

Name: ***Streptomyces peucetius***

Authors: Grein et al. 1963

Status: Approved Lists

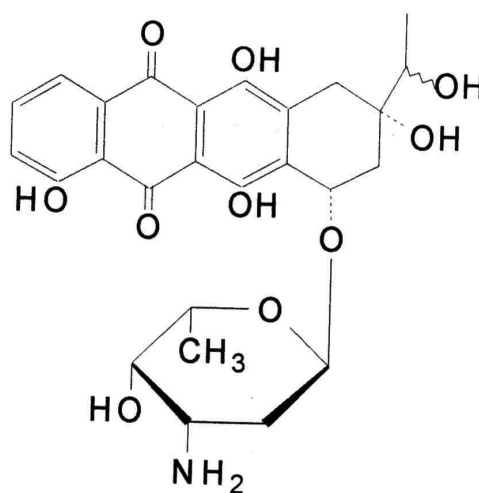
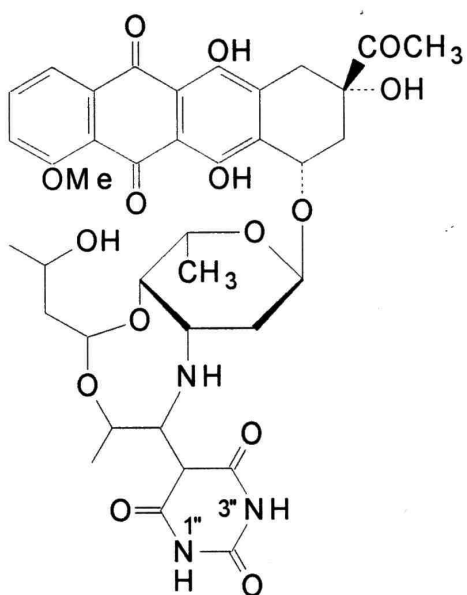
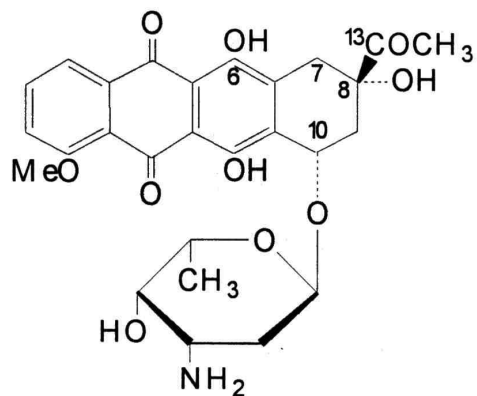
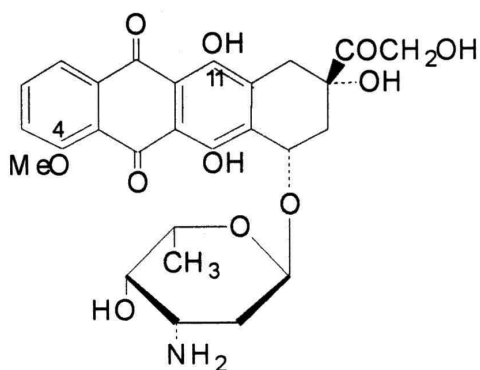
Reference(s): Int. J. Syst. Bacteriol. 30:396 (AL)

Risk group: 1 (German classification)

Type strain: ATCC 29050, DSM 40754

Secondary metabolites from *Streptomyces peucetius*

Anthracycline antibiotics like Adriamycin and Daunomycin which are used in tumor therapy



Genus: *Streptomyces*

FH 2453

Species: *peucetius*

Numbers in other collections: ATCC 29050

Morphology:

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

Spore chains: RA

Spore surface: smooth

Sporangia:

Fragmentation:

