

Table 5: Species without any good quality ribosomal SSU sequence in public repositories. (Updated)**LTP_s100**

Taxon name	Author(s)	Type strain cited in its effective publication
<i>Actinomyces johnsonii</i>	Henssge et al. 2009, sp. nov.	strain ATCC 49338 = CCUG 34287.
<i>Actinomyces oris</i>	Henssge et al. 2009, sp. nov.	strain ATCC 27044 = CCUG 34288.
<i>Aerococcus viridans</i>	Williams et al. 1953, species. (Type species of the genus).	strain ATCC 11563 = CCUG 4311 = CIP 54.145 = DSM 20340 = HAMBI 1583 = IFO (now NBRC) 12219 = JCM 20461 = LMG 17931 = NCAIM B.01070 = NCTC 8251.
<i>Aeromonas hydrophila</i> subsp. <i>anaerogenes</i>	Schubert 1964, subspecies.	strain ATCC 15467 = CIP 76.15 = DSM 30188 = IFO (now NBRC) 13282 = JCM 1043 = LMG 3755.
<i>Afifella pfennigii</i>	(Caumette et al. 2007) Urdiain et al. 2009, comb. nov.	strain AR2102 = ATCC BAA-1145 = DSM 17143.
<i>Agromyces fucosus</i>	Zgurskaya et al. 1992, sp. nov.	strain ATCC 51764 = CCUG 35506 = CIP 103633 = DSM 8597 = IFO (now NBRC) 15781 = IMET 11529 = JCM 9085 = LMG 16156 = VKM Ac-1345.
<i>Albibacter methylovorans</i>	Doronina et al. 2001, sp. nov. (Type species of the genus).	strain DM10 = DSM 13819 = VKM B-2236.
<i>Alcaligenes aquatilis</i>	Van Trappen et al. 2005, sp. nov.	strain CCUG 50924 = LMG 22996.
<i>Ammonifex degensii</i>	Huber and Stetter 1996, sp. nov. (Type species of the genus).	strain KC4 = DSM 10501
<i>Angiococcus disciformis</i>	(Thaxter 1904) Hook et al. 1980, comb. nov. (Type species of the genus).	strain CMU-1 = ATCC 33172.
<i>Aquaspirillum polymorphum</i>	(Williams and Rittenberg 1957) Hylemon et al. 1973, species.	strain ATCC 11332 = CCUG 49450 = CIP 63.15 = DSM 9160 = IFO (now NBRC) 13961 = JCM 21224 = LMG 4392.
<i>Arthrobacter flavus</i>	Reddy et al. 2000, sp. nov.	strain CMS 19Y = JCM 11496 = MTCC 3476.
<i>Avibacterium endocarditidis</i>	Bisgaard et al. 2007, sp. nov.	strain 20186H4H1 = CCUG 52860 = DSM 18224.

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<i>Azospirillum amazonense</i>	Magalhães et al. 1984, sp. nov.	strain Am 14 (Y1) = ATCC 35119 = DSM 2787 = LMG 6509 = NRRL B-23163.
<i>Azospirillum largimobile</i>	corrig. (Skerman et al. 1983) Ben Dekhil et al. 1997, comb. nov.	strain ACM 2041 = UQM 2041.
<i>Bacillus subterraneus</i>	Kanso et al. 2002, sp. nov.	strain COOI3B = ATCC BAA-136 = DSM 13966.
<i>Bacillus tequilensis</i>	Gatson et al. 2006, sp. nov.	strain 10b = ATCC BAA-819 = NCTC 13306.
<i>Bacillus thermantarcticus</i>	corrig. Nicolaus et al. 2002, sp. nov.	strain M1 = BGSC 20A1 = DSM 9572.
<i>Bacteroides coagulans</i>	Eggerth and Gagnon 1933, species.	strain ATCC 29798 = CCUG 48292 = DSM 20705 = JCM 12528 = LMG 8206.
<i>Bergeyella zoohelcum</i>	(Holmes et al. 1987) Vandamme et al. 1994, comb. nov. (Type species of the genus).	strain D658 = ATCC 43767 = CCUG 12568 = CCUG 30535 = CIP 103041 = IFO (now NBRC) 16014 = JCM 21249 = LMG 8351 = LMG 12996 = NCTC 11660.
<i>Bifidobacterium bombi</i>	Killer et al. 2009, sp. nov.	strain BluCI/TP = ATCC BAA-1567 = DSM 19703.
<i>Bifidobacterium cuniculi</i>	Scardovi et al. 1979, species.	strain RA93 = AS 1.2239 = ATCC 27916 = BCRC (formerly CCRC) 14672 = CCUG 24610 = CIP 103379 = DSM 20435 = JCM 1213 = LMG 10738.
<i>Bifidobacterium thermophilum</i>	corrig. Mitsuoka 1969, species.	strain AS 1.2235 = ATCC 25525 = BCRC (formerly CCRC) 14669 = CCUG 34983 = CIP 105420 = DSM 20210 = HAMB1 111 = JCM 1207 = LMG 11573.
<i>Blastococcus saxosidens</i>	Urzi et al. 2004, sp. nov.	strain BC444 = DSM 44509 = JCM 13239 = NRRL B-24246.
<i>Blautia hansenii</i>	(Holdeman and Moore 1974) Liu et al. 2008, comb. nov.	strain ATCC 27752 = CIP 104219 = DSM 20583 = JCM 14655.
<i>Borrelia afzelii</i>	Canica et al. 1994, sp. nov.	strain VS461 = ATCC 51567 = CIP 103469 = DSM 10508.

