Streptomyces fulvissimus

Strain identifier

BacDive ID:	15206	**DOI:**	10.13145/bacdive15206.20190402.4
Type strain:	yes		
Culture col. no.:	DSM 40593, ATCC 27431, CBS 783.72, IFO 13482, ISP 5593, NBRC 13482, NCIB 9609, NRRL B-1453, RIA 1443		

Sections

Name and taxonomic classification

Ref.: 9669	**Domain**	Bacteria
Ref.: 9669	**Phylum**	Actinobacteria
Ref.: 9669	**Class**	Actinobacteria
Ref.: 9669	**Order**	Actinomycetales
Ref.: 9669	**Family**	Streptomycetaceae
Ref.: 9669	**Genus**	Streptomyces
Ref.: 9669	**Species**	Streptomyces fulvissimus
Ref.: 9669	**Full Scientific Name**	Streptomyces fulvissimus (Jensen 1930) Waksman and Henrici 1948
Ref.: 9669	**Designation:**	None
Ref.: 9669	**Type strain:**	yes

Prokaryotic Nomenclature Up-to-date (PNU)

Ref.: 20215	**Domain**	Bacteria
Ref.: 20215	**Phylum**	Actinobacteria
Ref.: 20215	**Class**	Actinobacteria
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 47:483*
Ref.: 20215	**Family**	Streptomycetaceae
Ref.: 20215	**Genus**	Streptomyces
Ref.: 20215	Taxonomical status	genus (AL)

Streptomyces fulvissimus

Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	**Species**	Streptomyces fulvissimus
Ref.: 20215	Taxonomical status	comb. nov. (AL)
Ref.: 20215	Literature reference	Int. J. Syst. Bacteriol. 30:225
Ref.: 20215	**Full Scientific Name**	Streptomyces fulvissimus (Jensen 1930) Waksman and Henrici 1948

Morphology and physiology

Ref.: 19481	**Cultivation medium used**	ISP 2
Ref.: 19481	**Colony color**	Orange
Ref.: 19481	**Incubation period**	10-14 days
Ref.: 19481	**Cultivation medium used**	ISP 3
Ref.: 19481	**Colony color**	Red
Ref.: 19481	**Incubation period**	10-14 days
Ref.: 19481	**Cultivation medium used**	ISP 4
Ref.: 19481	**Colony color**	Red
Ref.: 19481	**Incubation period**	10-14 days
Ref.: 19481	**Cultivation medium used**	ISP 5
Ref.: 19481	**Colony color**	Red
Ref.: 19481	**Incubation period**	10-14 days

Ref.: 19481 **Halophily**

Salt	Tested relation	Salt conc.
NaCl	maximum	2.5 %

Ref.: 19481 **API 20E**

API ID	340
ONPG	+
ADH (Arg)	-
LDC (Lys)	-
ODC	-
CIT	+
H2S	-

URE	+
TDA (Trp)	+
IND	-
VP	-
GEL	+
GLU	n.d.
MAN	n.d.
INO	n.d.
Sor	n.d.
RHA	n.d.
SAC	n.d.
MEL	n.d.
AMY	n.d.
ARA	n.d.
OX	n.d.
NO2	n.d.
N2	n.d.
MOB	n.d.
MAC	n.d.
OF-O	n.d.
OF-F	n.d.

	Metabolite utilization	Chebi ID	Metabolite	Utilization activity
Ref.: 19481		22599	Arabinose	-
Ref.: 19481		62968	Cellulose	-
Ref.: 19481		28757	Fructose	-
Ref.: 19481		17234	Glucose	+
Ref.: 19481		17268	Inositol	-
Ref.: 19481		29864	Mannitol	+/-
Ref.: 19481		16634	Raffinose	-
Ref.: 19481		26546	Rhamnose	-
Ref.: 19481		17992	Sucrose	-
Ref.: 19481		18222	Xylose	-

Ref.: 19481	**Medium Name (multicellularity)**	ISP 2
Ref.: 19481	**Multicellular complex forming ability**	yes

