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Table S1. List of species/strains of complete 16S rRNA gene collected and aligned for design of specific primer and probe sets.

Bacteria species/strain	GenBank accession number
Lactobacilli (Back to table of contents)	
1. Lactobacillus delbrueckii strain UFV H2b20	EF015468.1
2. Lactobacillus brevis strain I218	EF412983.1
3. Lactobacillus brevis strain I25	EF412981.1
4. Lactobacillus brevis strain I12	EF412979.1
5. Lactobacillus brevis strain I211	EF412982.1
6. Lactobacillus brevis strain I23	EF412980.1
7. Lactobacillus salivarius strain ATCC 11741	AF089108.2
8. Lactobacillus sp. JKD6	AF264701.2
9. Lactobacillus manihotivorans strain OND 32	AF000162.1
10. Lactobacillus mucosae	AF126738.1
11. Lactobacillus manihotivorans strain YAM I	AF000163.1
12. Lactobacillus oeni strain 59b	AY681127.2
13. Lactobacillus uvarum strain 8	AY681126.2
14. Lactobacillus sp. 34-10B	AY960573.1
15. Lactobacillus sp. 459	AY681135.1
16. Lactobacillus sp. 166	AY681133.1
17. Lactobacillus vini strain 116	AY681131.1
18. Lactobacillus sp. 71	AY681129.1
19. Lactobacillus bobalius strain 203	AY681134.1
20. Lactobacillus vini strain 154	AY681132.1
21. Lactobacillus sp. 88	AY681130.1
22. Lactobacillus uvarum strain 68	AY681128.1
23. Lactobacillus brevis strain RO97	AF515219.1
24. Lactobacillus plantarum strain RO7	AF515222.1

25. <i>Lactobacillus brevis</i> strain RO66	AF515220.1
26. <i>Lactobacillus suntoryeus</i> strain IDCC 3101	EF533989.1
27. <i>Lactobacillus suntoryeus</i> strain LH4	AY675250.1
28. <i>Lactobacillus suntoryeus</i> strain LH5	AY675251.1
29. <i>Lactobacillus</i> sp. KR3	AF333975.1
30. <i>Lactobacillus salivarius</i> subsp. <i>salivarius</i>	AF335475.1
31. <i>Lactobacillus gasseri</i> strain ATCC 33323	AF519171.1
32. <i>Lactobacillus thailandensis</i>	AB257863.1
33. <i>Lactobacillus camelliae</i>	AB257864.1
34. <i>Lactobacillus plantarum</i>	AB326301.1
35. <i>Lactobacillus fabifermentans</i>	AM905388.1
36. <i>Lactobacillus cacaonum</i>	AM905389.1
37. <i>Lactobacillus pantheris</i> strain LMG 21017	NR_025189.1
38. <i>Lactobacillus mucosae</i> strain CCUG 43179	NR_024994.1
39. <i>Lactobacillus manihotivorans</i> strain OND 32	NR_024835.1
40. <i>Lactobacillus nantensis</i> strain LP33	AY690834.1
41. <i>Lactobacillus salivarius</i> strain KLB39	AY112743.2
42. <i>Lactobacillus</i> sp. NGRI 0130	AB362984.1
43. <i>Lactobacillus</i> sp. NGRI 0001	AB362983.1
44. <i>Lactobacillus plantarum</i>	AB362982.1
45. <i>Lactobacillus rhamnosus</i> strain IDCC 3201	EF533991.1
46. <i>Lactobacillus acidophilus</i> strain IDCC 3301	EF533992.1
47. <i>Lactobacillus gasseri</i> strain IDCC 3102	EF533990.1
48. <i>Lactobacillus rhamnosus</i> isolate 5D	AY773957.1
49. <i>Lactobacillus paracasei</i> isolate 9C	AY773955.1
50. <i>Lactobacillus paracasei</i> isolate 3C	AY773953.1
51. <i>Lactobacillus paracasei</i> subsp. <i>paracasei</i> strain BCRC12193	AY773951.1
52. <i>Lactobacillus delbrueckii</i> subsp. <i>delbrueckii</i> strain BCRC12195	AY773949.1
53. <i>Lactobacillus acidophilus</i> strain BCRC10695	AY773947.1
54. <i>Lactobacillus casei</i> strain BCRC10697	AY773945.1
55. <i>Lactobacillus rhamnosus</i> isolate 11D	AY773958.1
56. <i>Lactobacillus paracasei</i> isolate 10C	AY773956.1
57. <i>Lactobacillus paracasei</i> isolate 4C	AY773954.1
58. <i>Lactobacillus paracasei</i> isolate 2C	AY773952.1
59. <i>Lactobacillus delbrueckii</i> subsp. <i>lactis</i> strain BCRC11051	AY773950.1
60. <i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> strain BCRC10696	AY773948.1