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<i>Borrelia spielmanii</i>	Richter et al. 2006, sp. nov.	strain PC-Eq17N5 = CIP 108855 = DSM 16813.
<i>Brevinema andersonii</i>	Defosse et al. 1995, sp. nov. (Type species of the genus).	strain CT11616 = ATCC 43811.
<i>Burkholderia andropogonis</i>	(Smith 1911) Gillis et al. 1995, comb. nov.	strain ATCC 23061 = CCUG 32772 = CFBP 2421 = CIP 105771 = DSM 9511 = ICMP 2807 = JCM 10487 = LMG 2129 = NCPPB 934 = NRRL B-14296.
<i>Caldanaerobacter subterraneus subsp. subterraneus</i>	(Fardeau et al. 2000) Fardeau et al. 2004, subsp. nov.	strain ATCC BAA-225 = CNCM I-2383 = DSM 13054 = SEBR 7858.
<i>Catenococcus thiocycli</i>	corrig. Sorokin 1994, sp. nov. (Type species of the genus).	strain TG 5-3 = ATCC 51228 = DSM 9165 = LMD 92.12.
<i>Catenuloplanes niger</i>	Tamura et al. 1995, sp. nov.	strain N406-14 = ATCC 31638 = IFO (now NBRC) 14177 = JCM 9533 = VKM Ac-1964.
"<i>Chlorobaculum limnaeum</i>" **	Imhoff 2003, sp. nov.	strain DSM 1677.
"<i>Chlorobaculum parvum</i>" **	Imhoff 2003, sp. nov.	strain DSM 263
<i>Clostridium acidurici</i>	corrig. (Liebert 1909) Barker 1938, species.	strain ATCC 7906 = CIP 104303 = DSM 604 = NCCB 46094
<i>Clostridium cadaveris</i>	(Klein 1899) McClung and McCoy 1957, species.	strain ATCC 25783 = CCUG 24035 = CIP 104314 = DSM 1284 = JCM 1392.
<i>Clostridium carboxidivorans</i>	Liou et al. 2005, sp. nov.	strain P7 = ATCC BAA-624 = DSM 15243.
<i>Clostridium histolyticum</i>	(Weinberg and Séguin 1916) Bergey et al. 1923, species.	strain ATCC 19401 = BCRC (formerly CCRC) 10644 = CCUG 4854 = CIP 103713 = CN 1693 = DSM 2158 = JCM 1403 = NCIMB 503 = NCTC 503.
<i>Clostridium hungatei</i>	Monserrate et al. 2001, sp. nov.	strain AD = ATCC 700212 = DSM 14427.
<i>Clostridium josui</i>	Sukhumavasi et al. 1988, sp. nov.	strain III = FERM P-9684.

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<i>Clostridium ljungdahlii</i>	Tanner et al. 1993, sp. nov.	strain PETC = ATCC 55383 = DSM 13528.
<i>Clostridium malenominatum</i>	(Weinberg et al. 1937) Spray 1948, species.	strain ATCC 25776 = DSM 1127 = JCM 1405.
<i>Clostridium mangenotii</i>	(Prévot and Zimmès-Chaverou 1947) McClung and McCoy 1957, species.	strain ATCC 25761 = DSM 1289 = JCM 1428
<i>Clostridium oceanicum</i>	Smith 1970, species.	strain ATCC 25647 = DSM 1290 = JCM 1407 = LMG 3287.
<i>Clostridium oroticum</i>	(Wachsman and Barker 1954) Cato et al. 1968, species.	strain ATCC 13619 = DSM 1287 = JCM 1429 = LMG 3286 = NCCB 73016.
<i>Clostridium pasteurianum</i>	Winogradsky 1895, species.	strain ATCC 6013 = BCRC (formerly CCRC) 10942 = CCUG 31328 = DSM 525 = JCM 1408 = KCTC 1674 = LMG 3285 = NCIMB 9486 = VKM B-1774.
<i>Clostridium purinilyticum</i>	corrige. Dürre et al. 1981, sp. nov.	strain WA-1 = ATCC 33906 = DSM 1384
<i>Clostridium scatologenes</i>	(Weinberg and Ginsbourg 1927) Prévot 1948, species.	strain ATCC 25775 = CCUG 9283 = DSM 757 = JCM 1414 = NCTC 12992.
<i>Clostridium thermoalcaliphilum</i>	Li et al. 1994, sp. nov.	strain JW/YL23-2 = ATCC 51508 = CIP 105528 = DSM 7309.
<i>Colwellia hornerae</i>	Bowman et al. 1998, sp. nov.	strain IC035 = ACAM 607 = CIP 105821.
<i>Corynebacterium argentoratense</i>	Riegel et al. 1995, sp. nov.	strain IBS B10697 = ATCC 51927 = CCUG 34893 = CIP 104296 = DSM 44202 = JCM 10392.
<i>Corynebacterium hoagii</i>	(Morse 1912) Ebersson 1918, species.	strain ATCC 7005 = CCUG 20991 = CIP 81.17 = DSM 20295 = JCM 1319 = NCTC 10673.
<i>Corynebacterium vitaeruminis</i>	corrige. (Bechdel et al. 1928) Lanéelle et al. 1980, comb. nov.	strain ATCC 10234 = CCUG 28792 = CIP 82.7 = DSM 20294 = IFO (now NBRC) 12143 = JCM 1323 = NCIB (now NCIMB) 9291 = VKM B-1211.
<i>Desulfobacter hydrogenophilus</i>	Widdel 1988, sp. nov.	strain AcRS1 = ATCC 43915 = DSM 3380.