Ref.: 19481	**Multicellular complex name**	Aerial Mycelium
Ref.: 19481	**Multicellular complex color**	Orange
Ref.: 19481	**Medium Name (multicellularity)**	ISP 3
Ref.: 19481	**Multicellular complex forming ability**	yes
Ref.: 19481	**Multicellular complex name**	Aerial Mycelium
Ref.: 19481	**Multicellular complex color**	Red
Ref.: 19481	**Medium Name (multicellularity)**	ISP 4
Ref.: 19481	**Multicellular complex forming ability**	yes
Ref.: 19481	**Multicellular complex name**	Aerial Mycelium
Ref.: 19481	**Multicellular complex color**	Red
Ref.: 19481	**Medium Name (multicellularity)**	ISP 5
Ref.: 19481	**Multicellular complex forming ability**	yes
Ref.: 19481	**Multicellular complex name**	Aerial Mycelium
Ref.: 19481	**Multicellular complex color**	White/ orange
Ref.: 19481	**Medium Name (multicellularity)**	ISP 6
Ref.: 19481	**Multicellular complex forming ability**	no
Ref.: 19481	**Medium Name (multicellularity)**	ISP 7
Ref.: 19481	**Multicellular complex forming ability**	no

Streptomyces fulvissimus

Ref.: 9669	**Multimedia content**	
Ref.: 9669	**License/Copyright**	(C) Leibniz-Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH
Ref.: 9669	**Intellectual property rights**	© Leibniz-Institut DSMZ

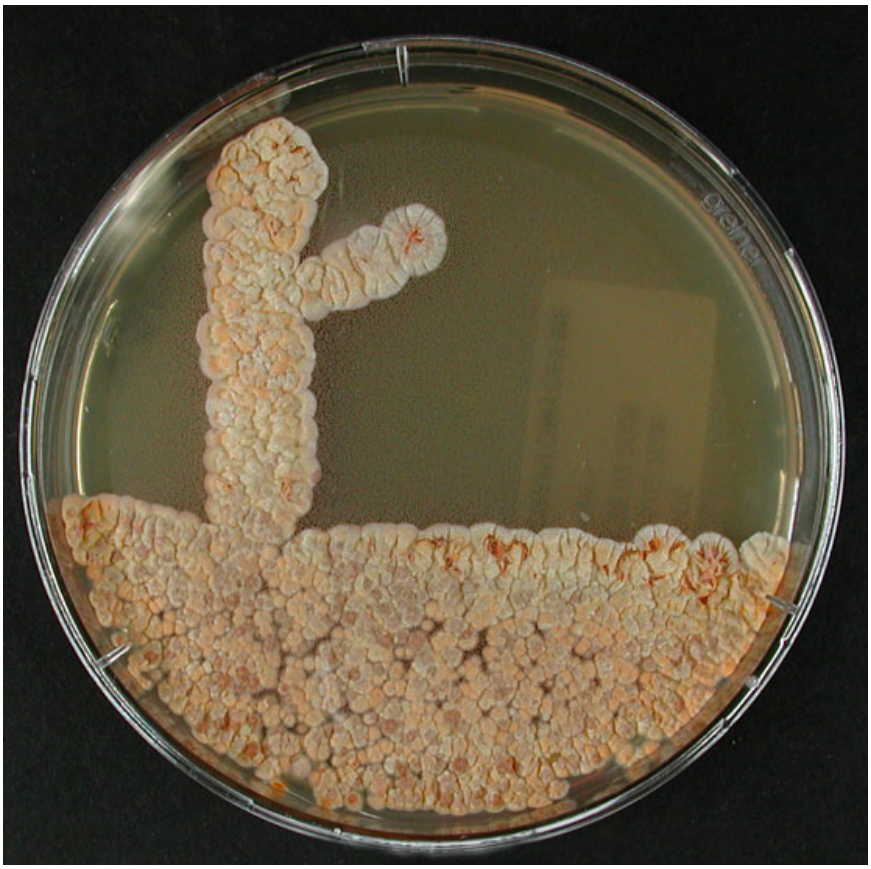
Streptomyces fulvissimus

Ref.: 9669	**Multimedia content**	
Ref.: 9669	**License/Copyright**	(C) Leibniz-Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH
Ref.: 9669	**Intellectual property rights**	© Leibniz-Institut DSMZ