61. Lactobacillus sp. BCRC16000	AY773946.1
62. Lactobacillus fermentum strain PL9005	AF477498.1
63. Lactobacillus paracasei	AY735405.2
64. Lactobacillus rhamnosus strain P15	AY852248.1
65. Lactobacillus ultunensis	AY253660.1
66. Lactobacillus gastricus	AY253658.1
67. Lactobacillus antri	AY253659.1
68. Lactobacillus kalixensis	AY253657.1
69. Lactobacillus plantarum strain LP2	AY735409.1
70. Lactobacillus delbrueckii subsp. bulgaricus strain LG1	AY735407.1
71. Lactobacillus plantarum strain LP1	AY735404.1
72. Lactobacillus reuteri strain LU3	AY735406.1
73. Lactobacillus paracollinoides	AB159218.1
74. Lactobacillus plantarum strain LP3	AY675256.1
75. Lactobacillus rhamnosus strain LR2	AY675254.1
76. Lactobacillus casei strain LC3	AY675252.1
77. Lactobacillus delbrueckii subsp. bulgaricus strain LGM2	AY675257.1
78. Lactobacillus paracasei strain LPC1	AY675255.1
79. Lactobacillus rhamnosus strain LR3	AY675253.1
80. Lactobacillus paracasei subsp. paracasei strain LPC3	AY692452.1
81. Lactobacillus sp. MD-1	AY496039.1
82. Lactobacillus sp. rennanqilyf5	AY339128.2
83. Lactobacillus sp. GV6	AY330709.1
84. Lactobacillus sp. G12	AF308146.1
85. Lactobacillus pantheri	AF413523.1
86. Lactobacillus fermentum strain KLB12	AF522394.1
87. Lactobacillus fermentum	AF302116.1
88. Lactobacillus fermentum	U62624.1
89. L.acidophilus	1X61138.1
90. Lactobacillus acidophilus	M58802.1
91. Lactobacillus acidophilus johnsonii	M99704.1
Streptococci (Back to table of contents)	
1. Streptococcus vestibularis strain ATCC 49124	AY188353.1

2. Streptococcus cristatus strain ATCC 51100	AY188347.1
3. Streptococcus downei strain ATCC 33748	AY188350.1
4. Streptococcus macacae strain ATCC 35911	AY188351.1
5. Streptococcus sp. oral clone ASCE04	AY953253.1
6. Streptococcus sp. oral clone ASCF07	AY953255.1
7. Streptococcus gallolyticus	AF323911.1
8. Streptococcus suis	AF009509.1
9. Streptococcus suis	AF009507.1
10. Streptococcus suis	AF009505.1
11. Streptococcus waiu	AF088900.1
12. Streptococcus suis	AF009508.1
13. Streptococcus suis	AF009506.1
14. Streptococcus suis	AF009504.1
15. Streptococcus sp. oral clone ASCD10	DQ272509.1
16. Streptococcus sp. oral clone ASCC12	DQ272507.1
17. Streptococcus sp. oral clone ASCE05	DQ272510.1
18. Streptococcus sp. oral clone ASCC01	DQ272506.1
19. Streptococcus sp. oral clone ASCA03	DQ272504.1
20. Streptococcus sp. oral clone ASCG04	AY923145.1
21. Streptococcus sp. oral clone ASCE10	AY923137.1
22. Streptococcus sp. oral clone ASCE06	AY923135.1
23. Streptococcus sp. oral clone ASCD01	AY923129.1
24. Streptococcus sp. oral clone ASCC04	AY923127.1
25. Streptococcus sp. oral clone ASCB12	AY923125.1
26. Streptococcus sp. oral clone ASCB04	AY923123.1
27. Streptococcus sp. oral clone ASB02	AY923121.1
28. Streptococcus sp. oral clone ASCA09	AY923119.1
29. Streptococcus sp. oral clone ASCF09	AY923142.1
30. Streptococcus sp. oral clone ASCF05	AY923140.1
31. Streptococcus sp. oral clone ASCE12	AY923138.1
32. Streptococcus sp. oral clone ASCE09	AY923136.1
33. Streptococcus sp. oral clone ASCE03	AY923134.1
34. Streptococcus sp. oral clone ASCE01	AY923132.1
35. Streptococcus sp. oral clone ASCD09	AY923130.1
36. Streptococcus sp. oral clone ASCC05	AY923128.1
37. Streptococcus sp. oral clone ASCB06	AY923124.1

