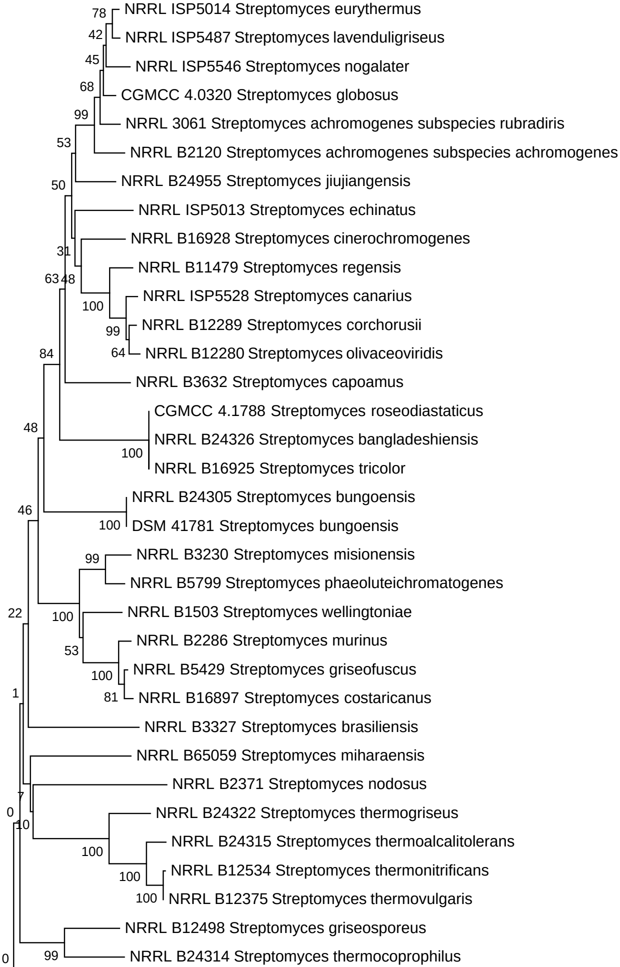
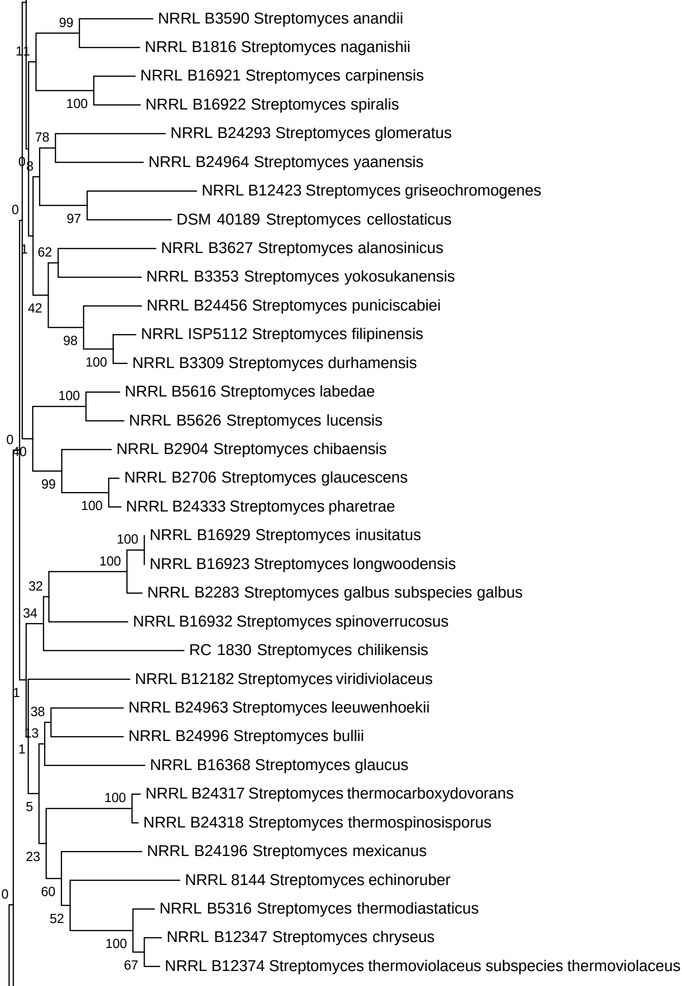
Supplementary Material. Figure S1. *Streptomyces* phylogenetic tree inferred from concatenated partial sequences of the housekeeping genes (*atp*D, gyrB, *rec*A, *rpoB,* and *trpB*) of rhizospher isolates (OR6, OR14, OR58, OR67, OR92 and OR96) with type strains obtained from the ARS Microbial Genomic Sequence Database server. The tree was constructed using the maximum-likelihood method based on Kimura two-parameters model (nucleotide-based analysis). The trees were subjected to 1000 bootstrap replications and values (expressed as percentages) greater than 50% are given in the nodes. Subclades containing the isolated strains(highlighted in bold blue font) and related type strains are shown yellow shaded. Bar scale reflects number of substitutions per site.


