

Table S2. Bacteria and virus detected with R

OLP	
Microbiome Species	Average Counts (normalized)
<i>Veillonella parvula</i>	3435527.229
<i>Rothia mucilaginosa</i>	1810713.571
<i>Haemophilus parainfluenzae</i>	844236.8342
<i>Fusobacterium nucleatum</i>	825289.7789
<i>Neisseria meningitidis</i>	626843.5897
<i>Achromobacter xylosoxidans</i>	415495.0883
<i>Atopobium parvulum</i>	205918.2297
<i>Campylobacter concisus</i>	159293.9124
<i>Leptotrichia buccalis</i>	123966.9359
<i>Megasphaera elsdenii</i>	87368.48455
<i>Prevotella melaninogenica</i>	82285.23784
<i>Selenomonas sputigena</i>	77508.6755
<i>Haemophilus influenzae</i>	76896.39289
<i>Porphyromonas gingivalis</i>	75766.09645
<i>Rothia dentocariosa</i>	64620.85367
<i>Candidatus Saccharimonas aalborgensis</i>	61728.68147
<i>Aggregatibacter aphrophilus</i>	54899.61834
<i>Prevotella intermedia</i>	37434.48581
<i>Tannerella forsythia</i>	36640.47285
<i>Streptococcus parasanguinis</i>	34865.49274
<i>Selenomonas ruminantium</i>	32825.83925
<i>Streptococcus pneumoniae</i>	23422.9219
<i>Pseudogulbenkiania</i> sp. NH8B	23371.8297
<i>Neisseria lactamica</i>	21815.23198
<i>Streptococcus constellatus</i>	20678.39506
<i>Streptococcus pyogenes</i>	20154.71044
<i>Dichelobacter nodosus</i>	19653.086
<i>Prevotella</i> sp. oral taxon 299	19244.10773
<i>Capnocytophaga ochracea</i>	18866.69759
[<i>Eubacterium</i>] <i>eligens</i>	17926.74096
<i>Streptococcus mitis</i>	17758.73348
<i>Campylobacter curvus</i>	17565.59393
<i>Taylorella equigenitalis</i>	15652.75392
<i>Candidatus Saccharibacteria bacterium</i> RAAC3_TM7_1	15478.8893
<i>Streptococcus oligofermentans</i>	15445.0097
<i>Ruminiclostridium thermocellum</i>	15128.26924
<i>Kocuria rhizophila</i>	14534.55059
[<i>Clostridium</i>] <i>saccharolyticum</i>	13834.76647
<i>Mobiluncus curtisii</i>	12226.83711
<i>Porphyromonas asaccharolytica</i>	11934.89197
<i>Alteromonas macleodii</i>	11795.64654
<i>Campylobacter jejuni</i>	11434.08098
<i>Alkaliphilus metalliredigens</i>	11110.06602
<i>Clostridium</i> sp. SY8519	10660.96776
<i>Candidatus Kinetoplastibacterium galatii</i>	10306.05213
<i>Streptococcus dysgalactiae</i>	9921.069259
<i>Beutenbergia cavernae</i>	9847.025451
<i>Mannheimia haemolytica</i>	9318.389064
<i>Escherichia coli</i>	9075.501643
<i>Streptococcus sanguinis</i>	8883.458496

Candidatus Hamiltonella defensa	8765.999689
Clostridium botulinum	8618.283278
Propionibacterium avidum	8480.487263
Neisseria gonorrhoeae	8403.95921
Eubacterium rectale	8321.721258
Jonesia denitrificans	8130.988625
Hyphomicrobium nitrativorans	7663.281185
Campylobacter hominis	7573.253666
Prevotella dentalis	7133.078687
Mycoplasma hyopneumoniae	6906.389526
Corynebacterium argenteratense	6558.384485
Thauera sp. MZ1T	6521.481732
[Clostridium] stercorarium	6036.080454
Leadbetterella byssophila	5745.60771
Streptococcus salivarius	5084.465299
Arcanobacterium haemolyticum	4926.291111
Macrococcus caseolyticus	4869.007226
Micrococcus luteus	4834.201935
Streptococcus equi	4825.310544
Oscillibacter valericigenes	4679.309626
butyrate-producing bacterium SSC/2	4635.132016
Ilyobacter polytropus	4632.362662
Roseburia hominis	4605.968475