38. Streptococcus sp. oral clone ASCA04	AY923116.1
39. Streptococcus mutans strain UA140	AF077836.1
40. Streptococcus mutans strain 669	AF077834.1
41. Streptococcus mutans strain LM7	AF077832.1
42. Streptococcus mutans strain UA96	AF077835.1
43. Streptococcus mutans strain AF199	AF077833.1
44. Streptococcus oralis	AF003932.1
45. Streptococcus thermophilus	DQ176426.1
46. Streptococcus thermophilus strain ST3	AY675258.1
47. Streptococcus dysgalactiae	AB102730.1
48. Streptococcus equinus NCDO1037T	AF429765.1
49. Streptococcus suis strain SAP 77	AF284578.2
50. Streptococcus parauberis strain SAP 99	AF284579.2
51. Streptococcus thermophilus strain ATCC 19258	AY188354.1
52. Streptococcus sobrinus strain ATCC 33478	AY188349.1
53. Streptococcus salivarius strain ATCC 7073	AY188352.1
54. Streptococcus mutans strain ATCC 25175	AY188348.1
55. Streptococcus sp. TW1	AF084836.1
56. Streptococcus sp. KN3	AF084834.1
57. Streptococcus sp. KN1	AF084832.1
58. Streptococcus sp. KN2	AF084833.1
59. Streptococcus parasanguis	AF003933.1
60. Streptococcus pneumoniae	AF003930.1
61. Streptococcus sanguis	AF003928.1
62. Streptococcus gordonii	AF003931.1
63. Streptococcus mitis	AF003929.1
64. Streptococcus uberis	AB002527.1
65. Streptococcus suis	AB002525.1
66. Streptococcus porcinus	AB002523.1
67. Streptococcus pyogenes	AB002521.1
68. Streptococcus equi	AB002516.1
69. Streptococcus equinus	AB002514.1
70. Streptococcus dysgalactiae	AB002492.1
71. Streptococcus uberis	AB002526.1
72. Streptococcus sanguis	AB002524.1
73. Streptococcus pneumoniae	AB002522.1

74. Streptococcus mitis	AB002520.1
75. Streptococcus hyointestinalis	AB002518.1
76. Streptococcus dysgalactiae	AB002511.1
77. Streptococcus dysgalactiae	AB002497.1
78. Streptococcus dysgalactiae	AB002495.1
79. Streptococcus canis	AB002483.1
<i>Fusobacterium</i> spp. (Back to table of contents)	
1. Fusobacterium sp. oral clone ASCF11	AY953256.1
2. Fusobacterium sp. oral clone ASCF06	AY923141.1
3. Fusobacterium sp. RMA 2453	AJ867041.1
4. Fusobacteriumnecrophorum	AJ867039.1
5. Fusobacteriumulcerans	AJ867037.1
6. Fusobacteriumvarium	AJ867035.1
7. Fusobacteriummortiferum	AJ867033.1
8. Fusobacterium sp. RMA 1065	AJ867040.1
9. Fusobacteriumnecrophorum	AJ867038.1
10. Fusobacteriumvarium	AJ867036.1
11. Fusobacteriumnecrogenes	AJ867034.1
12. Fusobacteriummortiferum	AJ867032.1
13. Fusobacteriumnucleatum subsp. nucleatum	AJ133496.1
14. Fusobacteriumnecrophorum	AF044948.1
15. F.necrophorum (FnS-40) gene for	X74408.1
16. F.necrophorum (FnS-1)	X74407.1
<i>Prevotella</i> spp. (Back to table of contents)	
1. Prevotella sp. oral clone ASCD07	AY953252.1
2. Prevotella sp. oral clone ASCG12	DQ272511.1
3. Prevotella sp. oral clone ASCG10	AY923148.1
4. Prevotellazoogoleoformans ATCC 33285	L16488.1
5. Prevotellaheparinolytica ATCC	L16487.1
6. Prevotellatanneriae strain 93-1-2	AF183406.1

7. Prevotellatannerae strain 83-10-2	AF183404.1
8. Prevotellatannerae strain 131-9-1	AF183402.1
9. Prevotellatannerae strain 89-9-1	AF183405.1
10. Prevotellatannerae strain 29-1	AF183403.1
11. Prevotelladisiens ATCC 29426	L16483.1
12. Prevotellaloescheii ATCC 15930	L16481.1
13. Prevotellanigrescens ATCC 25261	L16479.1
14. Prevotellabuccae ATCC 33574	L16477.1
15. Prevotellabivia ATCC 29303	L16475.1
16. Prevotellaveroralis ATCC 33779	L16473.1
17. Prevotellamelaninogenica ATCC 43982	L16470.1
18. Prevotellaintermedia ATCC 25611	L16468.1
19. Prevotelladenticola ATCC 33185	L16466.1
20. Prevotellaruminicola ATCC 19189	L16482.1
21. Prevotellaoralis ATCC 33269)	L16480.1
22. Prevotellabuccae ATCC 33690	L16478.1
23. Prevotellabuccalis ATCC 35310	L16476.1
24. Prevotellaoris ATCC 33573	L16474.1
25. Prevotellanigrescens ATCC 33563	L16471.1
26. Prevotellamelaninogenica ATCC 25845	L16469.1
27. Prevotelladenticola ATCC 35308	L16467.1
28. Prevotellacorporis ATCC 33547	L16465.1
29. Prevotellaalbensis	AJ011683.1
30. Prevotellabryantii	AJ006457.1
31. Prevotellabrevis	AJ011682.1
32. Prevotellaenoeca	AJ005635.1
33. Prevotellapallens	Y13106.1
34. Prevotellapallens	Y13105.1
35. Prevotellapallens	Y13107.1
36. P.dentalis	X81876.1
37. P.nigrescens	X73963.1
Mixed bacteria (Back to table of contents)	
1. Pseudomonas aeruginosa strain	EU834943.1
2. Aggregatibacteraphophilus strain ATCC 7901	M75040.1