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<i>Desulfobacterium niacini</i>	Kuever et al. 2006, sp. nov.	strain NAV-1 = DSM 2650 = JCM 12294.
<i>Desulfotomaculum luciae</i>	Liu et al. 1997, sp. nov.	strain SLT = ATCC 700428 = DSM 12396 = SMCC W644.
<i>Desulfovibrio profundus</i>	Bale et al. 1997, sp. nov.	strain 500-1 = DSM 11384.
<i>Desulfovibrio salexigens</i>	Postgate and Campbell 1966, species.	strain ATCC 14822 = DSM 2638 = VKM B-1763.
<i>Desulfovibrio sapovorans</i>	Widdel 1981, sp. nov.	strain "Lindhorst" = 1pa3 = ATCC 33892 = DSM 2055 = LMG 7857.
<i>Desulfurococcus amylolyticus</i>	Bonch-Osmolovskaya et al. 2001, sp. nov.	strain Z-533 = DSM 3822 = JCM 9188.
<i>Ectothiorhodospira shaposhnikovii</i>	Cherni et al. 1969, species.	strain Kondratieva N1 = ATCC BAA-49 = DSM 243 = VKM B-1525.
<i>Eikenella corrodens</i>	(Eiken 1958) Jackson and Goodman 1972, species. (Type species of the genus).	strain ATCC 23834 = CCUG 2138 = CIP 70.75 = DSM 8340 = JCM 12952 = LMG 15557 = NCTC 10596.
<i>Enterobacter helveticus</i>	Stephan et al. 2007, sp. nov.	strain 513/05 = DSM 18396 = LMG 23732.
<i>Enterobacter turicensis</i>	Stephan et al. 2007, sp. nov.	strain 508/05 = DSM 18397 = LMG 23730.
<i>Entomoplasma ellychniae</i>	(Tully et al. 1989) Tully et al. 1993, comb. nov. (Type species of the genus).	strain ELCN-1 = ATCC 43707 = NCTC 11714.
<i>Erwinia billingiae</i>	Mergaert et al. 1999, sp. nov.	strain Billing E63 = CIP 106121 = LMG 2613 = NCPPB 661.
<i>Erwinia toletana</i>	Rojas et al. 2004, sp. nov.	strain A37 = ATCC 700880 = CECT 5263 = CFBP 6631.
<i>Eubacterium contortum</i>	(Prévot 1947) Holdeman et al. 1971, species.	strain ATCC 25540 = DSM 3982.

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<i>Eubacterium moniliforme</i>	(Repaci 1910) Holdeman and Moore 1970, species.	strain ATCC 25546 = CCUG 28088 = DSM 3984 = JCM 9990.
<i>Eubacterium ramulus</i>	Moore et al. 1976, species.	strain ATCC 29099 = DSM 3995.
<i>Eubacterium tarantellae</i>	corrige. Udey et al. 1977, species.	strain UM-87 = ATCC 29255 = DSM 3997.
<i>Eubacterium tenue</i>	(Bergey et al. 1923) Holdeman and Moore 1970, species.	strain ATCC 25553 = DSM 20695 = JCM 6486.
<i>Eubacterium uniforme</i>	van Gylswyk and van der Toorn 1985, sp. nov.	strain X3C39 = ATCC 35992.
<i>Fibrobacter succinogenes</i> subsp. <i>elongatus</i>	corrige. Montgomery et al. 1988, subsp. nov.	strain HM2 = ATCC 43856.
<i>Flavobacterium branchiophilum</i>	corrige. Wakabayashi et al. 1989, sp. nov.	strain BGD -7721 = ATCC 35035 = CCUG 33442 = CIP 103527 = IFO (now NBRC) 15030 = LMG 13707.
<i>Flavobacterium flevense</i>	(van der Meulen et al. 1974) Bernardet et al. 1996, comb. nov.	strain ATCC 27944 = CCUG 14832 = CIP 104740 = DSM 1076 = IFO (now NBRC) 14960 = JCM 21143 = LMG 8328.
<i>Flavobacterium pectinovorum</i>	(Reichenbach 1989) Bernardet et al. 1996, comb. nov.	strain number 81 Dorey = ATCC 19366 = CIP 104742 = DSM 6368 = IFO (now NBRC) 15945 = JCM 8518 = LMG 4031 = NCIMB 9059.
<i>Geobacillus gargensis</i>	Nazina et al. 2004, sp. nov.	strain Ga = DSM 15378 = VKM B-2300.
<i>Geotoga petraea</i>	Davey et al. 1993, sp. nov. (Type species of the genus).	strain T5 = ATCC 51226.
<i>Globicatella sanguinis</i>	corrige. Collins et al. 1995, sp. nov. (Type species of the genus).	strain 1152-78 = ATCC 51173 = CCUG 32999 = CIP 107044 = DSM 7447 = IFO (now NBRC) 15551 = LMG 18987 = NCIMB 702835 (formerly NCFB 2835).
<i>Gluconobacter kondonii</i>	Malimas et al. 2008, sp. nov.	strain K. Kondo 75 = BCC 14441 = IFO 3266 = NBRC 3266

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<i>Haemophilus haemolyticus</i>	Bergey et al. 1923, species.	strain ATCC 33390 = CCUG 12834 = CIP 103290 = NCTC 10659.
<i>Halanaerobacter chitinivorans</i>	corrige. Liaw and Mah 1996, sp. nov. (Type species of the genus).	strain W5C8 = CIP 105156 = DSM 9569 = OCM 229.
<i>Halanaerobium alcaliphilum</i>	corrige. Tsai et al. 1995, sp. nov.	strain GSLS = DSM 8275.
<i>Halobaculum gomorrense</i>	Oren et al. 1995, sp. nov. (Type species of the genus).	strain ATCC 700876 = DS2807 = DSM 9297 = JCM 9908.
<i>Halorhodospira halochloris</i>	(Imhoff and Trüper 1979) Imhoff and Süling 1997, comb. nov.	strain BN 9850 = ATCC 35916 = DSM 1059.
<i>Halorubrum tebenquichense</i>	Lizama et al. 2002, sp. nov.	strain ALT6-92 = CECT 5317 = DSM 14210 = JCM 12290
<i>Halothiobacillus neapolitanus</i>	(Parker 1957) Kelly and Wood 2000, comb. nov. (Type species of the genus).	strain Parker strain X = CIP 104769 = DSM 15147 = NCIMB 8539.
<i>Heliophilum fasciatum</i>	Ormerod et al. 1996, sp. nov. (Type species of the genus).	strain Tanzania = ATCC 51790 = DSM 11170.
<i>Heliobacterium oregonense</i>	Pierson et al. 1986, sp. nov. (Type species of the genus).	strain IS/F-1
<i>Hydrogenophilus hirschii</i>	Stöhr et al. 2001, sp. nov.	strain Yel5a = CIP 107057 = DSM 11420 = JCM 10831.
<i>Iodobacter fluviatilis</i>	corrige. (Moss et al. 1981) Logan 1989, comb. nov. (Type species of the genus).	strain Logan C009 = 165 = ATCC 33051 = CCUG 30103 = CIP 103351 = DSM 3764 = JCM 9044 = LMG 6630 = NCTC 11159.
<i>Kineosporia rhizophila</i>	Kudo et al. 1998, sp. nov.	strain I-449 = CIP 105754 = DSM 44389 = IFO (now NBRC) 16233 = JCM 9960.
<i>Lachnospira multipara</i>	Bryant and Small 1956 (Approved Lists 1980)	strain ATCC 19207 = DSM 3073
<i>Lachnospira pectinoschiza</i>	Cornick et al. 1994	strain 150-1 = ATCC 49827