Streptomyces fulvissimus

Ref.: 9669	**Multimedia content**	
Ref.: 9669	**License/Copyright**	(C) Leibniz-Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH
Ref.: 9669	**Intellectual property rights**	© Leibniz-Institut DSMZ

Streptomyces fulvissimus

Ref.: 9669	**Multimedia content**	
Ref.: 9669	**License/Copyright**	(C) Leibniz-Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH
Ref.: 9669	**Intellectual property rights**	© Leibniz-Institut DSMZ

Streptomyces fulvissimus

Ref.: 9669	**Multimedia content**	
Ref.: 9669	**Caption**	Medium 65 28°C
Ref.: 9669	**License/Copyright**	(C) Leibniz-Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH
Ref.: 9669	**Intellectual property rights**	© Leibniz-Institut DSMZ

Ref.: 19481	**Spore description**	Formation of spore chains (rectiflixibilis), spore surface smooth
Ref.: 19481	**Type of spore**	spore
Ref.: 19481	**Ability of spore formation**	yes

Culture and growth conditions

Ref.: 9669	**Culture medium**	GYM STREPTOMYCES MEDIUM (DSMZ Medium 65), 28°C
Ref.: 9669	**Culture medium growth**	yes
Ref.: 9669	**Culture medium link**	https://www.dsmz.de/microorganisms/medium/pdf/DSMZ_Medium65.pdf

Ref.: 19481	**Culture medium**	ISP 2
Ref.: 19481	**Culture medium growth**	yes

Streptomyces fulvissimus

Ref.: 19481	**Culture medium composition**	Name: ISP 2 / Yeast Malt Agar (5265); 5265 Composition Malt extract 10.0 g/l Yeast extract 4.0 g/l Glucose 4.0 g/l Agar 15.0 g/l Preparation: Sterilisation: 20 minutes at 121°C pH before sterilisation: 7.0 Usage: Maintenance and Taxonomy Organisms: All Actinomycetes
Ref.: 19481	**Culture medium**	ISP 3
Ref.: 19481	**Culture medium growth**	yes
Ref.: 19481	**Culture medium composition**	Name: ISP 3; 5315 Composition Dog oat flakes 20.0 g/l Trace element solution (5314) 2.5 ml/l Agar 18.0 g/l Preparation: Oat flakes are cooked for 20 minutes, trace element solution and agar are added (in the case of non rolled oat flakes the suspension has to bee filtrated). Sterilisation: 20 minutes at 121°C pH before sterilisation: 7.8 Usage: Maintenance and taxonomy (e.g. SEM As liquid medium for metabolite production) Organisms: All Actinomycetes Trace element solution 5314 Name: Trace element solution 5314; 5314 Composition CaCl2 x H2O 3.0 g/l Fe-III-citrate 1.0 g/l MnSO4 0.2 g/l ZnCl2 0.1 g/l CuSO4 x 5 H2O 0.025 g/l Sodium tetra borate 0.2 g/l CoCl2 x 6 H2O 0.004 g/l Sodium molybdate 0.01 g/l Preparation: Use double destillated water. Sterilisation: 20 minutes at 121°C pH before sterilisation: Usage: Trace element solution for different media Organisms:
Ref.: 19481	**Culture medium**	ISP 4
Ref.: 19481	**Culture medium growth**	yes
Ref.: 19481	**Culture medium composition**	Name: ISP 4; DSM 547 Solution I: Difco soluble starch, 10.0 g. Make a paste of the starch with a small amount of cold distilled water and bring to a volume of 500 ml. Solution II: CaCO3 2.0 g K2HPO4 (anhydrous) 1.0 g MgSO4 x 7 H2O 1.0 g NaCl 1.0 g (NH4)2SO4 2.0 g Distilled water 500.0 ml Trace salt solution (see below) 1.0 ml The pH should be between 7.0 and 7.4. Do not adjust if it is within this range. Mix solutions I and II together. Add 20.0 g agar. Liquify agar by steaming at 100°C for 10 to 20 min. Trace element solution: FeSO4 x 7 H2O 0.1 g MnCl2 x 4 H2O 0.1 g ZnSO4 x 7 H2O 0.1 g Distilled water 100.0 ml
Ref.: 19481	**Culture medium**	ISP 5
Ref.: 19481	**Culture medium growth**	yes
Ref.: 19481	**Culture medium composition**	Name: ISP 5 (5323) Composition L-Asparagine 1.0 g/l Glycerol 10.0 g/l K2HPO4 1.0 g/l Salt solution (see preparation) 1.0 ml/l Agar 20.0 g/l Preparation: Salt solution 1.0 g FeSO4 x 7 H2O 1.0 g MnCl2 x 4 H2O 1.0 g ZNSO4 x 7 H2O in 100 ml water Sterilisation: 20 minutes at 121°C pH before sterilisation: 7.2 Usage: Maintenance and taxonomy Organisms: All Actinomycetes
Ref.: 39717	**Culture medium**	MEDIUM 57 - for Streptomyces, Nocardioides, Lentzea albidocapillata and Streptoverticillium reticulum
Ref.: 39717	**Culture medium growth**	yes