3. Clostridium sp. strain P6	AY949857.1
4. Escherichia coli strain T10	AY804014.1
5. Mycobacterium parmensis	AF466821.2
6. Mycobacterium sp. FI-25796	AF058299.1
7. Clostridium frigidicarnis	AF069742.1
8. Mycobacterium goodii strain MSFC 2-M3-R-2	DQ447773.1
9. Mycobacterium septicum strain MSFC 2-M3-R-4	DQ447772.1
10. Pseudomonas aeruginosa strain B13	DQ350823.1
11. Pseudomonas aeruginosa strain B2	DQ350824.1
12. Haemophilus sp. oral clone ASCB01	DQ272505.1
13. Haemophilus sp. oral clone ASCG06	AY923147.1
14. Haemophilus sp. oral clone ASCA10	AY923120.1
15. Clostridium sp. ID4	AY960571.1
16. Clostridium sp. ID11	AY960565.1
17. Clostridium sp. CE6	AY960563.1
18. Clostridium sp. ID5	AY960574.1
19. Clostridium sp. ID6	AY960572.1
20. Clostridium sp. ID3	AY960570.1
21. Clostridium sp. IE5	AY960566.1
22. Neisseria meningitidis strain N.261/03	AY735389.1
23. Neisseria meningitidis strain N.138/00	AY735369.1
24. Neisseria meningitidis strain N.544/03	AY735392.1
25. Neisseria meningitidis strain N.479/03	AY735390.1
26. Neisseria meningitidis strain N.677/03	AY735388.1
27. Neisseria meningitidis strain N.817/03	AY735382.1
28. Neisseria meningitidis strain N.573/02	AY735378.1
29. Neisseria meningitidis strain N.3/94	AY735342.1
30. Clostridium sp. cTPY-17	AY239462.1
31. Mycobacterium vulneris strain NLA000700772	EU834055.1
32. Clostridium scindens	AY878326.1
33. Clostridium sulfidigenes strain SGB2	EF199998.1
34. Mycoplasma orale strain NC10112	AY796060.1
35. Corynebacterium pseudogenitalium	U87822.1
36. Peptostreptococcus anaerobius	L04168.1
37. Corynebacterium genitalium	U87817.1
38. Bacteroides forsythus	L16495.1