Coprococcus catus	4513.087167
Campylobacter fetus	4486.93473
Megamonas hypermegale	4231.847878
Riemerella anatipestifer	4217.218421
Bacillus thuringiensis	4070.825111
Thiocystis violascens	4049.011888
Lachnoclostridium phytofermentans	4014.829704
Carnobacterium maltaromaticum	3630.422343
Sebaldella termitidis	3476.406887
Staphylococcus haemolyticus	3307.959463
Syntrophobacter fumaroxidans	3271.401975
Clostridium kluyveri	3258.260924
Filifactor alocis	3025.027123
Streptococcus sp. I-P16	2997.089729
Streptococcus pseudopneumoniae	2972.717776
Bacteroides vulgatus	2928.198821
[Mannheimia] succiniciproducens	2907.150286
Collimonas fungivorans	2819.838416
Magnetococcus marinus	2731.524626
Thiobacillus denitrificans	2730.319277
Prevotella ruminicola	2716.013351
Streptococcus sp. I-G2	2699.422993
Niastella korensis	2639.941347
Ralstonia solanacearum	2635.626152
Streptococcus gordonii	2632.496209
Paludibacter propionicigenes	2570.068778
Jingmen tick virus	2530.66705
Comamonas testosteroni	2482.093745
Peptoclostridium difficile	2452.189537
Lactobacillus fermentum	2392.363769

Azoarcus sp. BH72	2303.878671
Flavobacteriaceae bacterium 3519-10	2222.428093
Streptococcus anginosus	2183.583062
Butyrivibrio proteoclasticus	2165.709168
[Eubacterium] siraeum	2054.380865
Kribbella flavida	2029.937342
Cryptobacterium curtum	1992.232708
Candidatus Zinderia insecticola	1974.882081
Parabacteroides distasonis	1826.54615
Anaerobaculum mobile	1822.778671
Olsenella uli	1802.860078
Halanaerobium hydrogeniformans	1784.372651
Tick-borne encephalitis virus	1747.517785
Saccharopolyspora erythraea	1728.572881
Rhodospirillum rubrum	1688.637738
Staphylococcus epidermidis	1678.594116
Sodalis glossinidius	1627.345766
Erysipelothrix rhusiopathiae	1591.419709
Bacillus virus SPO1	1583.029071
Anaplasma centrale	1519.426383
Treponema denticola	1473.378508
Capnocytophaga canimorsus	1458.052508
Streptococcus macedonicus	1456.423232
Aggregatibacter actinomycetemcomitans	1438.230003
Anaerococcus prevotii	1423.209805
Cellulosilyticum lentocellum	1421.651868
Brachybacterium faecium	1414.977586
Bronchotrix virus Thermophacta bacteriophage	1394.254104
Actinobacillus succinogenes	1373.762371
Thioalkalivibrio sulfidiphilus	1369.544862
Thioalkalimicrobium cyclicum	1364.703406
Mycobacterium sp. JDM601	1363.586593
Tetragenococcus halophilus	1363.553446
Mesotoga prima	1362.781572
Candidatus Puniceispirillum marinum	1309.635311
Leptothrix cholodnii	1307.452571
Eubacterium limosum	1305.74138
Gramella forsetii	1286.069822
Thermanaerovibrio acidaminovorans	1283.739927
candidate division SR1 bacterium RAAC1_SR1_1	1245.131342
Pasteurella multocida	1219.235619
Flavobacterium psychrophilum	1213.840017
Nocardiopsis alba	1199.073393
Halothiobacillus neapolitanus	1178.684166
Candidatus Carsonella ruddii	1168.090398
Thermosediminibacter oceani	1123.529705
Mycoplasma hyorhinitis	1118.291558
Lactobacillus reuteri	1086.991491
Alistipes shahii	1081.1798
Frateuria aurantia	1050.701639
Acidothermus cellulolyticus	1034.362384
Candidatus Profftella armatura	1030.539615
Desulfomonile tiedjei	1012.588737

<i>Streptococcus suis</i>	1004.021005