78
NRRL ISP5014 Streptomyces eurythermus
42
NRRL ISP5487 Streptomyces lavenduligriseus
45
NRRL ISP5546 Streptomyces nogalater
68
CGMCC 4.0320 Streptomyces globosus
99
NRRL 3061 Streptomyces achromogenes subspecies rubradiris
53
NRRL B2120 Streptomyces achromogenes subspecies achromogenes
50
NRRL B24955 Streptomyces jiujiangensis
NRRL ISP5013 Streptomyces echinatus
NRRL B16928 Streptomyces cinerochromogenes
31
NRRL B11479 Streptomyces regensis
63
48
NRRL ISP5528 Streptomyces canarius
100
NRRL B12289 Streptomyces corchorusii
99
64
NRRL B12280 Streptomyces olivaceoviridis
84
NRRL B3632 Streptomyces capoamus
CGMCC 4.1788 Streptomyces roseodiastaticus
48
NRRL B24326 Streptomyces bangladeshiensis
100
NRRL B16925 Streptomyces tricolor
NRRL B24305 Streptomyces bungoensis
46
100
DSM 41781 Streptomyces bungoensis
99
NRRL B3230 Streptomyces misionensis
NRRL B5799 Streptomyces phaeoluteichromatogenes
22
100
NRRL B1503 Streptomyces wellingtoniae
NRRL B2286 Streptomyces murinus
53
NRRL B5429 Streptomyces griseofuscus
100
1
81
NRRL B16897 Streptomyces costaricanus
NRRL B3327 Streptomyces brasiliensis
NRRL B65059 Streptomyces miharaensis
NRRL B2371 Streptomyces nodosus
7
0
NRRL B24322 Streptomyces thermogriseus
10
NRRL B24315 Streptomyces thermoalcalitolerans
100
NRRL B12534 Streptomyces thermonitrificans
100
100
NRRL B12375 Streptomyces thermovulgaris
NRRL B12498 Streptomyces griseosporeus
0
99
NRRL B24314 Streptomyces thermocoprophilus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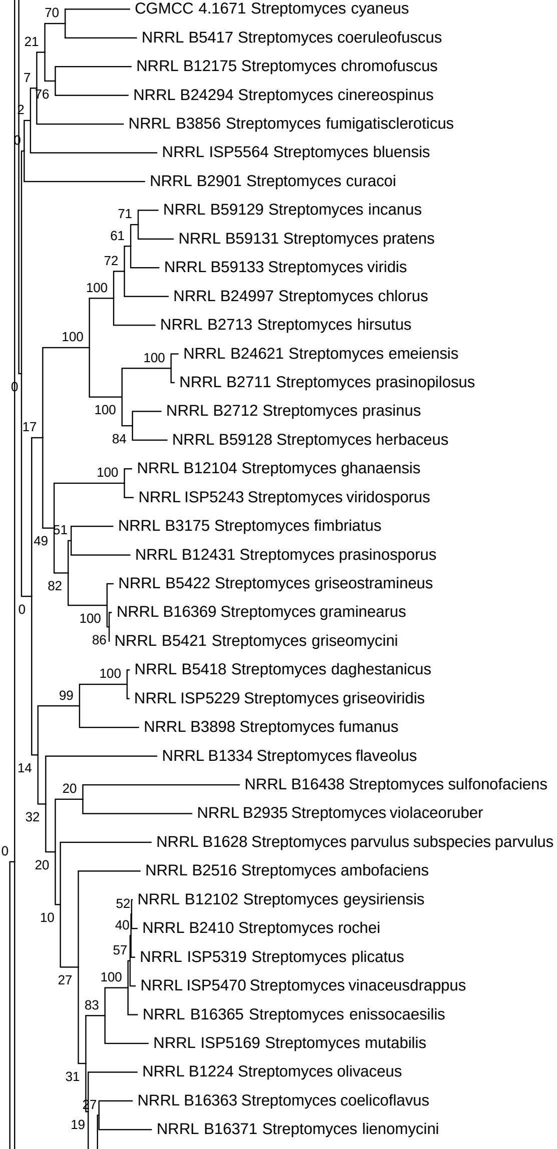
11
NRRL B1816 Streptomyces naganishii
NRRL B16921 Streptomyces carpinensis
100
NRRL B16922 Streptomyces spiralis
78
NRRL B24293 Streptomyces glomeratus
0
8
NRRL B24964 Streptomyces yaanensis
NRRL B12423 Streptomyces griseochromogenes
0
97
DSM 40189 Streptomyces cellostaticus
1
62
NRRL B3627 Streptomyces alanosinicus
NRRL B3353 Streptomyces yokosukanensis
42
NRRL B24456 Streptomyces puniciscabiei
NRRL ISP5112 Streptomyces filipinensis
98
100
NRRL B3309 Streptomyces durhamensis
100
NRRL B5616 Streptomyces labedae
NRRL B5626 Streptomyces lucensis
0
40
NRRL B2904 Streptomyces chibaensis
NRRL B2706 Streptomyces glaucescens
99
100
NRRL B24333 Streptomyces pharetrae
100
NRRL B16929 Streptomyces inusitatus
100
NRRL B16923 Streptomyces longwoodensis
32
NRRL B2283 Streptomyces galbus subspecies galbus
34
NRRL B16932 Streptomyces spinoverrucosus
RC 1830 Streptomyces chilikensis
NRRL B12182 Streptomyces viridiviolaceus
1
38
NRRL B24963 Streptomyces leeuwenhoekii
13
NRRL B24996 Streptomyces bullii
1
NRRL B16368 Streptomyces glaucus
100
NRRL B24317 Streptomyces thermocarboxydovorans
5
NRRL B24318 Streptomyces thermospinosisporus
23
NRRL B24196 Streptomyces mexicanus
60
NRRL 8144 Streptomyces echinoruber
0
NRRL B5316 Streptomyces thermodiastaticus
52
100
NRRL B12347 Streptomyces chryseus
67
NRRL B12374 Streptomyces thermoviolaceus subspecies thermoviolaceus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21
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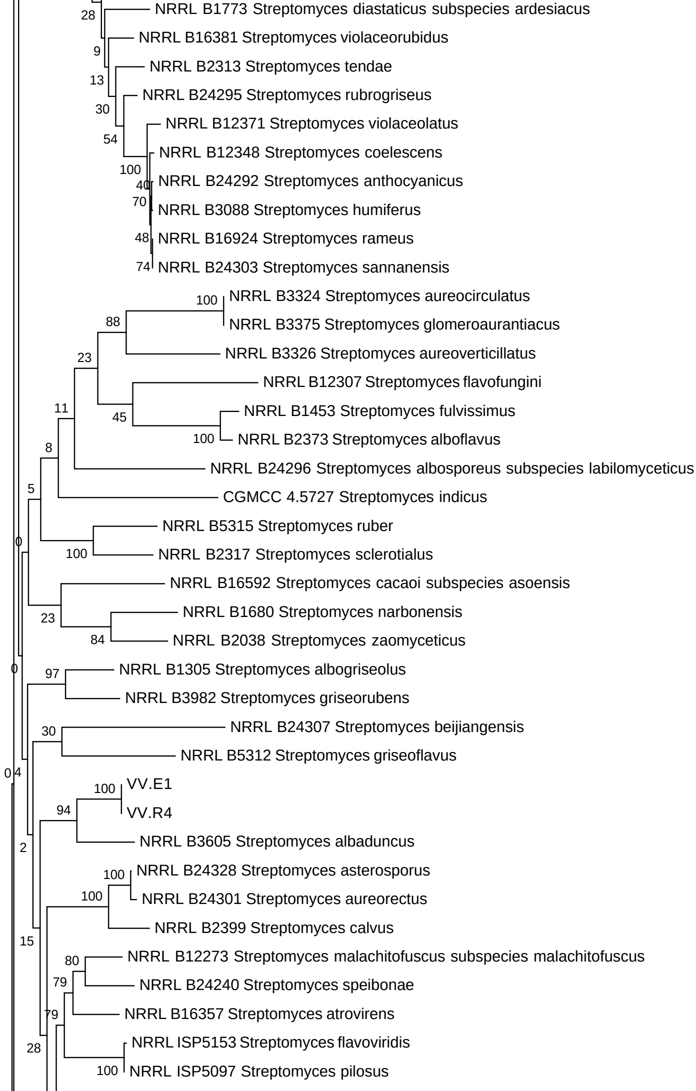
NRRL B12175 Streptomyces chromofuscus
7
76
NRRL B24294 Streptomyces cinereospinus
2
NRRL B3856 Streptomyces fumigatiscleroticus
0
NRRL ISP5564 Streptomyces bluensis
NRRL B2901 Streptomyces curacoi
71
NRRL B59129 Streptomyces incanus
61
NRRL B59131 Streptomyces pratens
72
NRRL B59133 Streptomyces viridis
100
NRRL B24997 Streptomyces chlorus
NRRL B2713 Streptomyces hirsutus
100
100
NRRL B24621 Streptomyces emeiensis
NRRL B2711 Streptomyces prasinopilosus
0
100
NRRL B2712 Streptomyces prasinus
17
84
NRRL B59128 Streptomyces herbaceus
100
NRRL B12104 Streptomyces ghanaensis
NRRL ISP5243 Streptomyces viridosporus
51
NRRL B3175 Streptomyces fimbriatus
49
NRRL B12431 Streptomyces prasinosporus
82
NRRL B5422 Streptomyces griseostramineus
0
NRRL B16369 Streptomyces graminearus
100
86
NRRL B5421 Streptomyces griseomycini
100
NRRL B5418 Streptomyces daghestanicus
99
NRRL ISP5229 Streptomyces griseoviridis
NRRL B3898 Streptomyces fumanus
NRRL B1334 Streptomyces flaveolus
14
20
NRRL B16438 Streptomyces sulfonofaciens
32
NRRL B2935 Streptomyces violaceoruber
0
NRRL B1628 Streptomyces parvulus subspecies parvulus
20
NRRL B2516 Streptomyces ambofaciens
10
52
NRRL B12102 Streptomyces geysiriensis
40
NRRL B2410 Streptomyces rochei
57
NRRL ISP5319 Streptomyces plicatus
27
100
NRRL ISP5470 Streptomyces vinaceusdrappus
83
NRRL B16365 Streptomyces enissocaesilis
NRRL ISP5169 Streptomyces mutabilis
31
NRRL B1224 Streptomyces olivaceus
27
NRRL B16363 Streptomyces coelicoflavus
19
NRRL B16371 Streptomyces lienomycini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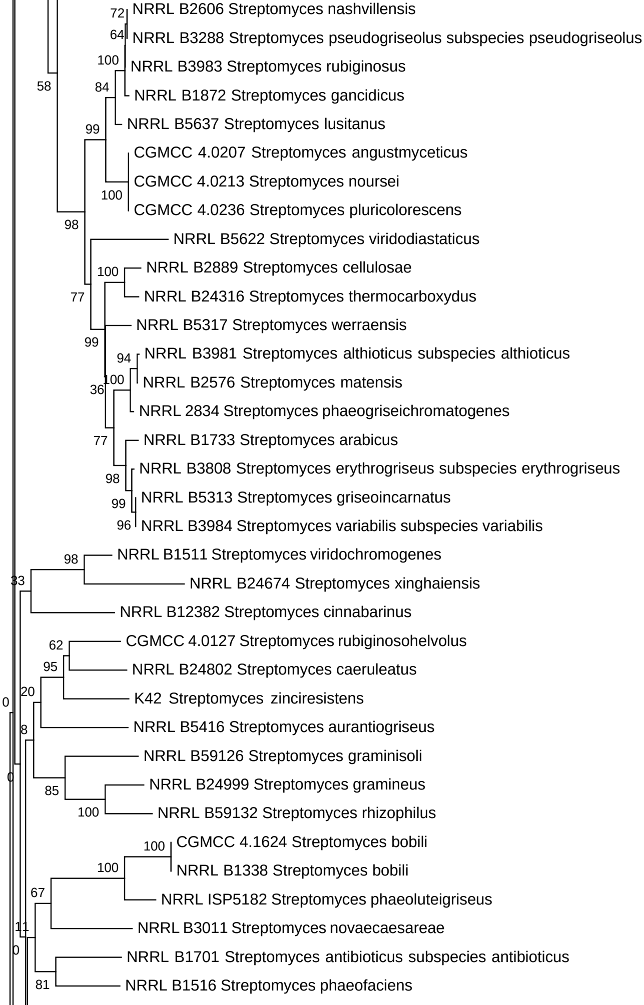
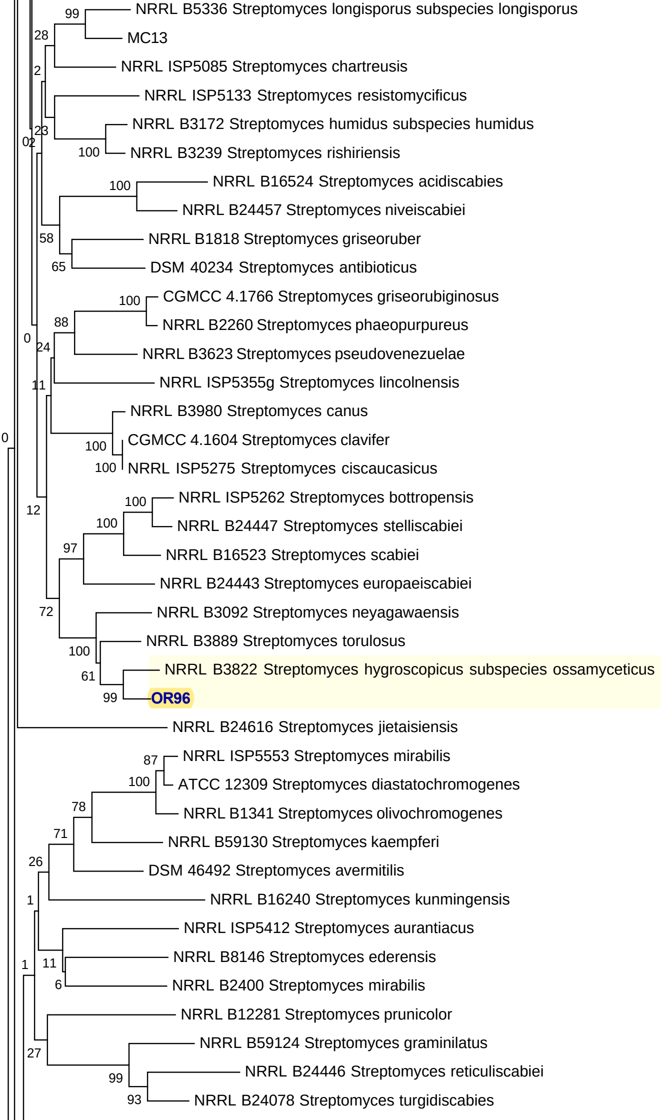
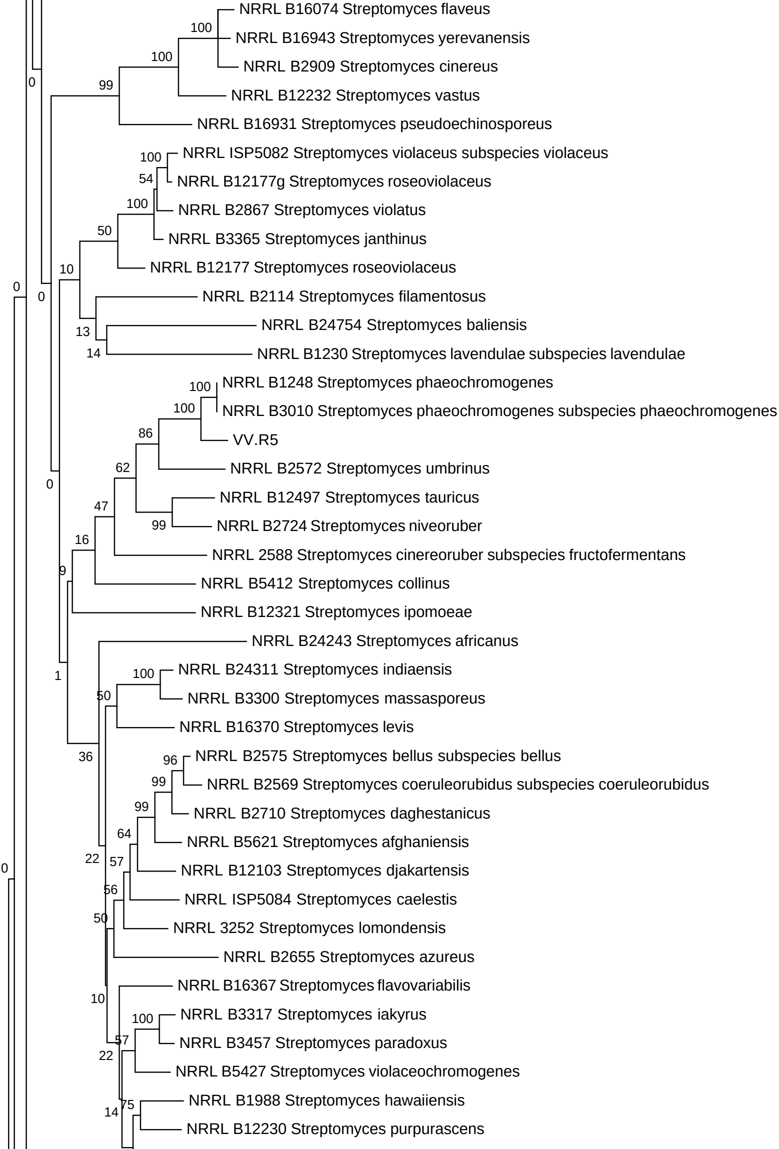
9
NRRL B16381 Streptomyces violaceorubidus
13
NRRL B2313 Streptomyces tendae
30
NRRL B24295 Streptomyces rubrogriseus
54
NRRL B12371 Streptomyces violaceolatus
100
NRRL B12348 Streptomyces coelescens
40
NRRL B24292 Streptomyces anthocyanicus
70
NRRL B3088 Streptomyces humiferus
48
NRRL B16924 Streptomyces rameus
74
NRRL B24303 Streptomyces sannanensis
100
NRRL B3324 Streptomyces aureocirculatus
88
NRRL B3375 Streptomyces glomeroaurantiacus
23
NRRL B3326 Streptomyces aureoverticillatus
NRRL B12307 Streptomyces flavofungini
11
45
NRRL B1453 Streptomyces fulvissimus
100
NRRL B2373 Streptomyces alboflavus
8
NRRL B24296 Streptomyces albosporeus subspecies labilomyceticus
5
CGMCC 4.5727 Streptomyces indicus
0
NRRL B5315 Streptomyces ruber
100
NRRL B2317 Streptomyces sclerotialus
NRRL B16592 Streptomyces cacaoi subspecies asoensis
23
NRRL B1680 Streptomyces narbonensis
84
NRRL B2038 Streptomyces zaomyceticus
0
97
NRRL B1305 Streptomyces albogriseolus
NRRL B3982 Streptomyces griseorubens
30
NRRL B24307 Streptomyces beijiangensis
NRRL B5312 Streptomyces griseoflavus
0
4
100
VV.E1
94
VV.R4
2
NRRL B3605 Streptomyces albaduncus
100
NRRL B24328 Streptomyces asterosporus
100
NRRL B24301 Streptomyces aureorectus
15
NRRL B2399 Streptomyces calvus
80
NRRL B12273 Streptomyces malachitofuscus subspecies malachitofuscus
79
NRRL B24240 Streptomyces speibonae
79
NRRL B16357 Streptomyces atrovirens
28
NRRL ISP5153 Streptomyces flavoviridis
100
NRRL ISP5097 Streptomyces pilosus