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<i>Lactobacillus aviarius</i> subsp. <i>araffinosus</i>	Fujisawa et al. 1986	strain ML2 = ATCC 43235 = DSM 20653 = CCUG 32231 = CIP 103145 = JCM 5667
<i>Lactobacillus bifermentans</i>	(ex Pette and van Beynum 1943) Kandler et al. 1983	strain ATCC 35409 = CCUG 32234 = CIP 102811 = DSM 20003 = JCM 1094 = LMG 9845
<i>Lactobacillus fermentum</i>	Beijerinck 1901 (Approved Lists 1980)	strain ATCC 14931 = CCUG 30138 = CIP 102980 = DSM 20052 = IFO (now NBRC) 15885 = JCM 1173 = LMG 6902 = NCCB 46038 = NCIMB 11840 (formerly NCDO 1750) = NRRL B-4524
<i>Lactobacillus fuchuensis</i>	Sakala et al. 2002	strain B5M10 = CCUG 47133 = DSM 14340 = JCM 11249
<i>Lactobacillus leichmannii</i>	(Henneberg 1903) Bergey et al. 1923 (Approved Lists 1980)	strain ATCC 4797 = LMG 13136 = NCCB 49006
<i>Lactobacillus siliginis</i>	Aslam et al. 2006	strain M1-212 = KCTC 3985 = NBRC 101315
<i>Lactococcus garvieae</i>	(Collins et al. 1984) Schleifer et al. 1986	strain ATCC 43921 = CCUG 32208 = CIP 102507 = DSM 20684 = HAMB1 1592 = JCM 10343 = JCM 12256 = LMG 8893 = NCIMB 702155 (formerly NCDO 2155)
<i>Legionella hackeliae</i>	Brenner et al. 1985, sp. nov.	strain Lansing 2 = ATCC 35250 = CCUG 31232 A = CIP 103844 = JCM 7563 = NCTC 11979.
<i>Legionella pneumophila</i> subsp. <i>fraseri</i>	Brenner et al. 1989, subsp. nov.	strain Los Angeles 1 = ATCC 33156 = CCUG 13398 = CIP 103858 = DSM 7514.
<i>Legionella spiritensis</i>	Brenner et al. 1985, sp. nov.	strain Mount Saint Helens 9 = ATCC 35249 = CCUG 29715 = CCUG 31118 = CIP 103850 = JCM 7562 = NCTC 11990.
<i>Marinilabilia salmonicolor</i>	(Veldkamp 1961) Nakagawa and Yamasato 1996, comb. nov. (Type species of the genus).	strain ATCC 19041 = CIP 104809 = DSM 6480 = IFO (now NBRC) 15948 = JCM 21150 = LMG 1346.
<i>Methanobacterium espanolae</i>	Patel et al. 1990, sp. nov.	strain GP9 = DSM 5982 = NRC 5912 = OCM 178.
<i>Methanobacterium thermaggregans</i>	corrige. Blotevogel and Fischer 1988, sp. nov.	strain ATCC 43168 = DSM 3266 = OCM 141 = VKM B-1959.

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<i>Methanobrevibacter oralis</i>	Ferrari et al. 1995, sp. nov.	strain ZR = DSM 7256.
<i>Methanococcoides methylutens</i>	Sowers and Ferry 1985, sp. nov. (Type species of the genus).	strain TMA-10 = ATCC 33938 = DSM 2657 = OCM 158.
<i>Methanococcus maripaludis</i>	Jones et al. 1984, sp. nov.	strain JJ = ATCC 43000 = DSM 2067 = JCM 10722 = OCM 175.
<i>Methanococcus voltae</i>	Balch and Wolfe 1981, sp. nov.	strain PS = ATCC 33273 = DSM 1537 = NBRC 100457 = OCM 70 (OGC 70).
<i>Methanocorpusculum sinense</i>	strain SZSXXZ	strain China Z = DSM 4274 = OCM 128.
<i>Methanogenium cariaci</i>	Romesser et al. 1981, sp. nov. (Type species of the genus).	strain JR1 = ATCC 35093 = DSM 1497 = JCM 10550 = OCM 49.
<i>Methanogenium frigidum</i>	Franzmann et al. 1997, sp. nov.	strain Ace-2 = OCM 469 = SMCC 459W.
<i>Methanohalobium evestigatum</i>	corrig. Zhilina and Zavarzin 1988, sp. nov. (Type species of the genus).	strain Z-7303 = DSM 3721 = OCM 161.
<i>Methanolobus bombayensis</i>	Kadam et al. 1994, sp. nov.	strain B-1 = DSM 7082 = OCM 438.
<i>Methanoplanus endosymbiosus</i>	van Bruggen et al. 1986, sp. nov.	strain MC1 = DSM 3599.
<i>Methanosarcina siciliae</i>	(Stetter and König 1989) Ni et al. 1994, comb. nov.	strain T4/M = DSM 3028 = OCM 156.
<i>Methanosarcina vacuolata</i>	Zhilina and Zavarzin 1987, sp. nov.	strain Z-761 = ATCC 35090 = DSM 1232 = OCM 85.
<i>Methanothermus sociabilis</i>	Stetter 1986, sp. nov.	strain Kf1-FI = DSM 3496 = JCM 10723 = OCM 173.
<i>Methanotorris igneus</i>	(Burggraf et al. 1990) Whitman 2002, comb. nov. (Type species of the genus).	strain Kol 5 = DSM 5666 = JCM 11834.