<i>Frankia</i> sp. Eu11c	966.7181843
<i>Mahella australiensis</i>	966.5100106
<i>Pseudonocardia dioxanivorans</i>	960.2329669
<i>Owenweeksia hongkongensis</i>	959.987509
<i>Nocardia farcinica</i>	957.8158926
<i>Finegoldia magna</i>	953.2863447
<i>Clostridium acetobutylicum</i>	943.5274921
<i>Haemophilus parasuis</i>	894.3916004
<i>Pseudomonas aeruginosa</i>	879.65122
<i>Dickeya dadantii</i>	875.1803446
<i>Rickettsia australis</i>	870.5931162
<i>Corynebacterium urealyticum</i>	843.3037006
<i>Propionibacterium acnes</i>	819.2572046
<i>Actinobacillus pleuropneumoniae</i>	797.9658716
<i>Caldicellulosiruptor kronotskyensis</i>	781.2828121
<i>Faecalitalea cylindroides</i>	776.1484477
<i>Corynebacterium diphtheriae</i>	767.4445618
<i>Pedobacter heparinus</i>	748.6248488
<i>Kineococcus radiotolerans</i>	732.0870205
<i>Chitinophaga pinensis</i>	731.5443735
<i>Amycolicococcus subflavus</i>	731.0443786
<i>Histophilus somni</i>	729.6492699
<i>Methylobacterium alcaliphilum</i>	728.0514733
<i>Oceanithermus profundus</i>	703.6491702
<i>Thermovirga lienii</i>	700.7230242
<i>Thermobispora bispora</i>	690.8909457
<i>Streptococcus uberis</i>	687.3719373
<i>Bacillus coagulans</i>	626.0015219
<i>Bacillus cytotoxicus</i>	618.4377566
Dill cryptic virus 2	575.8866491
<i>Haemophilus ducreyi</i>	571.784698
<i>Bifidobacterium longum</i>	571.4486826
<i>Marivirga tractuosa</i>	565.7122803
<i>Coprococcus</i> sp. ART55/1	546.5359034
<i>Desulfotomaculum gibsoniae</i>	526.4780525
Spring beauty latent virus	522.6202009
alpha proteobacterium HIMB59	493.025217
<i>Aminobacterium colombiense</i>	492.8863417
<i>Buchnera aphidicola</i>	492.5961806
<i>Clostridium tetani</i>	492.1856025
<i>Burkholderia multivorans</i>	480.8704346
<i>Corynebacterium kroppenstedtii</i>	475.6220403
<i>Gallibacterium anatis</i>	474.2792235
<i>Lactobacillus sanfranciscensis</i>	463.9387069
<i>Solitalea canadensis</i>	462.0094581
<i>Actinobacillus suis</i>	444.8284605
<i>Stenotrophomonas maltophilia</i>	439.7124614
<i>Flavobacterium indicum</i>	425.2601622
<i>Methanococcus maripaludis</i>	414.6080959
<i>Planctomyces limnophilus</i>	413.2721691
<i>Streptococcus agalactiae</i>	411.2400624
<i>Aequorivita sublithicola</i>	407.4323932

<i>Bibersteinia trehalosi</i>	402.3423612
<i>Desulfotomaculum reducens</i>	402.0242253
<i>Pedobacter saltans</i>	401.4698498
Mouse astrovirus M-52/USA/2008	397.7216543
<i>Amphibacillus xylanus</i>	394.2993765
<i>Leptospirillum ferriphilum</i>	391.7936064
<i>Caldilinea aerophila</i>	387.7081532
<i>Mycobacterium rhodesiae</i>	385.2670847
Candidatus <i>Azobacteroides pseudotrichonymphae</i>	384.6312384
<i>Segniliparus rotundus</i>	383.9315467
<i>Lactobacillus kefiranofaciens</i>	373.273856
<i>Corynebacterium efficiens</i>	372.7355969
<i>Propionibacterium propionicum</i>	360.1445988
<i>Aerococcus urinae</i>	346.0534359
[<i>Ruminococcus</i>] <i>torques</i>	340.0362423
<i>Chromobacterium violaceum</i>	336.7411534
<i>Meiothermus silvanus</i>	334.5053257
<i>Ethanoligenens harbinense</i>	327.8403629
<i>Burkholderia gladioli</i>	311.4201316
<i>Streptococcus thermophilus</i>	306.9012228
<i>Streptococcus mutans</i>	304.75375
<i>Sulfobacillus acidophilus</i>	304.5510708