72
NRRL B2606 Streptomyces nashvillensis
64
NRRL B3288 Streptomyces pseudogriseolus subspecies pseudogriseolus
100
NRRL B3983 Streptomyces rubiginosus
58
84
NRRL B1872 Streptomyces gancidicus
NRRL B5637 Streptomyces lusitanus
99
CGMCC 4.0207 Streptomyces angustmyceticus
CGMCC 4.0213 Streptomyces noursei
100
CGMCC 4.0236 Streptomyces pluricolorescens
98
NRRL B5622 Streptomyces viridodiastaticus
NRRL B2889 Streptomyces cellulosae
100
77
NRRL B24316 Streptomyces thermocarboxydus
NRRL B5317 Streptomyces werraensis
99
NRRL B3981 Streptomyces althioticus subspecies althioticus
94
100
36
NRRL B2576 Streptomyces matensis
NRRL 2834 Streptomyces phaeogriseichromatogenes
NRRL B1733 Streptomyces arabicus
77
NRRL B3808 Streptomyces erythrogriseus subspecies erythrogriseus
98
NRRL B5313 Streptomyces griseoincarnatus
99
96
NRRL B3984 Streptomyces variabilis subspecies variabilis
98
NRRL B1511 Streptomyces viridochromogenes
33
NRRL B24674 Streptomyces xinghaiensis
NRRL B12382 Streptomyces cinnabarinus
62
CGMCC 4.0127 Streptomyces rubiginosohelvolus
95
NRRL B24802 Streptomyces caeruleatus
20
K42 Streptomyces zinciresistens
0
NRRL B5416 Streptomyces aurantiogriseus
8
NRRL B59126 Streptomyces graminisoli
0
NRRL B24999 Streptomyces gramineus
85
100
NRRL B59132 Streptomyces rhizophilus
100
CGMCC 4.1624 Streptomyces bobili
100
NRRL B1338 Streptomyces bobili
67
NRRL ISP5182 Streptomyces phaeoluteigriseus
11
NRRL B3011 Streptomyces novaecaesareae
0
NRRL B1701 Streptomyces antibioticus subspecies antibioticus
81
NRRL B1516 Streptomyces phaeofaciens


99
NRRL B5336 Streptomyces longisporus subspecies longisporus
28
MC13
NRRL ISP5085 Streptomyces chartreusis
2
NRRL ISP5133 Streptomyces resistomycificus
NRRL B3172 Streptomyces humidus subspecies humidus
23
02
100
NRRL B3239 Streptomyces rishiriensis
100
NRRL B16524 Streptomyces acidiscabies
NRRL B24457 Streptomyces niveiscabiei
58
NRRL B1818 Streptomyces griseoruber
65
DSM 40234 Streptomyces antibioticus
100
CGMCC 4.1766 Streptomyces griseorubiginosus
88
NRRL B2260 Streptomyces phaeopurpureus
0
24
NRRL B3623 Streptomyces pseudovenezuelae
11
NRRL ISP5355g Streptomyces lincolnensis
NRRL B3980 Streptomyces canus
0
100
CGMCC 4.1604 Streptomyces clavifer
100
NRRL ISP5275 Streptomyces ciscaucasicus
100
NRRL ISP5262 Streptomyces bottropensis
12
100
NRRL B24447 Streptomyces stelliscabiei
97
NRRL B16523 Streptomyces scabiei
NRRL B24443 Streptomyces europaeiscabiei
72
NRRL B3092 Streptomyces neyagawaensis
NRRL B3889 Streptomyces torulosus
100
NRRL B3822 Streptomyces hygroscopicus subspecies ossamyceticus
61
99
OR96
NRRL B24616 Streptomyces jietaisiensis
87
NRRL ISP5553 Streptomyces mirabilis
100
ATCC 12309 Streptomyces diastatochromogenes
78
NRRL B1341 Streptomyces olivochromogenes
71
NRRL B59130 Streptomyces kaempferi
26
DSM 46492 Streptomyces avermitilis
1
NRRL B16240 Streptomyces kunmingensis
NRRL ISP5412 Streptomyces aurantiacus
1
11
NRRL B8146 Streptomyces ederensis
6
NRRL B2400 Streptomyces mirabilis
NRRL B12281 Streptomyces prunicolor
27
NRRL B59124 Streptomyces graminilatus
99
NRRL B24446 Streptomyces reticuliscabiei
93
NRRL B24078 Streptomyces turgidiscabies