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<i>Methylobacillus glycogenes</i>	Yordy and Weaver 1977, species. (Type species of the genus).	strain TK 0113 = Yordy and Weaver T-11 = ATCC 29475 = DSM 5685 = JCM 2850 = LMG 6082 = NCIB (now NCIMB) 11375 = VKM B-2060.
<i>Methylopila helvetica</i>	Doronina et al. 2000, sp. nov.	strain DM9 = CIP 106788 = VKM B-2189.
<i>Microvirga subterranea</i>	Kanso and Patel 2003, sp. nov. (Type species of the genus).	strain FaiI4 = ATCC BAA-295 = DSM 14364.
<i>Moraxella lincolnii</i>	Vandamme et al. 1993, sp. nov.	strain ATCC 51388 = CCUG 9405 = CIP 103802 = LMG 5127.
<i>Moraxella oblonga</i>	Xie and Yokota 2005, sp. nov.	strain ATCC 29468 = IAM 14971 = ICPB 3652 = JCM 21442.
<i>Moraxella osloensis</i>	Bøvre and Henriksen 1967, species	strain A1920 = ATCC 19976 = CCUG 350 = CIP 68.35 = DSM 6998 = LMG 5131 = NCTC 10465.
<i>Myceligenersans crystallogenes</i>	Groth et al. 2006, sp. nov.	strain CD12E2-27 = DSM 17134 = HKI 0369 = JCM 14326 = NCIMB 14061 = VTT E-032285.
<i>Mycobacterium bovis</i>	rlson and Lessel 1970, species.	strain ATCC 19210 = CIP 105234 = NCTC 10772.
<i>Mycobacterium fortuitum</i> subsp. <i>acetamidolyticum</i>	Tsukamura et al. 1986, subsp. nov.	strain NCH E11620 = ATCC 35931 = CIP 105423 = DSM 44220 = JCM 6368.
<i>Mycobacterium haemophilum</i>	Sompolinsky et al. 1978, species.	strain ATCC 29548 = CCUG 47452 = CIP 105049 = DSM 44634 = NCTC 11185.
<i>Mycobacterium interjectum</i>	Springer et al. 1995, sp. nov.	strain 4185/92 = ATCC 51457 = CCUG 37514 = DSM 44064.
<i>Mycobacterium madagascariense</i>	Kazda et al. 1992, sp. nov.	strain P2 = ATCC 49865 = CIP 104538 = JCM 13574.
<i>Mycobacterium murale</i>	Vuorio et al. 1999, sp. nov.	strain MA112/96 = CCUG 39728 = CIP 105980 = DSM 44340 = HAMB1 2320 = JCM 13392.
<i>Mycobacterium sphagni</i>	Kazda 1980, sp. nov.	strain Sph 38 = ATCC 33027 = DSM 44076.

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<i>Mycobacterium ulcerans</i>	MacCallum et al. 1950, species.	strain ATCC 19423 = CIP 105425 = NCTC 10417.
<i>Mycoplasma hyopneumoniae</i>	Maré and Switzer 1965, species.	strain ATCC 25934 = NCTC 10110.
<i>Natranaerobius trueperi</i>	Mesbah and Wiegel 2009, sp. nov.	strain JW/NM-WN-LU = ATCC BAA-1443 = DSM 18760.
<i>Neisseria cinerea</i>	(von Lingelsheim 1906) Murray 1939, species.	strain ATCC 14685 = CCUG 346 = CCUG 2156 = CIP 73.16 = DSM 4630 = LMG 8380 = NCTC 10294.
<i>Neisseria elongata</i> subsp. <i>nitroreducens</i>	Grant et al. 1991, subsp. nov.	strain B1019 = ATCC 49377 = CCUG 30802 = CIP 103511 = NCTC 12736.
<i>Neisseria iguanae</i>	Barrett et al. 1994, sp. nov.	strain NVSL 85737 = ATCC 51483.
<i>Neisseria macacae</i>	Vedros et al. 1983, sp. nov.	strain M-740 = ATCC 33926 = CIP 103346.
<i>Neisseria meningitidis</i>	(Albrecht and Ghon 1901) Murray 1929, species.	strain Sara E. Branham M1027 = ATCC 13077 = CCUG 3269 = CIP 73.10 = DSM 10036 = NCTC 10025.
<i>Neisseria mucosa</i>	Véron et al. 1959, species.	strain ATCC 19696 = CCUG 26877 = CIP 59.51 = JCM 12992 = NCTC 12978.
<i>Neisseria perflava</i>	Bergey et al. 1923, species.	strain ATCC 10555 = CCUG 17915 = LMG 5284 = NRRL B-1790.
<i>Neisseria sicca</i>	(von Lingelsheim 1908) Bergey et al. 1923, species.	strain ATCC 29256 = CCUG 23929 = CCUG 24959 = CIP 103345 = LMG 5290 = NRL 30,016.
<i>Nitrococcus mobilis</i>	Watson and Waterbury 1971, species. (Type species of the genus).	strain ATCC 25380 = CIP 104751.
"<i>Nitrosomonas aestuarii</i>" **	Koops et al. 2001, sp. nov.	strain Nm 36 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).
"<i>Nitrosomonas communis</i>" **	Koops et al. 2001, sp. nov.	strain Nm 2 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).

Table 5: Species without any good quality ribosomal SSU sequence in public repositories. (Updated)**LTP_s100**

Taxon name	Author(s)	Type strain cited in its effective publication
"<i>Nitrosomonas halophila</i>" **	Koops et al. 2001, sp. nov.	strain Nm 1 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).
"<i>Nitrosomonas marina</i>" **	Koops et al. 2001, sp. nov.	strain Nm 22 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).
"<i>Nitrosomonas nitrosa</i>" **	Koops et al. 2001, sp. nov.	strain Nm 90 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).
"<i>Nitrosomonas oligotropha</i>" **	Koops et al. 2001, sp. nov.	strain Nm 45 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).
"<i>Nitrosomonas ureae</i>" **	Koops et al. 2001, sp. nov.	strain Nm 10 (Deposited at the culture collection of the Institut für allgemeine Botanik, Mikrobiologische Abteilung, Universität Hamburg, Germany.).
<i>Nitrospira tenuis</i>	(ex Harms et al. 1976) Head et al. 1995, nom. rev., comb. nov.	strain Nv-1 (stored in stock culture in the Institut für Allgemeine Botanik, Abteilung Mikrobiologie, Hamburg, Germany).
<i>Nocardia globerula</i>	(Gray 1928) Waksman and Henrici 1948, species.	strain ATCC 19370 = DSM 44596 = JCM 7475.
<i>Nocardia mexicana</i>	Rodríguez-Nava et al. 2006, sp. nov.	strain CIP 108295 = DSM 44952 = JCM 14590.
<i>Oceanospirillum linum</i>	(Williams and Rittenberg 1957) Hylemon et al. 1973, species. (Type species of the genus).	strain ATCC 11336 = CIP 103374 = DSM 6292 = IFO (now NBRC) 15448 = LMG 5214 = VKM B-1416.
<i>Olleya marilimosa</i>	Mancuso Nichols et al. 2005, sp. nov. (Type species of the genus).	strain CAM030 = ACAM 1065 = CIP 108537.
<i>Pantoea punctata</i>	Kageyama et al. 1992, sp. nov.	strain SHS 2006 = ATCC 31626 = CCUG 30159 = CIP 105598 = DSM 13700 = JCM 8885.
<i>Pantoea stewartii subsp. indologenes</i>	Mergaert et al. 1993, subsp. nov.	strain ATCC 51785 = CIP 104006 = ICMP 77 = LMG 2632 = NCPPB 2280.
<i>Pantoea terrea</i>	Kageyama et al. 1992, sp. nov.	strain SHS 2008 = ATCC 31628 = CCUG 30161 = CIP 105600 = DSM 13701 = JCM 8887.

Table 5: Species without any good quality ribosomal SSU sequence in public repositories. (Updated)**LTP_s100**

Taxon name	Author(s)	Type strain cited in its effective publication
<i>Pectinatus cerevisiiphilus</i>	Lee et al. 1978, species. (Type species of the genus).	strain ATCC 29359 = DSM 20467 = HAMBI 1348.
<i>Pectinatus frisingensis</i>	Schleifer et al. 1990, sp. nov.	strain ATCC 33332 = CCUG 43283 = DSM 6306 = HAMBI 1347.
<i>Pelistega europaea</i>	Vandamme et al. 1998, sp. nov. (Type species of the genus).	strain Homme N57 = ATCC 700725 = CCUG 39967 = CIP 105809 = CIP 105842 = LMG 10982.
<i>Persicivirga xylanidelens</i>	O'Sullivan et al. 2006, sp. nov. (Type species of the genus).	strain SW256 = DSM 16809 = NCIMB 14027.
<i>Petrotoga miotherma</i>	Davey et al. 1993, sp. nov. (Type species of the genus).	strain 42-6 = ATCC 51224 = DSM 10691.
<i>Phaeospirillum molischianum</i>	(Giesberger 1947) Imhoff et al. 1998, comb. nov.	strain ATCC 14031 = DSM 120 = LMG 4354.
<i>Polaribacter glomeratus</i>	(McGuire et al. 1988) Gosink et al. 1998, comb. nov.	strain ACAM 171 = ATCC 43844 = CIP 103112 = LMG 13858 = UQM 3055.
<i>Porphyromonas crevioricanis</i>	Hirasawa and Takada 1994, sp. nov.	strain NUM 402 = ATCC 55563.
<i>Porphyromonas gingivicanis</i>	Hirasawa and Takada 1994, sp. nov.	strain NUM 301 = ATCC 55562.
<i>Propionicimonas paludicola</i>	Akasaka et al. 2003, sp. nov. (Type species of the genus).	strain Wd = DSM 15597 = JCM 11933.
<i>Providencia burhodogranariaea</i>	Juneja and Lazzaro 2009, sp. nov.	strain B = ATCC BAA-1590 = DSM 19968.
<i>Providencia sneebia</i>	Juneja and Lazzaro 2009, sp. nov.	strain A = ATCC BAA-1589 = DSM 19967.
<i>Pseudonocardia alaniniphila</i>	(Xu et al. 1999) Huang et al. 2002, comb. nov.	strain Y-16303 = AS 4.1536 = CCTCC AA 97001 = DSM 44660 = JCM 11837.
<i>Pseudonocardia aurantiaca</i>	(Xu et al. 1999) Huang et al. 2002, comb. nov.	strain Y-14860 = AS 4.1537 = CCTCC AA 97002 = JCM 11838.

Table 5: Species without any good quality ribosomal SSU sequence in public repositories. (Updated)**LTP_s100**