<i>Prochlorococcus marinus</i>	300.6024959
<i>Brevibacillus brevis</i>	299.3059003
[<i>Clostridium</i>] <i>sticklandii</i>	299.2999382
<i>Ramlibacter tataouinensis</i>	286.6296702
<i>Geitlerinema</i> sp. PCC 7407	275.9327419
Candidatus <i>Baumannia cicadellinicola</i>	270.8723685
<i>Lactobacillus salivarius</i>	259.8376415
<i>Bacteroides thetaiotaomicron</i>	251.1598996
<i>Fibrobacter succinogenes</i>	243.2188239
<i>Clostridium beijerinckii</i>	240.4406627
<i>Desulfobulbus propionicus</i>	236.4897488
<i>Melioribacter roseus</i>	235.2160049
Candidatus <i>Sulcia muelleri</i>	232.5400588
<i>Lactococcus lactis</i>	229.7529346
<i>Desulfitobacterium dichloroeliminans</i>	226.7415423
<i>Deferribacter desulfuricans</i>	226.6754987
<i>Flexistipes sinusarabici</i>	222.7051558
<i>Fretibacterium fastidiosum</i>	218.9041818
<i>Cyanothece</i> sp. PCC 7425	215.094391
<i>Enterococcus hirae</i>	211.2618928
<i>Odoribacter splanchnicus</i>	206.107572
Hop trefoil cryptic virus 2	198.8389921
<i>Bacteroides helcogenes</i>	191.4084936
<i>Caldanaerobacter subterraneus</i>	188.4816382
<i>Variovorax paradoxus</i>	184.5361171
<i>Salinibacter ruber</i>	183.3709925
<i>Salmonella enterica</i>	181.6727863
<i>Streptococcus iniae</i>	175.9874943
<i>Streptococcus lutetiensis</i>	170.6441875
<i>Bifidobacterium dentium</i>	170.4209654
<i>Gottschalkia acidurici</i>	169.1478881

<i>Streptobacillus moniliformis</i>	167.5136491
<i>Caldicellulosiruptor saccharolyticus</i>	167.1513518
<i>Bacteroides salanitronis</i>	166.1361272
<i>Staphylococcus lugdunensis</i>	165.3949863
<i>Flavobacterium branchiophilum</i>	164.9795465
<i>Desulfotalea psychrophila</i>	164.9723789
<i>Lactococcus garvieae</i>	164.5672852
<i>Bordetella avium</i>	162.7852976
<i>Acetobacterium woodii</i>	158.8352629
<i>Helicobacter cinaedi</i>	158.157163
<i>Belliella baltica</i>	157.484672
<i>Truepera radiovictrix</i>	153.5305036
<i>Rubrobacter xylanophilus</i>	138.910921
<i>Vibrio cholerae</i>	137.8634698
<i>Bifidobacterium thermophilum</i>	136.8786984
Torque teno midi virus 2	135.5230165
<i>Melissococcus plutonius</i>	134.3574369
<i>Streptococcus parauberis</i>	133.86099
<i>Thermomonospora curvata</i>	131.9862537
<i>Treponema brennaboreense</i>	129.2556459
<i>Desulfobacterium autotrophicum</i>	127.3040671
<i>Myxococcus fulvus</i>	126.2358128
Hepatitis C virus	125.66876
<i>Burkholderia phymatum</i>	125.5171709
<i>Ruminococcus</i> sp. SR1/5	124.9497906
<i>Desulfomicrobium baculatum</i>	124.4120991
<i>Acholeplasma palmae</i>	124.3165013
Clostridiales genomsp. BVAB3	120.2948912
<i>Yersinia enterocolitica</i>	119.8420326
Candidatus <i>Methylomirabilis oxyfera</i>	118.9805623
<i>Mycobacterium kansasii</i>	118.8631273
<i>Burkholderia glumae</i>	116.9879938
<i>Corynebacterium matruchotii</i>	112.5840342
<i>Bacillus subtilis</i>	111.2612911
secondary endosymbiont of <i>Ctenarytaina eucalypti</i>	110.4537671
<i>Staphylococcus aureus</i>	109.0117339
<i>Nitrosomonas eutropha</i>	108.3726245
<i>Weissella koreensis</i>	107.6672062
<i>Ochrobactrum anthropi</i>	102.7081569
<i>Cyclobacterium marinum</i>	102.0108255
<i>Prevotella denticola</i>	98.55122261