NRRL B16074 Streptomyces flaveus
100
NRRL B16943 Streptomyces yerevanensis
100
NRRL B2909 Streptomyces cinereus
0
99
NRRL B12232 Streptomyces vastus
NRRL B16931 Streptomyces pseudoechinosporeus
NRRL ISP5082 Streptomyces violaceus subspecies violaceus
100
NRRL B12177g Streptomyces roseoviolaceus
54
100
NRRL B2867 Streptomyces violatus
NRRL B3365 Streptomyces janthinus
50
NRRL B12177 Streptomyces roseoviolaceus
10
0
0
NRRL B2114 Streptomyces filamentosus
NRRL B24754 Streptomyces baliensis
13
14
NRRL B1230 Streptomyces lavendulae subspecies lavendulae
NRRL B1248 Streptomyces phaeochromogenes
100
100
NRRL B3010 Streptomyces phaeochromogenes subspecies phaeochromogenes
VV.R5
86
NRRL B2572 Streptomyces umbrinus
62
0
NRRL B12497 Streptomyces tauricus
47
99
NRRL B2724 Streptomyces niveoruber
16
NRRL 2588 Streptomyces cinereoruber subspecies fructofermentans
9
NRRL B5412 Streptomyces collinus
NRRL B12321 Streptomyces ipomoeae
NRRL B24243 Streptomyces africanus
NRRL B24311 Streptomyces indiaensis
100
1
50
NRRL B3300 Streptomyces massasporeus
NRRL B16370 Streptomyces levis
36
NRRL B2575 Streptomyces bellus subspecies bellus
96
99
NRRL B2569 Streptomyces coeruleorubidus subspecies coeruleorubidus
99
NRRL B2710 Streptomyces daghestanicus
64
NRRL B5621 Streptomyces afghaniensis
22
57
0
NRRL B12103 Streptomyces djakartensis
56
NRRL ISP5084 Streptomyces caelestis
50
NRRL 3252 Streptomyces lomondensis
NRRL B2655 Streptomyces azureus
NRRL B16367 Streptomyces flavovariabilis
10
NRRL B3317 Streptomyces iakyrus
100
57
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NRRL B5427 Streptomyces violaceochromogenes
NRRL B1988 Streptomyces hawaiiensis
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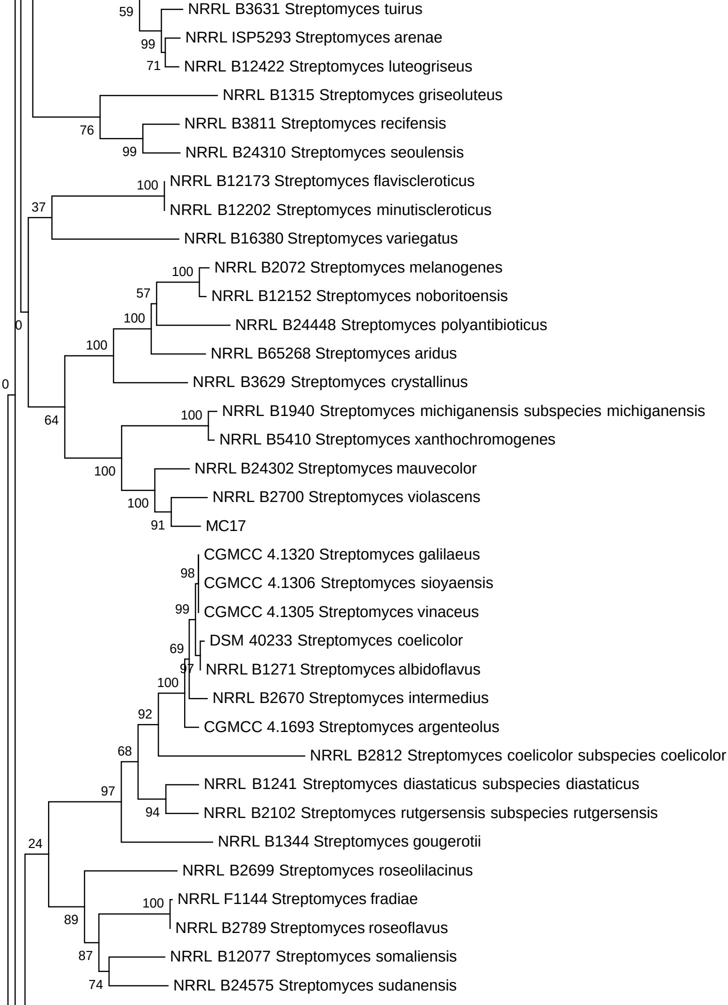
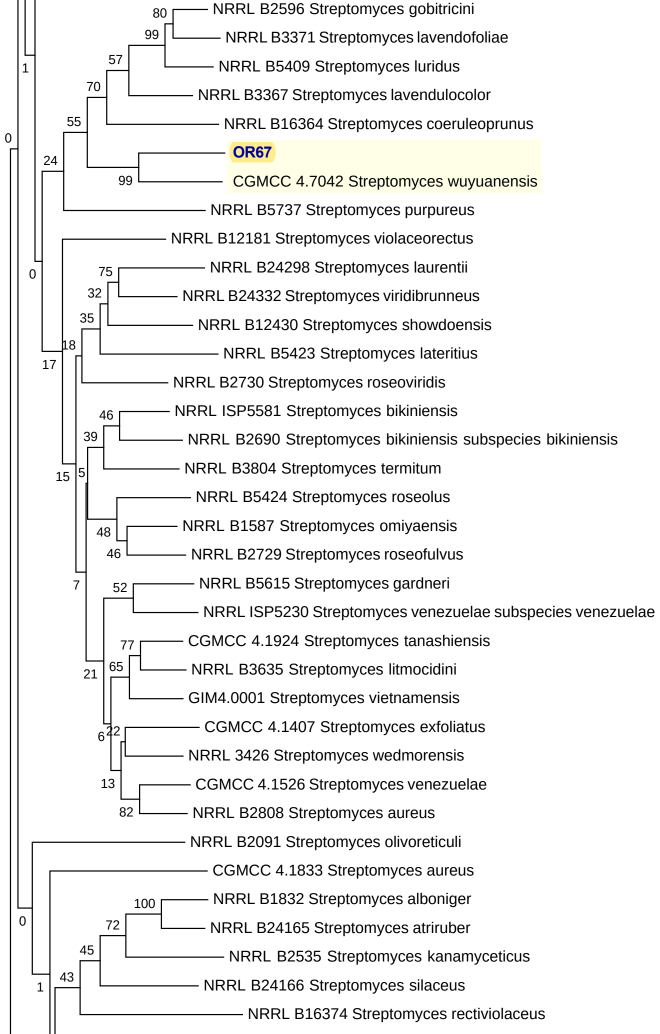
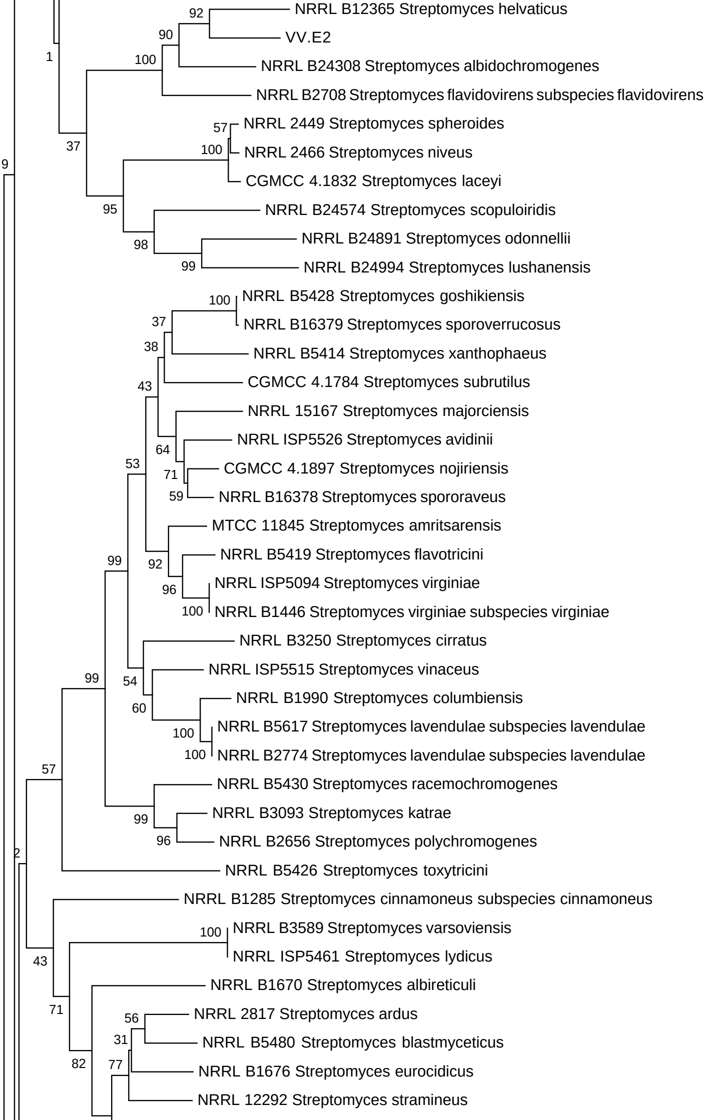
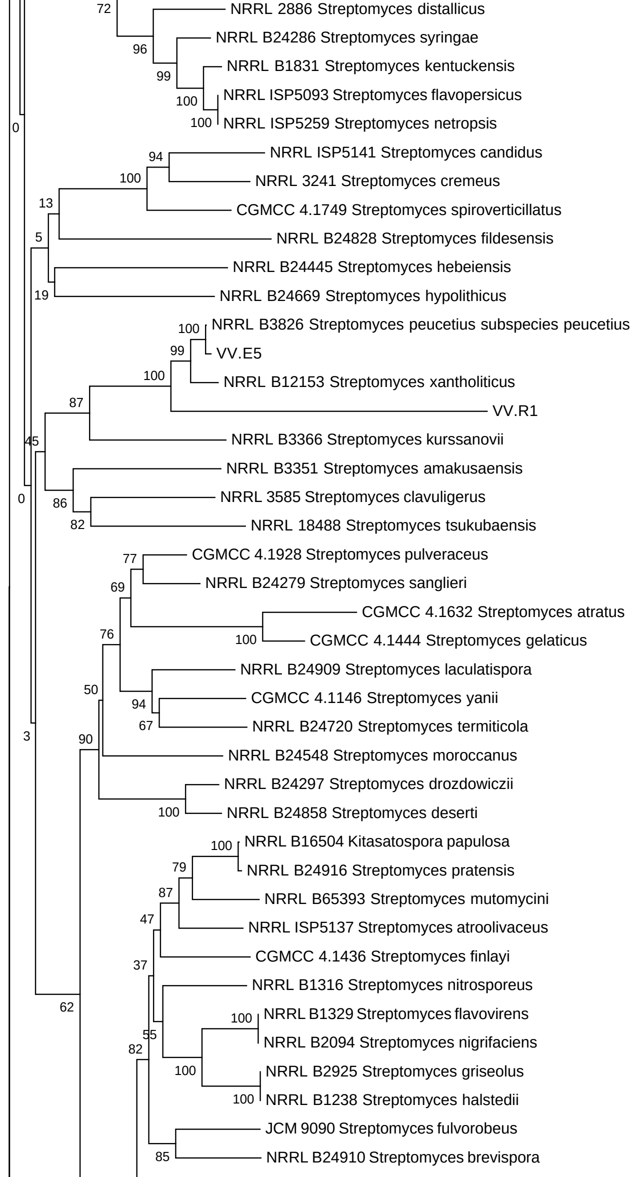
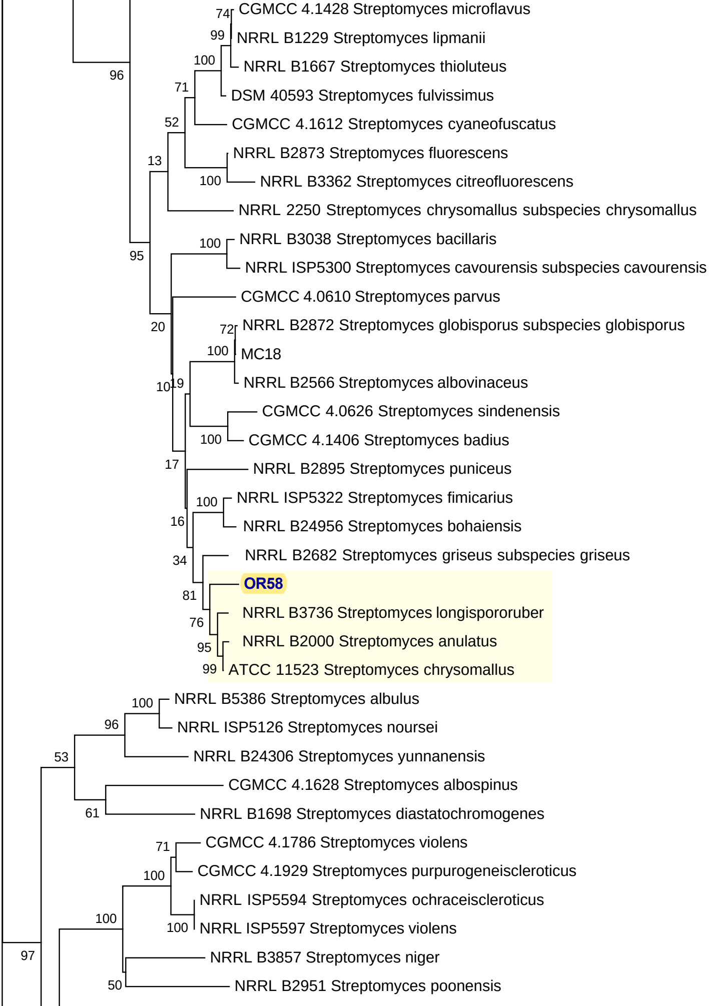
14
NRRL B12230 Streptomyces purpurascens