Taxon name	Author(s)	Type strain cited in its effective publication
<i>Psychrobacter adeliensis</i>	Shivaji et al. 2005, sp. nov.	strain SJ 14 = DSM 15333 = MTCC 4825.
<i>Psychroflexus gondwanensis</i>	corrige. (Dobson et al. 1993) Bowman et al. 1999, comb. nov.	strain ACAM 44 = ATCC 51278 = CCUG 33444 = CIP 104040 = DSM 5423 = LMG 13192.
<i>Pyrodictium abyssi</i>	Pley and Stetter 1991, sp. nov.	strain AV2 = ATCC 49828 = DSM 6158 = JCM 9394 = NBRC 100439.
<i>Rhodobium pfennigii</i>	Caumette et al. 2007, sp. nov.	strain AR2102 = ATCC BAA-1145 = DSM 17143.
<i>Rhodoblastus acidophilus</i>	(Pfennig 1969) Imhoff 2001, comb. nov. (Type species of the genus).	strain Pfennig 7050 = ATCC 25092 = CIP 103962 = DSM 137 = LMG 4304.
"<i>Rhodoferax antarcticus</i>" **	Madigan et al. 2001, sp. nov.	strain ANT.BR = ATCC 700587.
<i>Rhodomicrobium vannielii</i>	Duchow and Douglas 1949, species. (Type species of the genus).	strain ATCC 17100 = DSM 162 = LMG 4299.
<i>Rhodovibrio sodomensis</i>	(Mack et al. 1996) Imhoff et al. 1998, comb. nov.	strain DSI = ATCC 51195 = DSM 9895.
<i>Rickettsia peacockii</i>	Niebylski et al. 1997, sp. nov.	strain Skalkaho =
<i>Roseburia cecicola</i>	Stanton and Savage 1983, sp. nov. (Type species of the genus).	strain GM = ATCC 33874.
<i>Roseibacterium elongatum</i>	Suzuki et al. 2006, sp. nov. (Type species of the genus).	strain OCh 323 = CIP 107377 = JCM 11220.
<i>Roseospira mediosalina</i>	Imhoff et al. 1998, sp. nov. (Type species of the genus).	strain BN 280.
<i>Saccharopolyspora hordei</i>	Goodfellow et al. 1989, sp. nov.	strain A54 = ATCC 49856 = DSM 44065 = IFO (now NBRC) 15046 = JCM 8090 = NCIB (now NCIMB) 12824 = NRRL B-16507.
<i>Saccharopolyspora rectivirgula</i>	(Krasil'nikov and Agre 1964) Korn-Wendisch et al. 1989, comb. nov.	strain ATCC 33515 = DSM 43747 = IFO (now NBRC) 12464 = INMI 683 = JCM 3057 = NRRL B-16280 = VKM Ac-810.

Table 5: Species without any good quality ribosomal SSU sequence in public repositories. (Updated)**LTP_s100**

Taxon name	Author(s)	Type strain cited in its effective publication
<i>Saprospira grandis</i>	Gross 1911, species. (Type species of the genus).	strain ATCC 23119 = JCM 21750 = LMG 10407.
<i>Selenomonas lactificifex</i>	Schleifer et al. 1990, sp. nov.	strain VB4b = ATCC 49690 = DSM 20757.
<i>Shewanella profunda</i>	Toffin et al. 2004, sp. nov.	strain LT13a = DSM 15900 = JCM 12080.
<i>Shewanella sediminis</i>	Zhao et al. 2005, sp. nov.	strain HAW-EB3 = DSM 17055 = NCIMB 14036.
<i>Sphaerotilus natans</i>	Kützing 1833, species. (Type species of the genus).	strain ATCC 13338 = DSM 6575 = LMG 7172.
<i>Spirillum volutans</i>	Ehrenberg 1832, species. (Type species of the genus).	strain ATCC 19554.
<i>Spirochaeta aurantia subsp. aurantia</i>	(ex Vinzent 1926) Canale-Parola 1980, subsp. nov.	strain J1 = ATCC 25082 = DSM 1902.
<i>Spirochaeta isovalerica</i>	Harwood and Canale-Parola 1983, sp. nov.	strain MA-2 = ATCC 33939 = DSM 2461.
<i>Spirochaeta litoralis</i>	(ex Hespell and Canale-Parola 1970) Canale-Parola 1980, sp. nov., nom. rev.	strain R1 = ATCC 27000 = DSM 2029.
<i>Spirochaeta stenostrepta</i>	Zuelzer 1912, species.	strain ATCC 25083 = DSM 2028.
<i>Spirochaeta zuelzeriae</i>	(ex Veldkamp 1960) Canale-Parola 1980, sp. nov., nom. rev.	strain ATCC 19044 = DSM 1903.
<i>Spiroplasma apis</i>	Mouches et al. 1984, sp. nov.	strain B31 = ATCC 33834.
<i>Spiroplasma clarkii</i>	Whitcomb et al. 1993, sp. nov.	strain CN-5 = ATCC 33827.
<i>Spiroplasma diabroticae</i>	Carle et al. 1997, sp. nov.	strain DU-1 = ATCC 43210.
<i>Spiroplasma ixodetis</i>	Tully et al. 1995, sp. nov.	strain Y32 = ATCC 33835.

Table 5: Species without any good quality ribosomal SSU sequence in public repositories. (Updated)**LTP_s100**

Taxon name	Author(s)	Type strain cited in its effective publication
<i>Spiroplasma leucomae</i>	Oduori et al. 2005, sp. nov.	strain SMA = ATCC BAA-521 = NBRC 100392.
<i>Spiroplasma mirum</i>	Tully et al. 1982, sp. nov.	strain SMCA (suckling mouse cataract agent) = ATCC 29335 = CIP 103925.
<i>Spiroplasma monobiae</i>	itcomb et al. 1993, sp. nov.	strain MQ-1 = ATCC 33825.
<i>Spiroplasma taiwanense</i>	Abalain-Colloc et al. 1988, sp. nov.	strain CT-1 = ATCC 43302.
<i>Sporohalobacter lortetii</i>	(Oren 1984) Oren et al. 1988, comb. nov. (Type species of the genus).	strain MD-2 = ATCC 35059 = DSM 3070.
<i>Sporomusa termitida</i>	Breznak et al. 1990, sp. nov.	strain JSN = ATCC 49683 = DSM 4440.
<i>Sporosarcina pasteurii</i>	(Miquel 1889) Yoon et al. 2001, comb. nov.	strain ATCC 11859 = CCUG 7425 = CIP 66.21 = DSM 33 = LMG 7130 = NCCB 48021 = NCTC 4822 = NRRL NRS-673 = VKM B-513.
<i>Staphylococcus muscae</i>	Hájek et al. 1992, sp. nov.	strain MB4 = ATCC 49910 = CCUG 36972 = CCM 4175 = CIP 103641 = DSM 7068.
<i>Streptococcus acidominimus</i>	Ayers and Mudge 1922, species.	strain ATCC 51725 = CCUG 27296 = CIP 82.4 = DSM 20622 = LMG 17755 = NCIMB 702025 (formerly NCDO 2025) = NCTC 12957.
<i>Streptococcus pluranimalium</i>	Devriese et al. 1999, sp. nov.	strain T70 = ATCC 700864 = CCUG 43803 = CIP 106120 = LMG 14177.
<i>Streptomyces echinoruber</i>	Palleroni et al. 1981, sp. nov.	strain X-14077 = AC 4.1707 = DSM 41696 = IFO (now NBRC) 14238 = JCM 5016 = KCTC 9725 = NCIMB 12831 = NRRL 8144.
"<i>Syntrophomonas bryantii</i>" *	(Stieb and Schink 1985) Wu et al. 2006, comb. nov.	strain CuCal = DSM 3014A (co-culture with <i>Desulfovibrio</i> sp., E70) = DSM 3014B (co-culture with <i>Methanospirillum hungatei</i> , strain M1h).
"<i>Syntrophus aciditrophicus</i>" **	Jackson et al. 2001, sp. nov.	strain SB = ATCC 700169.
<i>Tetrasphaera remsis</i>	Osman et al. 2007, sp. nov.	strain 3-M5-R-4 = ATCC BAA-1496 = CIP 109413