<i>Staphylococcus warneri</i>	97.55269569
<i>Providencia stuartii</i>	96.48371994
<i>Streptococcus infantarius</i>	95.02194504
<i>Enterococcus faecium</i>	93.84679666
<i>Rubrivivax gelatinosus</i>	92.35236685
<i>Serratia symbiotica</i>	92.0715124
<i>Streptococcus oralis</i>	91.08160178
<i>Vibrio campbellii</i>	89.40923667
<i>Enterobacter cloacae</i>	87.14171579
<i>Cyanobacterium stanieri</i>	87.13052036
<i>Lysinibacillus sphaericus</i>	86.50284441
<i>Acidaminococcus intestini</i>	85.6184324

<i>Blattabacterium</i> sp. (<i>Blatta orientalis</i>)	84.80538898
<i>Rhodanobacter denitrificans</i>	83.52970829
<i>Oceanobacillus iheyensis</i>	82.94666715
<i>Streptomyces pratensis</i>	82.51426695
<i>Corynebacterium aurimucosum</i>	82.08249968
<i>Bacillus cellulosilyticus</i>	82.08062523
<i>Mycoplasma hominis</i>	81.37873682
<i>Alicyclophilus denitrificans</i>	81.29110825
<i>Intrasporangium calvum</i>	80.27472623
<i>Tolomonas auensis</i>	80.14292475
<i>Lactobacillus acidophilus</i>	79.72947449
<i>Bifidobacterium asteroides</i>	78.22586066
<i>Listeria monocytogenes</i>	76.40008282
<i>Pandoravirus dulcis</i>	75.81134905
<i>Muricauda ruestringensis</i>	74.68164645
<i>Tepidanaerobacter acetatoxydans</i>	74.29831554
<i>Klebsiella variicola</i>	73.62994109
<i>Methylophaga nitratreducenticrescens</i>	73.30048414
<i>Pantoea</i> sp. At-9b	73.04304307
<i>Sphingobacterium</i> sp. 21	72.93913018
<i>Tsukamurella paurometabola</i>	72.76696694
<i>Roseobacter denitrificans</i>	71.72653884
<i>Candidatus Symbiobacter mobilis</i>	71.1787151
<i>Alkalilimnicola ehrlichii</i>	70.88686985
<i>Fusobacterium periodonticum</i>	69.66839077
<i>Acidaminococcus fermentans</i>	69.57149148
<i>Propionibacterium freudenreichii</i>	68.88752597
<i>Microbacterium testaceum</i>	68.88383988
<i>Primula malacoides virus 1</i>	68.83020643
<i>Treponema pedis</i>	67.96804325
<i>Acholeplasma laidlawii</i>	67.96092371
<i>Wigglesworthia glossinidia</i>	67.56083931
<i>Desulfurispirillum indicum</i>	67.11990726
<i>Bifidobacterium adolescentis</i>	66.5680607
<i>Pseudoalteromonas haloplanktis</i>	66.4149126
<i>Nitratiruptor</i> sp. SB155-2	66.1879491
<i>Bacillus cereus</i>	65.88059654
<i>Renibacterium salmoninarum</i>	65.85783533
<i>Catenulispora acidiphila</i>	65.43531446
<i>Geobacter lovleyi</i>	63.55664894
<i>Bacillus amyloliquefaciens</i>	63.50621069
<i>Verminephrobacter eiseniae</i>	63.39580371
<i>Dickeya</i> phage RC-2014	63.10131901
<i>Clostridium perfringens</i>	63.01226352
<i>Photobacterium profundum</i>	62.98493554
<i>Treponema succinifaciens</i>	62.78341606
[<i>Ruminococcus</i>] <i>obeum</i>	62.73724374
<i>Marinomonas posidonica</i>	61.3602584
<i>Moorella thermoacetica</i>	60.15338866
<i>Xanthomonas campestris</i>	60.00068809
<i>Deinococcus proteolyticus</i>	59.85067033
<i>Aliivibrio fischeri</i>	59.38300452
<i>Oenococcus oeni</i>	59.24858769

Carnobacterium sp. 17-4	57.52873153
Psychroflexus torquis	57.46979991
Desulfarculus baarsii	57.44141558
Carnobacterium sp. WN1359	56.45910101
Thioalkalivibrio sp. K90mix	56.16450549
Halorhodospira halophila	53.65843124
Slackia heliotrinireducens	53.10803549
Psychromonas sp. CNPT3	52.87625745