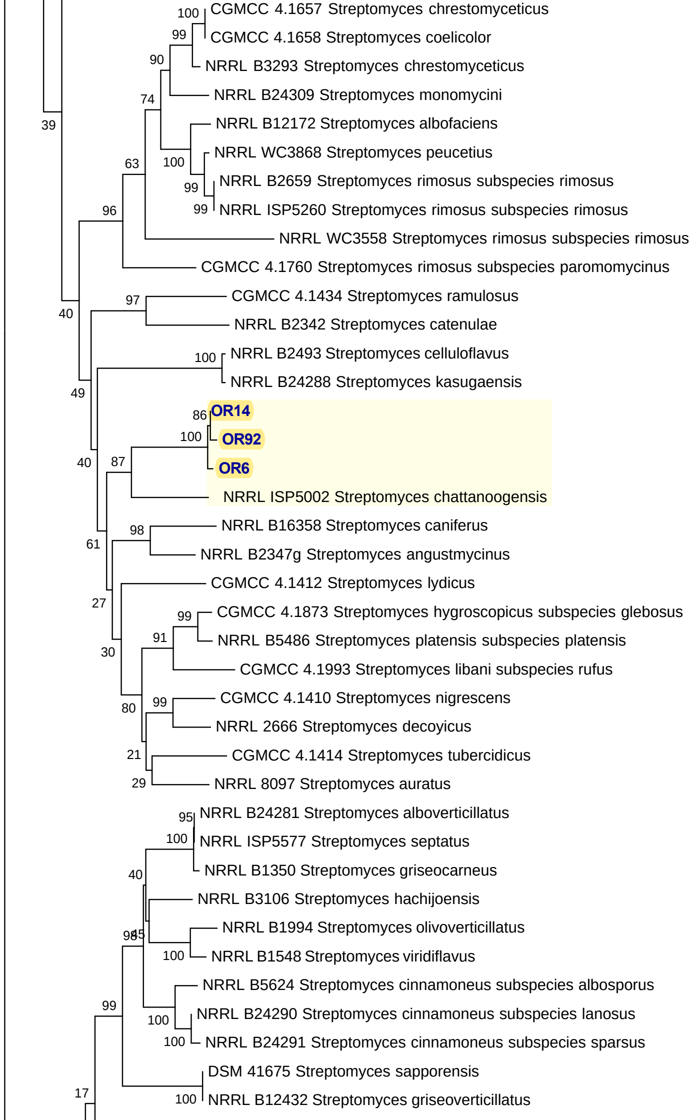

59
NRRL B3631 Streptomyces tuirus
99
NRRL ISP5293 Streptomyces arenae
71
NRRL B12422 Streptomyces luteogriseus
NRRL B1315 Streptomyces griseoluteus
76
NRRL B3811 Streptomyces recifensis
99
NRRL B24310 Streptomyces seoulensis
100
NRRL B12173 Streptomyces flaviscleroticus
37
NRRL B12202 Streptomyces minutiscleroticus
NRRL B16380 Streptomyces variegatus
100
NRRL B2072 Streptomyces melanogenes
57
NRRL B12152 Streptomyces noboritoensis
100
NRRL B24448 Streptomyces polyantibioticus
0
100
NRRL B65268 Streptomyces aridus
NRRL B3629 Streptomyces crystallinus
0
100
NRRL B1940 Streptomyces michiganensis subspecies michiganensis
64
NRRL B5410 Streptomyces xanthochromogenes
100
NRRL B24302 Streptomyces mauvecolor
100
NRRL B2700 Streptomyces violascens
91
MC17
CGMCC 4.1320 Streptomyces galilaeus
98
CGMCC 4.1306 Streptomyces sioyaensis
99
CGMCC 4.1305 Streptomyces vinaceus
DSM 40233 Streptomyces coelicolor
69
97
NRRL B1271 Streptomyces albidoflavus
100
NRRL B2670 Streptomyces intermedius
92
CGMCC 4.1693 Streptomyces argenteolus
68
NRRL B2812 Streptomyces coelicolor subspecies coelicolor
NRRL B1241 Streptomyces diastaticus subspecies diastaticus
97
94
NRRL B2102 Streptomyces rutgersensis subspecies rutgersensis
NRRL B1344 Streptomyces gougerotii
24
NRRL B2699 Streptomyces roseolilacinus
100
NRRL F1144 Streptomyces fradiae
89
NRRL B2789 Streptomyces roseoflavus
87
NRRL B12077 Streptomyces somaliensis
74
NRRL B24575 Streptomyces sudanensis

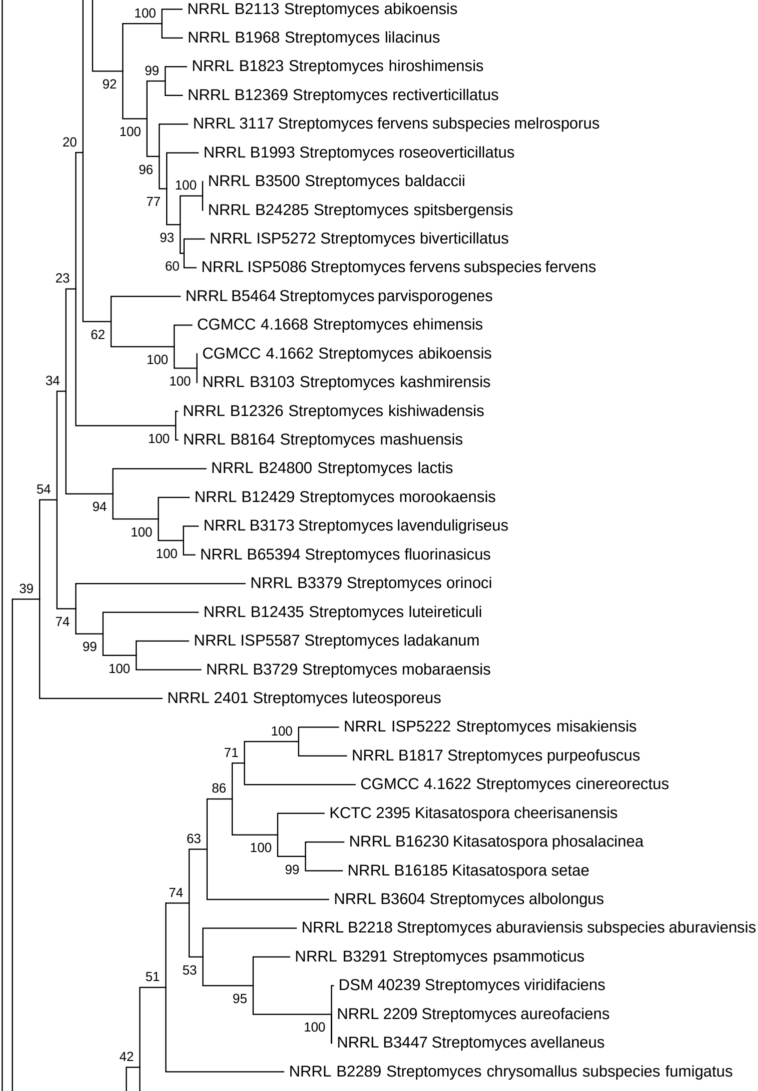

80
NRRL B2596 Streptomyces gobitricini
99
NRRL B3371 Streptomyces lavendofoliae
57
NRRL B5409 Streptomyces luridus
1
70
NRRL B3367 Streptomyces lavendulocolor
55
NRRL B16364 Streptomyces coeruleoprunus
0
OR67
24
99
CGMCC 4.7042 Streptomyces wuyuanensis
NRRL B5737 Streptomyces purpureus
NRRL B12181 Streptomyces violaceorectus
0
75
NRRL B24298 Streptomyces laurentii
32
NRRL B24332 Streptomyces viridibrunneus
35
NRRL B12430 Streptomyces showdoensis
18
NRRL B5423 Streptomyces lateritius
17
NRRL B2730 Streptomyces roseoviridis
NRRL ISP5581 Streptomyces bikiniensis
46
NRRL B2690 Streptomyces bikiniensis subspecies bikiniensis
39
NRRL B3804 Streptomyces termitum
15
5
NRRL B5424 Streptomyces roseolus
48
NRRL B1587 Streptomyces omiyaensis
46
NRRL B2729 Streptomyces roseofulvus
7
52
NRRL B5615 Streptomyces gardneri
NRRL ISP5230 Streptomyces venezuelae subspecies venezuelae
77
CGMCC 4.1924 Streptomyces tanashiensis
65
NRRL B3635 Streptomyces litmocidini
21
GIM4.0001 Streptomyces vietnamensis
6
22
CGMCC 4.1407 Streptomyces exfoliatus
NRRL 3426 Streptomyces wedmorensis
13
CGMCC 4.1526 Streptomyces venezuelae
82
NRRL B2808 Streptomyces aureus
NRRL B2091 Streptomyces olivoreticuli
CGMCC 4.1833 Streptomyces aureus
100
NRRL B1832 Streptomyces alboniger
0
72
NRRL B24165 Streptomyces atriruber
45
NRRL B2535 Streptomyces kanamyceticus
1
43
NRRL B24166 Streptomyces silaceus
NRRL B16374 Streptomyces rectiviolaceus

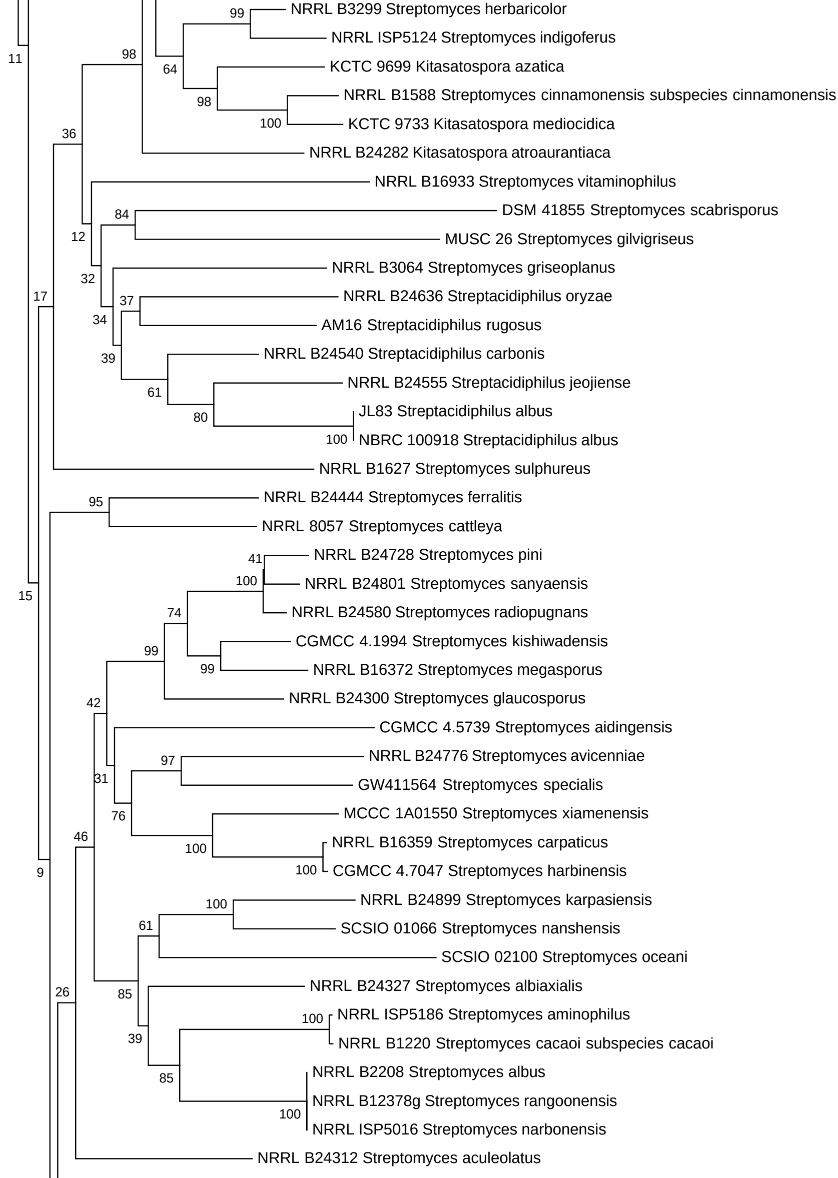

92
NRRL B12365 Streptomyces helvaticus
90
VV.E2
1
100
NRRL B24308 Streptomyces albidochromogenes
NRRL B2708 Streptomyces flavidovirens subspecies flavidovirens
57
NRRL 2449 Streptomyces spheroides
37
100
NRRL 2466 Streptomyces niveus
9
CGMCC 4.1832 Streptomyces laceyi
NRRL B24574 Streptomyces scopuloiridis
95
NRRL B24891 Streptomyces odonnellii
98
99
NRRL B24994 Streptomyces lushanensis
100
NRRL B5428 Streptomyces goshikiensis
37
NRRL B16379 Streptomyces sporoverrucosus
38
NRRL B5414 Streptomyces xanthophaeus
43
CGMCC 4.1784 Streptomyces subrutilus
NRRL 15167 Streptomyces majorciensis
NRRL ISP5526 Streptomyces avidinii
64
53
CGMCC 4.1897 Streptomyces nojiriensis
71
59
NRRL B16378 Streptomyces spororaveus
MTCC 11845 Streptomyces amritsarensis
NRRL B5419 Streptomyces flavotricini
99
92
NRRL ISP5094 Streptomyces virginiae
96
100
NRRL B1446 Streptomyces virginiae subspecies virginiae
NRRL B3250 Streptomyces cirratus
NRRL ISP5515 Streptomyces vinaceus
99
54
NRRL B1990 Streptomyces columbiensis
60
NRRL B5617 Streptomyces lavendulae subspecies lavendulae
100
100
NRRL B2774 Streptomyces lavendulae subspecies lavendulae
57
NRRL B5430 Streptomyces racemochromogenes
NRRL B3093 Streptomyces katrae
99
96
NRRL B2656 Streptomyces polychromogenes
2
NRRL B5426 Streptomyces toxytricini
NRRL B1285 Streptomyces cinnamoneus subspecies cinnamoneus
100
NRRL B3589 Streptomyces varsoviensis
43
NRRL ISP5461 Streptomyces lydicus
NRRL B1670 Streptomyces albireticuli
71
56
NRRL 2817 Streptomyces ardus
31
NRRL B5480 Streptomyces blastmyceticus
82
77
NRRL B1676 Streptomyces eurocidicus
NRRL 12292 Streptomyces stramineus

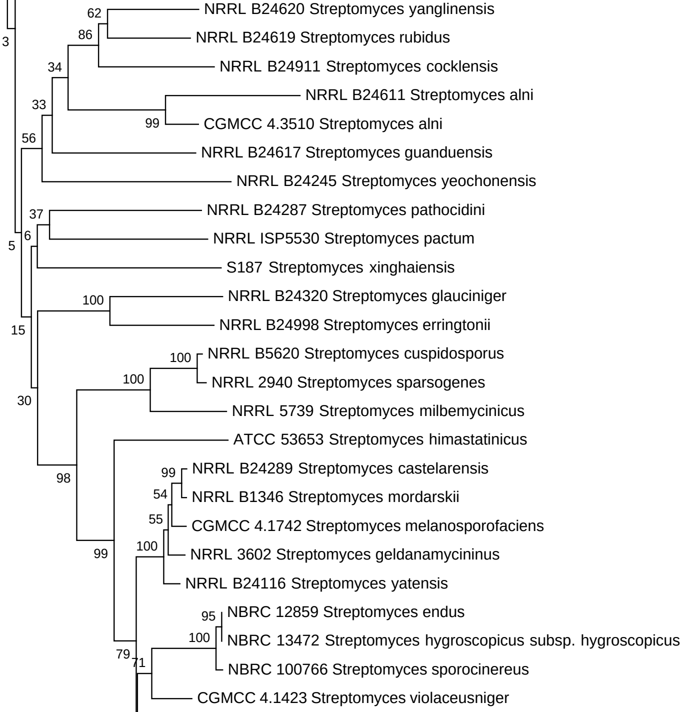

72
NRRL 2886 Streptomyces distallicus
NRRL B24286 Streptomyces syringae
96
NRRL B1831 Streptomyces kentuckensis
99
NRRL ISP5093 Streptomyces flavopersicus
100
0
100
NRRL ISP5259 Streptomyces netropsis
94
NRRL ISP5141 Streptomyces candidus
100
NRRL 3241 Streptomyces cremeus
13
CGMCC 4.1749 Streptomyces spiroverticillatus
5
NRRL B24828 Streptomyces fildesensis
NRRL B24445 Streptomyces hebeiensis
19
NRRL B24669 Streptomyces hypolithicus
100
NRRL B3826 Streptomyces peucetius subspecies peucetius
99
VV.E5
100
NRRL B12153 Streptomyces xantholiticus
87
VV.R1
45
NRRL B3366 Streptomyces kurssanovii
NRRL B3351 Streptomyces amakusaensis
0
86
NRRL 3585 Streptomyces clavuligerus
82
NRRL 18488 Streptomyces tsukubaensis
77
CGMCC 4.1928 Streptomyces pulveraceus
69
NRRL B24279 Streptomyces sanglieri
CGMCC 4.1632 Streptomyces atratus
76
100
CGMCC 4.1444 Streptomyces gelaticus
NRRL B24909 Streptomyces laculatispora
50
94
CGMCC 4.1146 Streptomyces yanii
67
NRRL B24720 Streptomyces termiticola
3
90
NRRL B24548 Streptomyces moroccanus
NRRL B24297 Streptomyces drozdowiczii
100
NRRL B24858 Streptomyces deserti
100
NRRL B16504 Kitasatospora papulosa
79
NRRL B24916 Streptomyces pratensis
87
NRRL B65393 Streptomyces mutomycini
47
NRRL ISP5137 Streptomyces atroolivaceus
CGMCC 4.1436 Streptomyces finlayi
37
NRRL B1316 Streptomyces nitrosporeus
62
100
NRRL B1329 Streptomyces flavovirens
55
82
NRRL B2094 Streptomyces nigrifaciens
100
NRRL B2925 Streptomyces griseolus
100
NRRL B1238 Streptomyces halstedii
JCM 9090 Streptomyces fulvorobeus
85
NRRL B24910 Streptomyces brevispora


74
CGMCC 4.1428 Streptomyces microflavus
99
NRRL B1229 Streptomyces lipmanii
100
NRRL B1667 Streptomyces thioluteus
96
71
DSM 40593 Streptomyces fulvissimus
CGMCC 4.1612 Streptomyces cyaneofuscatus
52
NRRL B2873 Streptomyces fluorescens
13
100
NRRL B3362 Streptomyces citreofluorescens
NRRL 2250 Streptomyces chrysomallus subspecies chrysomallus
100
NRRL B3038 Streptomyces bacillaris
95
NRRL ISP5300 Streptomyces cavourensis subspecies cavourensis
CGMCC 4.0610 Streptomyces parvus
20
72
NRRL B2872 Streptomyces globisporus subspecies globisporus
100
MC18
10
19
NRRL B2566 Streptomyces albovinaceus
CGMCC 4.0626 Streptomyces sindenensis
100
CGMCC 4.1406 Streptomyces badius
17
NRRL B2895 Streptomyces puniceus
100
NRRL ISP5322 Streptomyces fimicarius
16
NRRL B24956 Streptomyces bohaiensis
34
NRRL B2682 Streptomyces griseus subspecies griseus
OR58
81
NRRL B3736 Streptomyces longispororuber
76
NRRL B2000 Streptomyces anulatus
95
99
ATCC 11523 Streptomyces chrysomallus
100
NRRL B5386 Streptomyces albulus
96
NRRL ISP5126 Streptomyces noursei
53
NRRL B24306 Streptomyces yunnanensis
CGMCC 4.1628 Streptomyces albospinus
61
NRRL B1698 Streptomyces diastatochromogenes
71
CGMCC 4.1786 Streptomyces violens
100
CGMCC 4.1929 Streptomyces purpurogeneiscleroticus
NRRL ISP5594 Streptomyces ochraceiscleroticus
100
100
NRRL ISP5597 Streptomyces violens
97
NRRL B3857 Streptomyces niger
50
NRRL B2951 Streptomyces poonensis


100
CGMCC 4.1657 Streptomyces chrestomyceticus
99
CGMCC 4.1658 Streptomyces coelicolor
90
NRRL B3293 Streptomyces chrestomyceticus
74
NRRL B24309 Streptomyces monomycini
39
NRRL B12172 Streptomyces albofaciens
63
100
NRRL WC3868 Streptomyces peucetius
99
NRRL B2659 Streptomyces rimosus subspecies rimosus
96
99
NRRL ISP5260 Streptomyces rimosus subspecies rimosus
NRRL WC3558 Streptomyces rimosus subspecies rimosus
CGMCC 4.1760 Streptomyces rimosus subspecies paromomycinus
97
CGMCC 4.1434 Streptomyces ramulosus
40
NRRL B2342 Streptomyces catenulae
100
NRRL B2493 Streptomyces celluloflavus
49
NRRL B24288 Streptomyces kasugaensis
86
OR14
100
OR92
40
87
OR6
NRRL ISP5002 Streptomyces chattanoogensis
98
NRRL B16358 Streptomyces caniferus
61
NRRL B2347g Streptomyces angustmycinus
CGMCC 4.1412 Streptomyces lydicus
27
99
CGMCC 4.1873 Streptomyces hygroscopicus subspecies glebosus
NRRL B5486 Streptomyces platensis subspecies platensis
91
30
CGMCC 4.1993 Streptomyces libani subspecies rufus
99
CGMCC 4.1410 Streptomyces nigrescens
80
NRRL 2666 Streptomyces decoyicus
21
CGMCC 4.1414 Streptomyces tubercidicus
29
NRRL 8097 Streptomyces auratus
95
NRRL B24281 Streptomyces alboverticillatus
100
NRRL ISP5577 Streptomyces septatus
40
NRRL B1350 Streptomyces griseocarneus
NRRL B3106 Streptomyces hachijoensis
NRRL B1994 Streptomyces olivoverticillatus
98
45
100
NRRL B1548 Streptomyces viridiflavus
NRRL B5624 Streptomyces cinnamoneus subspecies albosporus
99
100
NRRL B24290 Streptomyces cinnamoneus subspecies lanosus
100
NRRL B24291 Streptomyces cinnamoneus subspecies sparsus
DSM 41675 Streptomyces sapporensis
17
100
NRRL B12432 Streptomyces griseoverticillatus


100
NRRL B2113 Streptomyces abikoensis
NRRL B1968 Streptomyces lilacinus
92
99
NRRL B1823 Streptomyces hiroshimensis
NRRL B12369 Streptomyces rectiverticillatus
100
NRRL 3117 Streptomyces fervens subspecies melrosporus
20
NRRL B1993 Streptomyces roseoverticillatus
96
100
NRRL B3500 Streptomyces baldaccii
77
NRRL B24285 Streptomyces spitsbergensis
93
NRRL ISP5272 Streptomyces biverticillatus
60
NRRL ISP5086 Streptomyces fervens subspecies fervens
23
NRRL B5464 Streptomyces parvisporogenes
62
CGMCC 4.1668 Streptomyces ehimensis
100
CGMCC 4.1662 Streptomyces abikoensis
34
100
NRRL B3103 Streptomyces kashmirensis
NRRL B12326 Streptomyces kishiwadensis
100
NRRL B8164 Streptomyces mashuensis
NRRL B24800 Streptomyces lactis
54
94
NRRL B12429 Streptomyces morookaensis
100
NRRL B3173 Streptomyces lavenduligriseus
100
NRRL B65394 Streptomyces fluorinasicus
39
NRRL B3379 Streptomyces orinoci
74
NRRL B12435 Streptomyces luteireticuli
99
NRRL ISP5587 Streptomyces ladakanum
100
NRRL B3729 Streptomyces mobaraensis
NRRL 2401 Streptomyces luteosporeus
100
NRRL ISP5222 Streptomyces misakiensis
71
NRRL B1817 Streptomyces purpeofuscus
86
CGMCC 4.1622 Streptomyces cinereorectus
KCTC 2395 Kitasatospora cheerisanensis
63
NRRL B16230 Kitasatospora phosalacinea
100
99
NRRL B16185 Kitasatospora setae
74
NRRL B3604 Streptomyces albolongus
NRRL B2218 Streptomyces aburaviensis subspecies aburaviensis
NRRL B3291 Streptomyces psammoticus
51
53
DSM 40239 Streptomyces viridifaciens
95
NRRL 2209 Streptomyces aureofaciens
100
NRRL B3447 Streptomyces avellaneus
42
NRRL B2289 Streptomyces chrysomallus subspecies fumigatus


99
NRRL B3299 Streptomyces herbaricolor
NRRL ISP5124 Streptomyces indigoferus
11
98
64
KCTC 9699 Kitasatospora azatica
98
NRRL B1588 Streptomyces cinnamonensis subspecies cinnamonensis
100
KCTC 9733 Kitasatospora mediocidica
36
NRRL B24282 Kitasatospora atroaurantiaca
NRRL B16933 Streptomyces vitaminophilus
84
DSM 41855 Streptomyces scabrisporus
12
MUSC 26 Streptomyces gilvigriseus
32
NRRL B3064 Streptomyces griseoplanus
17
37
NRRL B24636 Streptacidiphilus oryzae
34
AM16 Streptacidiphilus rugosus
39
NRRL B24540 Streptacidiphilus carbonis
61
NRRL B24555 Streptacidiphilus jeojiense
80
JL83 Streptacidiphilus albus
100
NBRC 100918 Streptacidiphilus albus
NRRL B1627 Streptomyces sulphureus
95
NRRL B24444 Streptomyces ferralitis
NRRL 8057 Streptomyces cattleya
41
NRRL B24728 Streptomyces pini
100
NRRL B24801 Streptomyces sanyaensis
15
NRRL B24580 Streptomyces radiopugnans
74
CGMCC 4.1994 Streptomyces kishiwadensis
99
99
NRRL B16372 Streptomyces megasporus
NRRL B24300 Streptomyces glaucosporus
42
CGMCC 4.5739 Streptomyces aidingensis
97
NRRL B24776 Streptomyces avicenniae
31
GW411564 Streptomyces specialis
76
MCCC 1A01550 Streptomyces xiamenensis
46
NRRL B16359 Streptomyces carpaticus
100
100
CGMCC 4.7047 Streptomyces harbinensis
9
100
NRRL B24899 Streptomyces karpasiensis
61
SCSIO 01066 Streptomyces nanshensis
SCSIO 02100 Streptomyces oceani
NRRL B24327 Streptomyces albiaxialis
26
85
100
NRRL ISP5186 Streptomyces aminophilus
39
NRRL B1220 Streptomyces cacaoi subspecies cacaoi
85
NRRL B2208 Streptomyces albus
NRRL B12378g Streptomyces rangoonensis
100
NRRL ISP5016 Streptomyces narbonensis
NRRL B24312 Streptomyces aculeolatus


62
NRRL B24620 Streptomyces yanglinensis
3
86
NRRL B24619 Streptomyces rubidus
34
NRRL B24911 Streptomyces cocklensis
33
NRRL B24611 Streptomyces alni
99
CGMCC 4.3510 Streptomyces alni
56
NRRL B24617 Streptomyces guanduensis
NRRL B24245 Streptomyces yeochonensis
37
NRRL B24287 Streptomyces pathocidini
6
5
NRRL ISP5530 Streptomyces pactum
S187 Streptomyces xinghaiensis
100
NRRL B24320 Streptomyces glauciniger
15
NRRL B24998 Streptomyces erringtonii
100
NRRL B5620 Streptomyces cuspidosporus
100
NRRL 2940 Streptomyces sparsogenes
30
NRRL 5739 Streptomyces milbemycinicus
ATCC 53653 Streptomyces himastatinicus
99
NRRL B24289 Streptomyces castelarensis
98
54
NRRL B1346 Streptomyces mordarskii
55
CGMCC 4.1742 Streptomyces melanosporofaciens
100
NRRL 3602 Streptomyces geldanamycininus
99
NRRL B24116 Streptomyces yatensis
95
NBRC 12859 Streptomyces endus
100
NBRC 13472 Streptomyces hygroscopicus subsp. hygroscopicus
79
71
NBRC 100766 Streptomyces sporocinereus
CGMCC 4.1423 Streptomyces violaceusniger