39. <i>Bifidobacteriumcatenulatum</i>	M58732.1
40. <i>Neisseria elongata</i> subsp. <i>elongata</i> strain ATCC 25295	NR_025893.1
41. <i>Pseudomonas aeruginosa</i> strain Z5	AY548952.1
42. <i>Pseudomonas aeruginosa</i> strain Z11	AY548953.1
43. <i>Clostridium papyrosolvens</i> DSM 2782	NR_026102.1
44. <i>Mycobacterium parmense</i> strain MUP 1182	NR_025225.1
45. <i>Neisseria gonorrhoeae</i> strain NCTC 83785	NR_026079.1
46. <i>Actinomycesdentalis</i> strain R18165	NR_025633.1
47. <i>Clostridium neopropionicum</i> strain DSM 3847	NR_026150.1
48. <i>Mycobacterium szulgai</i> strain ATCC 35799	NR_026080.1
49. <i>Pseudomonas aeruginosa</i> strain DSM 50071	NR_026078.1
50. <i>Clostridium chauvoei</i> strain 2585	NR_026013.1
51. <i>Mycobacterium nebraskense</i> strain UNMC-MY1349	NR_025767.1
52. <i>Mycobacterium lepromatosis</i> strain FJ924	EU203590.2
53. <i>Clostridium butyricum</i> strain IDCC 5101	EF533982.1
54. <i>Mycoplasma cricetuli</i> strain CH	EF036469.1
55. <i>Pseudomonas aeruginosa</i> gene for	AB126582.1
56. <i>Bacteroidesuniformis</i>	AB247145.1
57. <i>Bacteroidesuniformis</i>	AB247146.1
58. <i>Clostridium scatologenes</i> strain ATCC 25775	M59104.2
59. <i>Corynebacteriumglutamicum</i> strain CICC10120	DQ171713.1
60. <i>Corynebacteriumglutamicum</i> strain CICC10046	DQ171714.1
61. <i>Mycoplasma coccoides</i>	AY171918.1
62. <i>Clostridium intestinale</i>	AY781385.1
63. <i>Mycoplasma bovis</i> strain 2875	AY526883.1
64. <i>Mycoplasma agalactiae</i> strain KS6	AY526879.1
65. <i>Mycoplasma bovis</i> strain 613	AY526882.1
66. <i>Mycoplasma agalactiae</i> strain 6804	AY526880.1
67. <i>Mycoplasma</i> sp. 8790CV	AY526874.1
68. <i>Clostridium</i> sp. strain Z6	AY949859.1
69. <i>Bacteroides</i> sp. strain Z4	AY949860.1
70. <i>Escherichia coli</i>	AY776275.1
71. <i>Mycobacterium nebraskense</i> strain UNMC-MY1349	AY368456.1
72. <i>Bifidobacteriumbreve</i> strain BR2	AY735402.1
73. <i>Bifidobacteriumlongum</i> strain BG3	AY735403.1
74. <i>Clostridium hathewayi</i>	AY552788.2

75. <i>Bifidobacterium longum</i> strain BG	AY675246.1
76. <i>Bifidobacterium bifidum</i>	AY694148.1
77. <i>Pseudomonas aeruginosa</i>	AY596792.1
78. <i>Pseudomonas aeruginosa</i>	AB091760.1
79. <i>Clostridium tetani</i>	X74770.1
80. <i>Bifidobacterium thermacidophilum</i> subsp. suis	AY148470.1
81. <i>Mycobacterium</i> sp. LC6	AY351648.1
82. <i>Pseudomonas aeruginosa</i>	AB108690.1
83. <i>Mycobacterium vaccae</i> isolate VM0587	AF544638.1
84. <i>Mycobacterium frederiksbergense</i> isolate VM0503	AF544628.1
85. <i>Mycobacterium austroafricanum</i> isolate VM0450	AF544623.1
86. <i>Mycobacterium vaccae</i> isolate VM0588	AF544639.1
87. <i>Mycobacterium gilvum</i> isolate VM0583	AF544637.1
88. <i>Mycobacterium frederiksbergense</i> isolate VM0585	AF544632.1
89. <i>Mycobacterium austroafricanum</i> isolate VM0573	AF544627.1
90. <i>Mycobacterium austroafricanum</i> isolate VM0456	AF544622.1
91. <i>Bifidobacterium thermophilum</i>	AB016246.1
92. <i>Mycobacterium</i> sp. PYR-I	U30662.1
93. <i>Bacteroides ovatus</i> NCTC 11153	L16484.1
94. <i>Mycobacterium</i> sp. RJGll.135	U30661.1
95. <i>Bacteroides plachnicus</i> NCTC 10825	L16496.1
96. <i>Bacteroides eggerthii</i> NCTC 11185	L16485.1
97. <i>Mycoplasma meleagridis</i>	L24106.1
98. <i>Clostridium stercorarium</i> subsp. thermolacticum	L09176.1
99. <i>Mycobacterium interjectum</i>	AF014937.1
100. <i>Peptostreptococcus</i> sp.	L04166.1
101. <i>Clostridium aminophilum</i>	L04165.1
102. <i>Clostridium sticklandii</i>	L04167.1
103. <i>Pseudomonas aeruginosa</i>	AF237678.1
104. Actinomycete SF2809	AB017374.1
105. <i>Clostridium indolis</i>	AF028351.1
106. <i>Clostridium fusiformis</i>	AF028349.1
107. <i>Clostridium cocleatum</i>	AF028350.1
108. <i>Mycoplasma bovis</i>	U02968.1
109. <i>Mycobacterium</i> sp. T104	U62890.1
110. <i>Haemophilus influenzae</i> -murium	AF024530.1

111. <i>Corynebacterium xerosis</i>	AF024653.1
112. <i>Mycobacterium alvei</i>	AF023664.1
113. <i>Mycobacterium novocastrense</i>	U96747.1
114. <i>Mycobacterium</i> sp. RF002	U90876.1
115. <i>Corynebacterium jeikeium</i>	U87823.1
116. <i>Corynebacterium genitalium</i>	U87821.1
117. <i>Corynebacterium genitalium</i>	U87819.1
118. <i>Corynebacterium jeikeium</i>	U87816.1
119. <i>Corynebacterium genitalium</i>	U87824.1
120. <i>Corynebacterium genitalium</i>	U87820.1
121. <i>Mycoplasma leopharyngis</i>	U16760.1
122. <i>Mycoplasma feliminutum</i>	U16758.1

DNA library preparation for PCR specificity test ([Back to table of contents](#))

Lactobacillus rhamnosus ATCC 7469, *Lactobacillus salivarius* ATCC 11741, *Lactobacillus casei* ATCC 393 and *Lactobacillus plantarum* ATCC 14917 were grown on MRS agar/broth (Oxoid) and *Streptococcus mutans* NCTC 10449, *Streptococcus oralis* NCTC 11427, *Streptococcus mitis* NCTC 12261 and *Streptococcus parasanguis* NCTC 15912 were grown on Columbia agar (Oxoid) or in Brain-Heart infusion broth (Oxoid). Cultures were grown at 37°C under microaerobic condition in a candle jar or in MRS broth (Oxoid) in an anaerobic chamber with 90% N₂, 5% H₂ and 5% CO₂ atmosphere. DNA was subsequently extracted using a QIAamp DNA Mini Kit (Qiagen Inc., Australia) as per the manufacturer's instructions.

Similarly, isolated DNA from *Parvimonas micra* (formerly *Peptostreptococcus micros*) ATCC 33270, *Fusobacterium nucleatum* ATCC 25586, *Escherichia coli* (ECAT1177T), *Pseudomonas aeruginosa* ATCC 19660, *Prevotella denticola* (AF139203), *Prevotella melaninogenica* ATCC 25845 and *Prevotella tanneriae* were provided by Dr Mangala Nadkarni, Institute of Dental Research. *Streptococcus gordonii* ATCC 10558 was provided by Dr Derek Harty, Institute of Dental Research. *Prevotella intermedia* ATCC 25611, *Porphyromonas gingivalis* W83 and *Tannerella forsythia* ATCC 43037 were contributed by Dr Ky-Anh Nguyen, Institute of Dental Research.

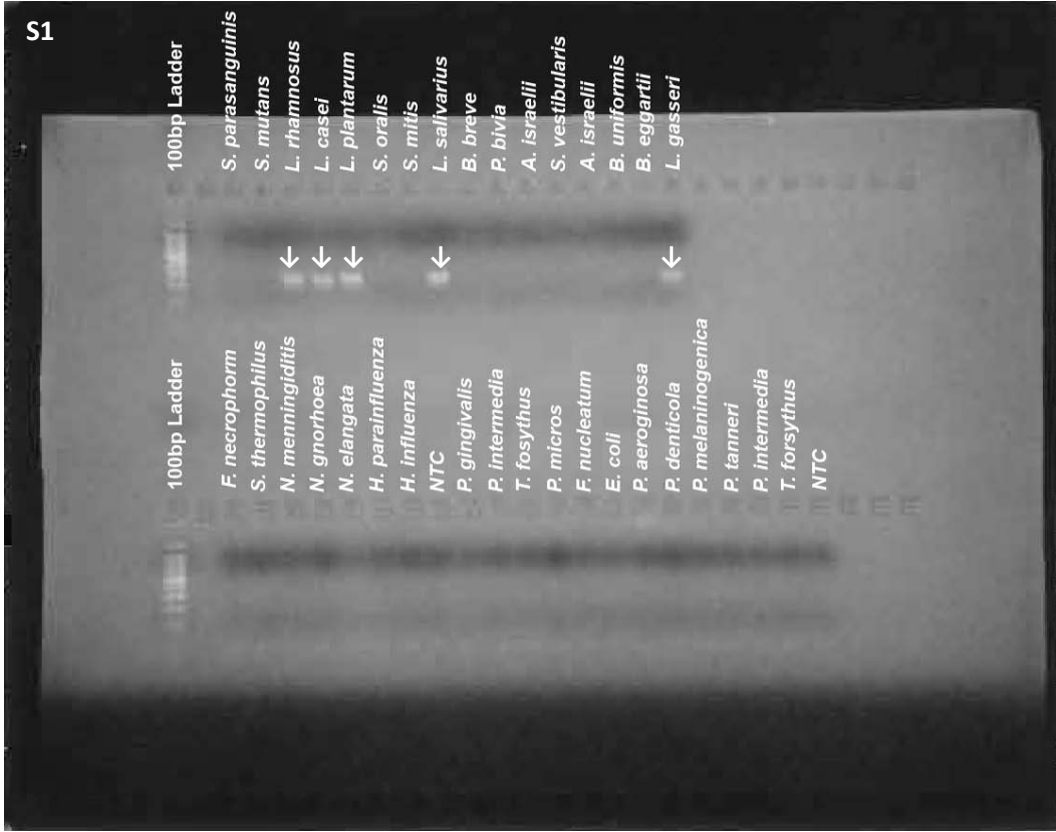
Lactobacillus gasseri (clinical isolate), *Streptococcus thermophilus*, *Streptococcus vestibularis* (clinical isolate), *Fusobacterium necrophorum* (clinical isolate), *Bifidobacterium breve* (clinical isolate), *Actinomyces israelii* ATCC 10048, *Actinomyces israelii* (clinical isolate), *Neisseria meningitidis* ATCC 13102, *Neisseria gonorrhoea* ATCC 43069, *Neisseria elongate* (clinical isolate),

Haemophilus influenza ATCC 49247, *Haemophilus parainfluenza* ATCC 33392, *Prevotella bivia* (clinical isolate), *Bacteroides uniformis* (Clinical isolate), *Bacteroides eggerthii* (clinical isolate) were grown at the Institute of Clinical Pathology and Medical Research (Westmead, Australia) and DNA extraction were performed using an automated nucleic acid extraction instrument NucliSENS® easyMag® (bioMerieux Inc., Durham, North Carolina) as per the manufacturer's protocol. 16S rRNA genes were amplified by PCR using the DNA template extracted from clinical isolates using a universal primer set and sent for sequencing at Australian Genome Research Facility (Westmead Millennium Institute, Westmead, Australia) for identification. The resulting 16S rRNA gene sequence was checked by BLAST before it was used for PCR specificity testing.

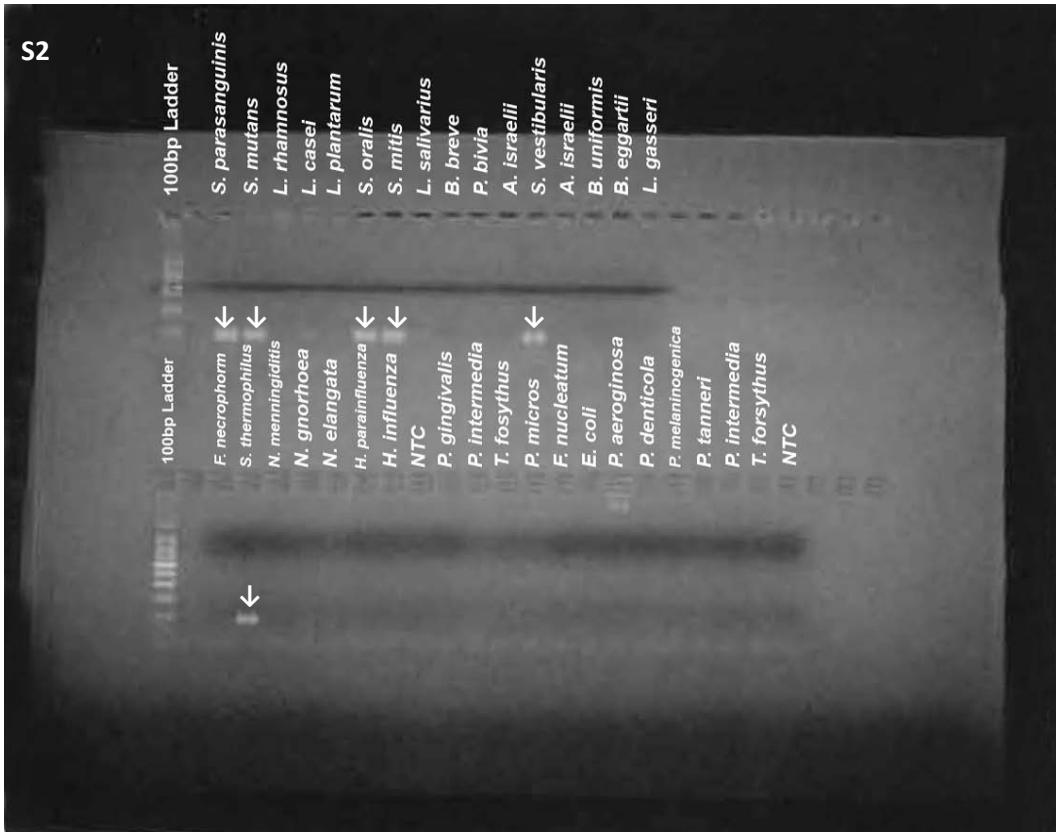
PCR specificity test ([Back to table of contents](#))

Extracted reference bacterial DNA was used in polymerase chain reactions to test the generaspecificity of designed primer sets. In a 25 µl volume reaction containing 12.5 µl HotStar Taq polymerase Master mix (Qiagen), 0.4 µM forward and reverse primers and 1 µl DNA template, PCR cycling parameters were as follows: 95°C for 15 min, followed by 30 cycles of 94°C for 30 s denaturation and 58°C for 60 s elongation for streptococcal, prevotellae and fusobacteria primer sets. For the lactobacilli primer set, 62°C for 60 s elongation was used. PCR products were run on 2% agarose gel in Tris-EDTA-acetate (TAE) buffer containing ethidium bromide for visualization of electrophoresed DNA under ultraviolet light (**Fig. S1-S4**).

S1



S2



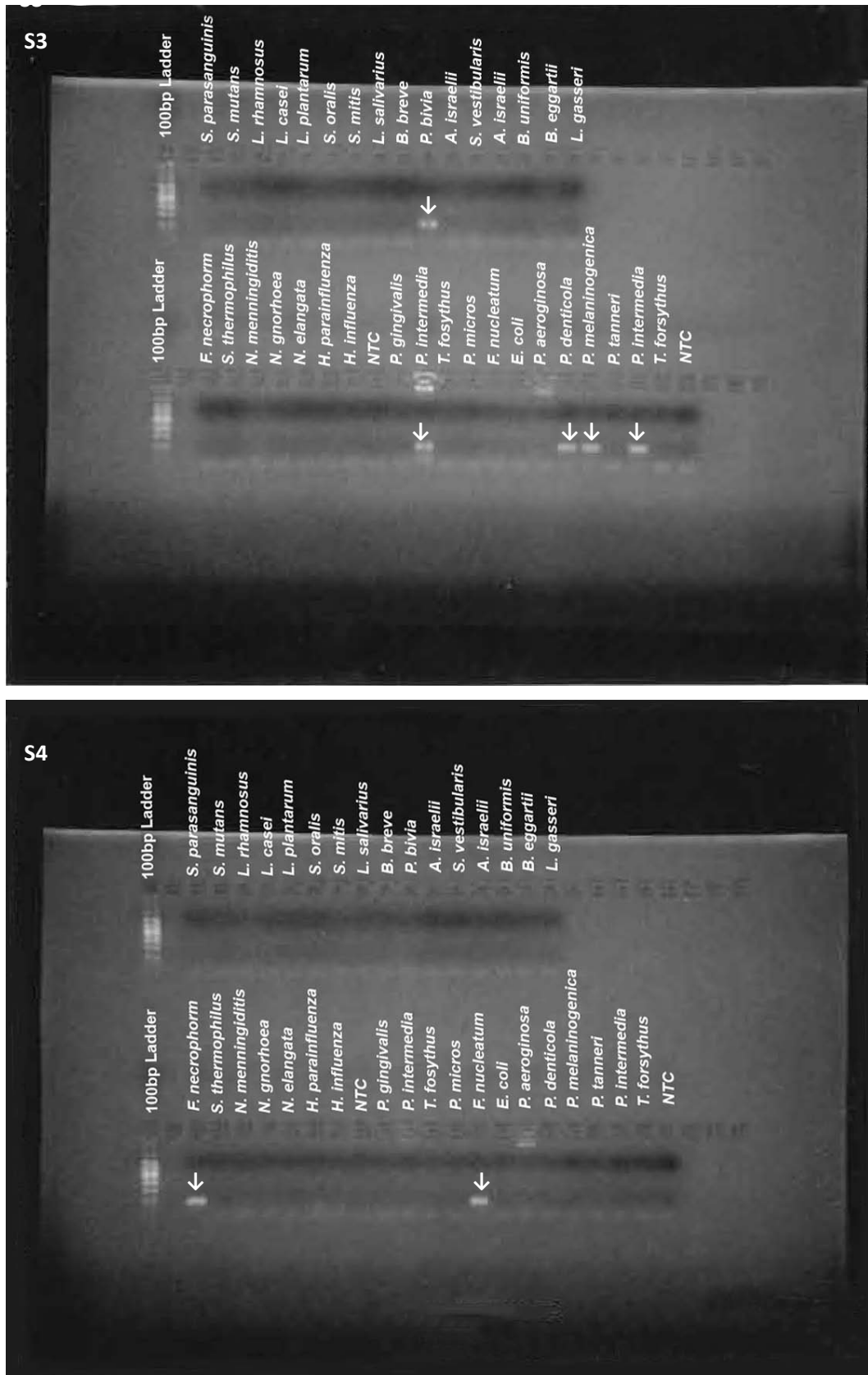


Figure S. PCR specificity test results on 2% agarose gel photos. White bands (↓) indicating positive detection of examined DNA. **S1:** Lactobacilli primer set (Amplicon size= 223bp). **S2:** Streptococcal

primer set (Amplicon size= 86bp). **S3**: Prevotellae primer set (Amplicon size= 116bp). **S4**: Fusobacteria primer set (Amplicon size= 87bp).