Dechloromonas aromatica	52.8511068
Candidatus Protochlamydia amoebophila	52.42872085
Halobacillus halophilus	52.16557256
Red clover cryptic virus 2	52.13340106
Opitutus terrae	52.09806573
Coxiella burnetii	51.62318416
Salivirus FHB	51.48229735
Desulfovibrio salexigens	50.71531769
Arthrobacter arilaitensis	50.67201597
Syntrophomonas wolfei	50.38968174
Ferrimonas balearica	49.71999605
Bacteroides fragilis	49.709828
Lactobacillus sakei	49.39686465
Ammonifex degensii	48.9043539
Pseudomonas mendocina	48.63385755
Shewanella baltica	48.61775862
Shigella flexneri	48.50075196
Pyrolobus fumarii	47.59970679
Novosphingobium aromaticivorans	46.55524129
Oceanimonas sp. GK1	46.36069692
Pseudomonas stutzeri	45.66637557
Butyrivibrio fibrisolvens	45.65466515
Leuconostoc citreum	45.4709675
Kyrpidia tusciae	44.76671861
Mycobacterium smegmatis	44.38886153
Vibrio vulnificus	43.72894923
Geobacillus sp. GHH01	43.20378822
Candidatus Tremblaya princeps	43.07068263
Thermodesulfatator indicus	42.49077183
Rhodothermus marinus	42.21754931
Helicobacter pylori	42.13276462
Candidatus Solibacter usitatus	41.84959305
Methylobacterium extorquens	41.58846589
Ilumatobacter coccineus	41.1773546
Enterococcus casseliflavus	40.84256099
Malvastrum leaf curl Philippines betasatellite	40.58878676
Exiguobacterium sp. AT1b	40.52056778
Lawsonia intracellularis	40.34763466
Oscillatoria nigro-viridis	39.96623818
Leuconostoc carnosum	39.57684147
Stackebrandtia nassauensis	39.3041147
Legionella longbeachae	39.12793816
Synechococcus sp. RCC307	39.02452102
Tropheryma whipplei	38.67689114
Enterococcus mundtii	38.60183648

<i>Streptococcus gallolyticus</i>	38.51156357
<i>Colwellia psychrerythraea</i>	38.29746758
<i>Desulfotomaculum acetoxidans</i>	38.17164745
alpha proteobacterium HIMB5	37.83066321
<i>Leptospira borgpetersenii</i>	37.55527287
<i>Streptococcus pasteurianus</i>	37.39899216
<i>Xylanimonas cellulosilytica</i>	37.37155337
<i>Ruminococcus bromii</i>	37.30597385
<i>Clostridium cellulovorans</i>	37.12956392
<i>Streptosporangium roseum</i>	37.07927497
<i>Bordetella petrii</i>	37.02546586
<i>Caldicellulosiruptor obsidiansis</i>	37.00537513
[<i>Clostridium</i>] <i>clariflavum</i>	36.96970307
<i>Alicyclobacillus acidocaldarius</i>	36.84645982
<i>Corynebacterium glutamicum</i>	36.83179731
<i>Spirochaeta smaragdinae</i>	36.80561929
<i>Desulfotomaculum ruminis</i>	36.67677962
<i>Clostridium pasteurianum</i>	36.3612394
<i>Gordonia polyisoprenivorans</i>	36.1266511
<i>Rhodoferax ferrireducens</i>	35.95716095
<i>Pectobacterium carotovorum</i>	35.51025241
<i>Desulfovibrio vulgaris</i>	35.22453034
<i>Corynebacterium maris</i>	35.19668511
<i>Bacillus pseudofirmus</i>	35.1033011
<i>Proteus mirabilis</i>	35.09170635
<i>Photorhabdus asymbiotica</i>	35.01892546
<i>Halothermothrix orenii</i>	34.87833463
<i>Streptomyces bingchengensis</i>	34.84710155
<i>Anoxybacillus flavithermus</i>	34.75180947
<i>Burkholderia pseudomallei</i>	34.5152049
Candidatus <i>Endolissoclinum faulkneri</i>	34.16397077
<i>Chthonomonas calidirosea</i>	33.62989297
<i>Arcobacter butzleri</i>	33.07911714
<i>Haliangium ochraceum</i>	32.82714017
<i>Bacillus megaterium</i>	32.35229709