Melanoid pigment: - - - -

NaCl resistance: 2,5 %

Lysozyme resistance: -

pH: Value-

Optimum-

Temperature : Value-

Optimum- 28 °C

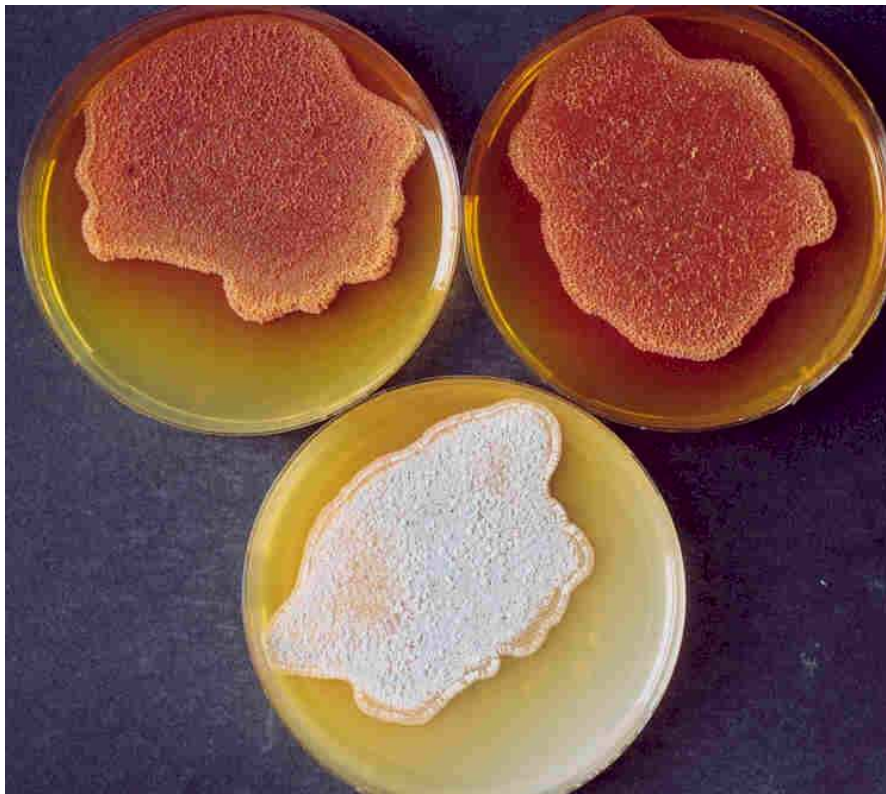
Carbon utilization:

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

Enzymes:

Gel	Cit	Ure	Arg	Onp	Trp	Lys	Odc	VP	Ind	H ₂ S
+	-	+	+	+	+	-	-	+	-	-

Comments:



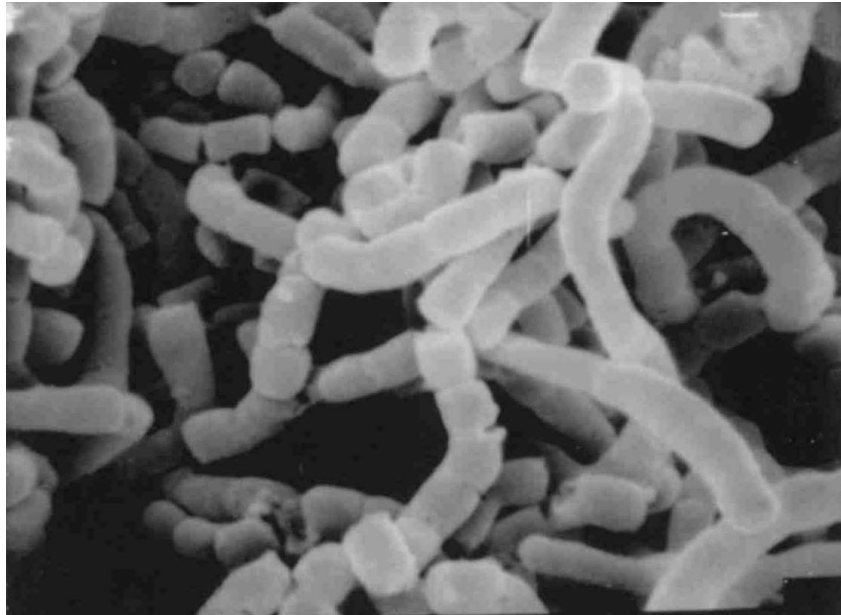
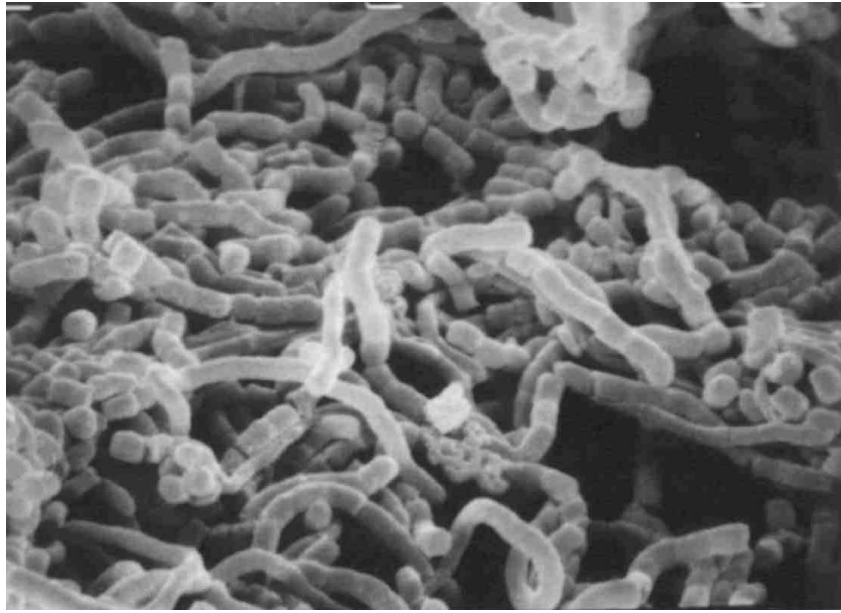
Streptomyces peucetius