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Taxon name	Author(s)	Type strain cited in its effective publication
<i>Thermanaerovibrio velox</i>	Zavarzina et al. 2000, sp. nov.	strain Z-9701 = DSM 12556.
<i>Thermoanaerobacterium thermosaccharolyticum</i>	(McClung 1935) Collins et al. 1994, comb. nov.	strain ATCC 7956 = DSM 571 = HAMBI 2225 = LMG 2811.
<i>Thermochromatium tepidum</i>	(Madigan 1986) Imhoff et al. 1998, comb. nov. (Type species of the genus).	strain MC = ATCC 43061 = DSM 3771.
<i>Thermococcus litoralis</i>	Neuner et al. 2001, sp. nov.	strain NS-C = ATCC 51850 = DSM 5473 = JCM 8560.
<i>Thermosinus carboxydivorans</i>	Sokolova et al. 2004, sp. nov. (Type species of the genus).	strain Nor1 = DSM 14886 = VKM B-2281.
<i>Thermothrix thiopara</i>	Caldwell et al. 1981, sp. nov. (Type species of the genus).	strain ATCC 29244.
<i>Thermus filiformis</i>	Hudson et al. 1987, sp. nov.	strain Wai33 A1 = ATCC 43280 = DSM 4687 = JCM 11600.
<i>Thiocapsa pendens</i>	(Molisch 1906) Guyoneaud et al. 1998, comb. nov.	strain 1314, Klein-Kalden = DSM 236.
<i>Thiomonas thermosulfata</i>	(Shooner et al. 1996) Moreira and Amils 1997, comb. nov.	strain ATCC 51520.
<i>Thiothrix fructosivorans</i>	Howarth et al. 1999, sp. nov.	strain Q = ATCC 49748.
<i>Tissierella creatinini</i>	Farrow et al. 1995, sp. nov.	strain BN11 = CIP 104584 = DSM 9508.
<i>Treponema bryantii</i>	Stanton and Canale-Parola 1980, sp. nov.	strain RUS-1 = ATCC 33254 = DSM 1788.
<i>Treponema pectinovorum</i>	Smibert and Burmeister 1983, sp. nov.	strain ATCC 33768 = VPI D-36DR-2.
<i>Vibrio aerogenes</i>	Shieh et al. 2000, sp. nov.	strain FG1 = ATCC 700797 = BCRC (formerly CCRC) 17041 = CAIM 906 = CCUG 43576 = DSM 14438 = LMG 19650.

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Taxon name	Author(s)	Type strain cited in its effective publication
<i>Vibrio navarrensis</i>	Urdaci et al. 1991, sp. nov.	strain 1397-6 = ATCC 51183 = CAIM 609 = CCUG 28805 = CIP 103381 = LMG 15976.
<i>Xanthomonas alfalfae</i> subsp. <i>alfalfae</i>	(ex Riker et al. 1935) Schaad et al. 2007, subsp. nov.	strain ICPB 10701 = ATCC 11765 = LMG 495.
<i>Xanthomonas alfalfae</i> subsp. <i>citrumelonis</i>	Schaad et al. 2007, subsp. nov.	strain ICPB 10483 = ATCC 49120 = ICMP 15808 = LMG 9325.
<i>Xanthomonas citri</i> subsp. <i>citri</i>	(ex Hasse 1915) Gabriel et al. 1989, subsp. nov.	strain 3213 = ATCC 49118 = ICMP 15804 = ICPB 10518 = LMG 9322.
<i>Xanthomonas citri</i> subsp. <i>malvacearum</i>	(ex Smith 1901) Schaad et al. 2007, subsp. nov., nom. rev.	strain ICPB 10528 = ATCC 9924 = ICMP 217 = LMG 785 (see footnote 2).
<i>Xanthomonas fuscans</i> subsp. <i>aurantifolii</i>	Schaad et al. 2007, subsp. nov.	strain ICMP 15806 = ICPB 10470 = NCPPB 3236 = CFBP 2901.
<i>Xanthomonas fuscans</i> subsp. <i>fuscans</i>	Schaad et al. 2007, subsp. nov.	strain ICPB 10520 = ATCC 19315 = ICMP 239 = LMG 826 = NCPPB 381.
<i>Zymophilus paucivorans</i>	Schleifer et al. 1990, sp. nov.	strain AA1 = ATCC 49689 = DSM 20756.

* Do not meet the criteria required by the *Bacteriological Code* (1990 revision), or they are incorrect, or they are rejected.

** Do not meet the criteria required by the *Bacteriological Code* (1990 revision), or they are incorrect, or they are rejected, but they are cited in the Request for an Opinion by Euzéby and Tindall (Int. J. Syst. Evol. Microbiol., 2004, 54, 293-301).