Candidatus <i>Riesia pediculicola</i>	32.3040003
<i>Rhodopseudomonas palustris</i>	32.11747054
<i>Syntrophothermus lipocalidus</i>	32.10214149
<i>Pseudoalteromonas atlantica</i>	32.05223747
<i>Eggerthella</i> sp. YY7918	32.02089133
<i>Lactobacillus delbrueckii</i>	31.9745867
<i>Acinetobacter oleivorans</i>	31.84608862
<i>Rickettsia canadensis</i>	31.74749801
<i>Paenibacillus polymyxa</i>	31.62905492
<i>Burkholderia mallei</i>	31.57522657
<i>Treponema primitia</i>	31.44522722
<i>Teredinibacter turnerae</i>	31.36955423
<i>Laribacter hongkongensis</i>	31.25153943
<i>Spirochaeta thermophila</i>	30.67589457
<i>Aliivibrio salmonicida</i>	30.47564784
<i>Vibrio furnissii</i>	30.32601503
<i>Kosmotoga olearia</i>	30.21292784
<i>Shimwellia blattae</i>	29.97456675

<i>Faecalibacterium prausnitzii</i>	29.810909
<i>Methanococcus aeolicus</i>	29.58663058
<i>Mycoplasma arthritis</i>	29.58079591
<i>Vibrio anguillarum</i>	29.10085443
<i>Bacteriovorax marinus</i>	28.61591075
<i>Delftia acidovorans</i>	28.53863054
<i>Listeria welshimeri</i>	27.9704227
<i>Clostridium novyi</i>	27.69104803
Dill cryptic virus 1	27.67327928
<i>Thermodesulfobium narugense</i>	27.58885542
<i>Klebsiella oxytoca</i>	27.41763547
<i>Marinomonas</i> sp. MWYL1	27.30017641
<i>Psychromonas ingrahamii</i>	27.119349
<i>Saccharomonospora viridis</i>	26.9265178
<i>Leifsonia xyli</i>	26.88701036
<i>Mycoplasma putrefaciens</i>	26.88229203
Carp picornavirus 1	26.86499493
<i>Mycobacterium canettii</i>	26.85215379
<i>Bartonella grahamii</i>	26.71653618
<i>Ralstonia pickettii</i>	26.58366884
<i>Clavibacter michiganensis</i>	26.38307566
<i>Methylobacterium radiotolerans</i>	26.27095812
<i>Burkholderia phytofirmans</i>	26.07319444
<i>Sphaerochaeta globosa</i>	26.0363216
<i>Weeksella virosa</i>	25.99576268
<i>Burkholderia thailandensis</i>	25.67181804
<i>Pediococcus clausenii</i>	25.64023851
<i>Ruminococcus champanellensis</i>	25.52829177
<i>Advenella kashmirensis</i>	25.40742823
<i>Geobacter bemidjensis</i>	24.82074435
<i>Lactobacillus gasseri</i>	24.73539906
<i>Cellvibrio japonicus</i>	24.46177235
<i>Brachyspira murdochii</i>	24.45304559
<i>Bifidobacterium breve</i>	24.43728825
<i>Burkholderia cenocepacia</i>	24.3979516
<i>Clostridium saccharobutylicum</i>	24.30355946
Candidatus <i>Liberibacter solanacearum</i>	24.2499886
<i>Sanguibacter keddieii</i>	24.09259381
<i>Serratia marcescens</i>	24.08198309
<i>Photorhabdus luminescens</i>	24.0363209
Cyprinid herpesvirus 3	23.95213529
<i>Halobacteroides halobius</i>	23.87388543
<i>Spirochaeta africana</i>	23.77495062
<i>Acholeplasma brassicae</i>	23.65271325
<i>Kinetoplastibacterium blastocrithidii</i>	23.36197948
<i>Thermoanaerobacter wiegeli</i>	23.23661175
<i>Anaerolinea thermophila</i>	23.09985856
<i>Staphylococcus carnosus</i>	23.08328799
<i>Isosphaera pallida</i>	22.92653563
Human endogenous retrovirus K	22.64849145
<i>Methylococcus capsulatus</i>	22.557552
<i>Thermobacillus composti</i>	22.32924103
Candidatus <i>Hodgkinia cicadicola</i>	22.31826461

<i>Rickettsia africae</i>	22.26565854
<i>Paenibacillus</i> sp. Y412MC10	22.25470136
<i>Nostoc punctiforme</i>	22.21407985
<i>Campylobacter coli</i>	22.13582998