Ref.: 39717	**Culture medium composition**	Distilled water make up to (1000.000 ml);Agar (15.000 g);Glucose (4.000g);Yeast extract (4.000 g);Malt extract (10.000 g);Calcium carbonate (2.000 g)

Temperatures

Kind of temperature	Temperature
growth	28 °C
optimum	30 °C
growth	30 °C

Ref.: 9669	**Temperature range**	mesophilic
Ref.: 19481	**Temperature range**	mesophilic
Ref.: 39717	**Temperature range**	mesophilic

Application and interaction

Ref.: 9669	**Biosafety level**	1 Risk group (German classification)
Ref.: 19481	**Biosafety level**	1 Risk group (German classification)

Molecular biology

	Sequence database	Sequence accession description	Sequence accession number	Sequence length(bp)	Associated NCBI tax ID	
Ref.: 20218	Marker Gene (DDBJ Direct submission)	Streptomyces fulvissimus gene for 16S rRNA, partial sequence, strain: NBRC 13482	AB184434	1475	68202	*
Ref.: 20218	Marker Gene (GenBank Direct submission)	Streptomyces fulvissimus strain NRRL B-1453 16S ribosomal RNA gene, partial sequence	AY999918	1325	68202	*
Ref.: 9669	INSDC	Streptomyces fulvissimus partial 16S rRNA gene, type strain DSM 40593T	LM999765	1502	68202	

Strain availability

Ref.: 9669	**Culture collection no.**	DSM 40593, ATCC 27431, CBS 783.72, IFO 13482, ISP 5593, NBRC 13482, NCIB 9609, NRRL B-1453, RIA 1443
Ref.: 9669	**Strain history**	<- E.B. Shirling, ISP <- NRRL

Associated Passport(s) in StrainInfo

Ref.: 20218	55614 - http://www.straininfo.net/strains/55614
Ref.: 20218	55610 - http://www.straininfo.net/strains/55610
Ref.: 20218	229397 - http://www.straininfo.net/strains/229397
Ref.: 20218	55615 - http://www.straininfo.net/strains/55615
Ref.: 20218	55617 - http://www.straininfo.net/strains/55617
Ref.: 20218	334126 - http://www.straininfo.net/strains/334126
Ref.: 20218	105386 - http://www.straininfo.net/strains/105386
Ref.: 20218	55625 - http://www.straininfo.net/strains/55625
Ref.: 20218	55626 - http://www.straininfo.net/strains/55626

References

Ref.: 9669	Leibniz Institut DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH; Curators of the DSMZ; DSM 40593
Ref.: 19481	Wink, J.: Compendium of Actinobacteria. HZI-Helmholtz-Centre for Infection Research, Braunschweig.
Ref.: 20215	D.Gleim, M.Kracht, N.Weiss et. al.: Prokaryotic Nomenclature Up-to-date - compilation of all names of Bacteria and Archaea, validly published according to the Bacteriological Code since 1. Jan. 1980, and validly published nomenclatural changes since.
Ref.: 20218	Verslyppe, B., De Smet, W., De Baets, B., De Vos, P., Dawyndt P. StrainInfo introduces electronic passports for microorganisms.. Syst Appl Microbiol. 37: 42-50 2014 (10.1016/j.syapm.2013.11.002, 24321274)
Ref.: 39717	None; Curators of the CIP; None

*** These References are textmined**

back to top