A and B – Agar plates medium 5006, 5265 and 5315



Streptomyces peucetius

C and D – Microplate with ISP- and melanin media



Streptomyces peuceitius

Spore chain morphology and spore surface in SEM

E x 5.000 F x 10.000

Genus: Streptomyces

FH 1777

Species: peucetius

Numbers in other collections: ATCC 21354

Morphology:

<u>ISP 2</u>	G	R
	good	salmon orange
	A	SP
<u>ISP 3</u>	none	maize yellow
	G	R
	good	salmon orange
<u>ISP 4</u>	A	SP
	none	maize yellow
	G	R
<u>ISP 5</u>	good	maize yellow
	A	SP
	none	maize yellow
<u>ISP 6</u>	G	R
	good	maize yellow
	A	SP
<u>ISP 7</u>	none	maize yellow
	G	R
	good	maize yellow
	A	SP
	none	maize yellow

Spore chains:

Spore surface:

Sporangia:

Fragmentation:

Melanoid pigment: - - - -

NaCl resistance: 2,5 %

Lysozyme resistance: -

pH: Value- Optimum-

Temperature : Value- Optimum- 28 °C

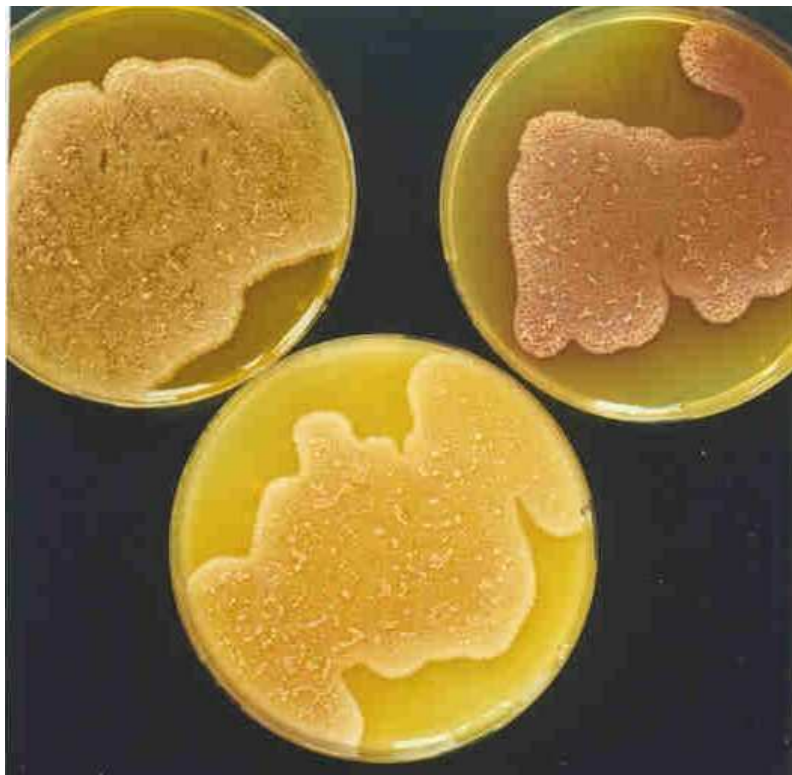
Carbon utilization:

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

Enzymes:

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

Comments: Strain produces Dihydrodaunomycin



Streptomyces peucetius

A and B – Agar plates medium 5006, 5265 and 5315

Genus: Streptomyces

FH 1778

Species: peucetius

Numbers in other collections: ATCC 27952

Morphology:

<u>ISP 2</u>	G	R
	good	salmon orange
	A	SP
<u>ISP 3</u>	none	maize yellow
	G	R
	good	salmon orange
<u>ISP 4</u>	A	SP
	none	maize yellow
	G	R
<u>ISP 5</u>	good	beige
	A	SP
	none	none
<u>ISP 6</u>	G	R
	good	salmon orange
	A	SP
<u>ISP 7</u>	none	maize yellow
	G	R
	good	salmon orange
	A	SP
	none	maize yellow

Spore chains:

Spore surface:

Sporangia:

Fragmentation:

Melanoid pigment: - - - -

NaCl resistance: 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	H ₂ S
-	+	+	+	-	-	-	-	+	-	-

Comments: Strain produces Adriamycin



Streptomyces peuceitius

A and B – Agar plates medium 5006, 5265 and 5315



Streptomyces peucetius

Microplate with ISP- and melanin media
FH 1777 (upper) and FH 1778 (lower)