<i>Kangiella koreensis</i>	22.10731821
<i>Coriobacterium glomerans</i>	22.09160422
Candidatus <i>Tremblaya phenacola</i>	22.06223586
butyrate-producing bacterium SS3/4	21.81145706
Cyprinid herpesvirus 1	21.72890278
<i>Pediococcus pentosaceus</i>	21.54749553
<i>Methylophaga frappieri</i>	21.37239459
<i>Heliobacterium modesticaldum</i>	21.29573271
<i>Kytococcus sedentarius</i>	21.29408214
<i>Leuconostoc mesenteroides</i>	20.89617768
Candidatus <i>Uzinura diaspidicola</i>	20.89004703
<i>Dictyoglomus thermophilum</i>	20.87576947
<i>Solibacillus silvestris</i>	20.8439999
<i>Corynebacterium jeikeium</i>	20.6988664
<i>Propionibacterium acidipropionici</i>	20.53555511
<i>Desulfurivibrio alkaliphilus</i>	20.49006371
<i>Pandoravirus salinus</i>	20.40793772
Candidatus <i>Sulfuricurvum</i> sp. RIFRC-1	20.38771955
[<i>Cellvibrio</i>] <i>gilvus</i>	20.07158024
<i>Pirellula staleyi</i>	20.0626201
<i>Flexibacter litoralis</i>	20.06081797
<i>Marinitoga piezophila</i>	19.98921601
<i>Caldicellulosiruptor bescii</i>	19.92807808
<i>Petrotoga mobilis</i>	19.78823789
<i>Alkaliphilus oremlandii</i>	19.70692513
<i>Burkholderia ambifaria</i>	19.62880758
<i>Burkholderia</i> sp. KJ006	19.58558995
<i>Mesoplasma florum</i>	19.50429644
<i>Pseudomonas denitrificans</i>	19.44152718
<i>Adlercreutzia equolifaciens</i>	19.32653679
<i>Listeria ivanovii</i>	19.2715054
<i>Syntrophobotulus glycolicus</i>	19.05091306
<i>Thermodesulfobacterium geofontis</i>	18.91083948
<i>Herminiimonas arsenicoxydans</i>	18.85152292
<i>Moraxella catarrhalis</i>	18.76489275
<i>Polaribacter</i> sp. MED152	18.66072722
<i>Gardnerella vaginalis</i>	18.57857713
<i>Nocardiopsis dassonvillei</i>	18.55085934
<i>Chroococciopsis thermalis</i>	18.37691322
<i>Mycoplasma penetrans</i>	18.33862807
<i>Sideroxydans lithotrophicus</i>	18.26809683
<i>Bacillus</i> sp. 1NLA3E	18.19718065
<i>Marinobacter hydrocarbonoclasticus</i>	18.12562204
<i>Cellulomonas flavigena</i>	17.82245131
<i>Shewanella loihica</i>	17.76990784
<i>Vibrio parahaemolyticus</i>	17.73522206
<i>Gordonia</i> sp. KTR9	17.73052784
<i>Pseudanabaena</i> sp. PCC 7367	17.6330487
<i>Mycobacterium abscessus</i>	17.61965183

<i>Pusillimonas</i> sp. T7-7	17.4037537
<i>Candidatus Ruthia magnifica</i>	17.37481364
<i>Actinoplanes friuliensis</i>	17.34175433
<i>Legionella pneumophila</i>	17.31120704
<i>Idiomarina loihiensis</i>	17.26350933
<i>Methylobacterium populi</i>	17.1778873
<i>Gallionella capsiferiformans</i>	17.08497493
<i>Acinetobacter calcoaceticus</i>	17.07597143
<i>Spirosoma linguale</i>	16.83481933
<i>Lactobacillus crispatus</i>	16.77653014
<i>Corynebacterium pseudotuberculosis</i>	16.47867683
<i>Pseudomonas putida</i>	16.47318862
<i>Paenibacillus terrae</i>	16.33045634
<i>Marinithermus hydrothermalis</i>	16.25994921
<i>Glaciecola psychrophila</i>	16.22121165
<i>Bradyrhizobium</i> sp. BTA11	16.1156097
<i>Arthrobacter phenanthrenivorans</i>	16.03446774
<i>Chromohalobacter salexigens</i>	16.01266646
<i>Thermoanaerobacterium thermosaccharolyticum</i>	16.00942791
<i>Flavobacterium columnare</i>	15.99515034
<i>Candidatus Rickettsia amblyommii</i>	15.94213522
<i>Janthinobacterium</i> sp. