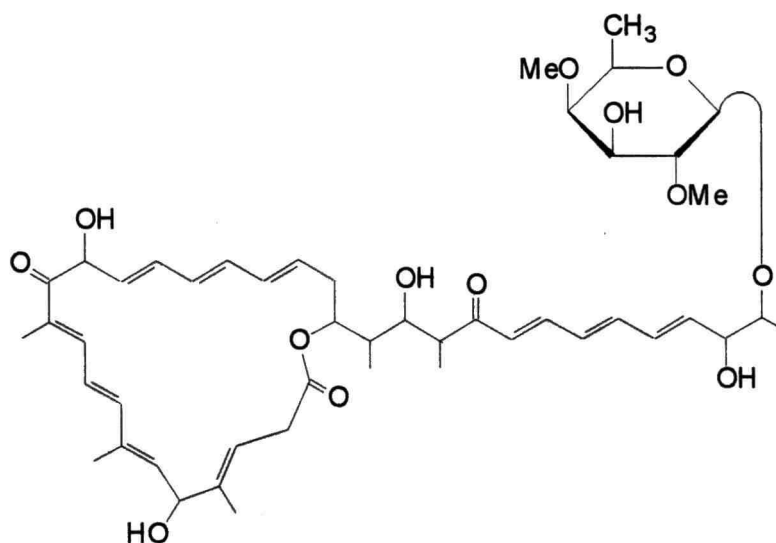
Volume 52

Page(s) 823-829

Year 2002

Secondary metabolites from *Streptomyces albosporeus* subsp.  
*albosporeus*

Labilomycin, glycolipid/macrolide antibiotic, active against gram-positive  
bacteria and tumors



**Genus:** *Streptomyces*

FH 2066

**Species:** *albosporeus*

**Subspecies:** *albosporeus*

**Numbers in other collections:** DSM 40795

Morphology:

<u>ISP 2</u>	G	R
	good	red
	A	SP
<u>ISP 3</u>	red	none
	G	R
	good	red
<u>ISP 4</u>	A	SP
	red	none
	G	R
<u>ISP 5</u>	good	red
	A	SP
	red	none
<u>ISP 6</u>	G	R
	good	colorless
	A	SP
<u>ISP 7</u>	none	none
	G	R
	good	red
	A	SP
	red	none

Spore chains: Sp

Spore surface: smooth

Sporangia:

Fragmentation:

**Melanoid pigment:** - - - -

**NaCl resistance:** 2,5 %

**Lysozyme resistance:** -

**pH:** Value- Optimum-

**Temperature :** Value- Optimum- 28 °C

**Carbon utilization:**

Glu	Ara	Suc	Xyl	Ino	Man	Fru	Rha	Raf	Cel
+	+	+	+	-	-	-	-	-	-

**Enzymes:**

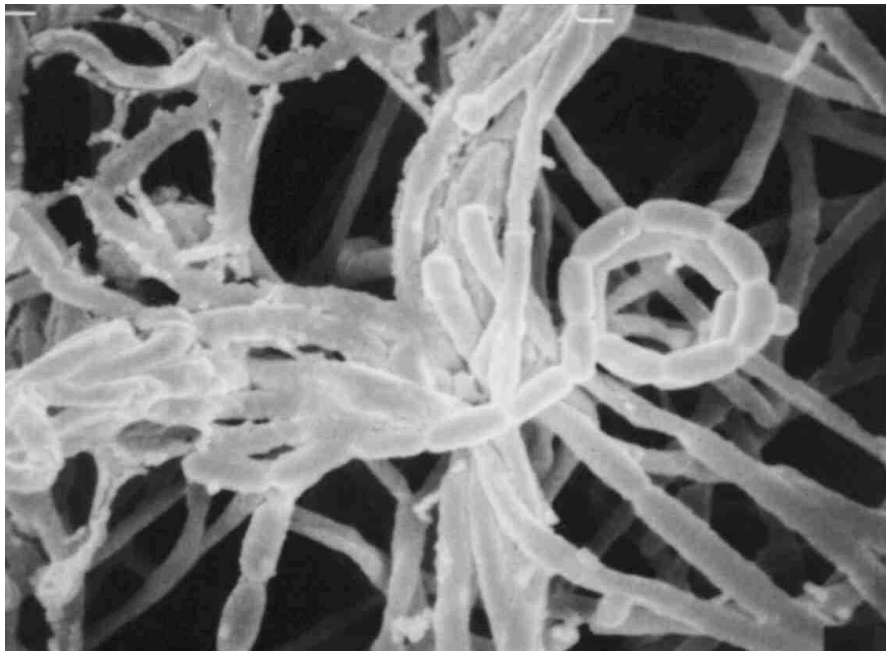
Gel	Cit	Ure	Arg	Onp	Trp	Lys	Odc	VP	Ind	H2S
-	-	-	-	+	-	-	-	-	-	-

**Comments**



***Streptomyces albosporeus* subsp. *albosporeus***  
A and B – Agar plates medium 5006, 5265 and 5315





***Streptomyces albosporus* subsp. *albosporus***

C – Microplate with ISP- and melanin media

D – Smooth spore surface and spore chain in spiral (SEM x 7500)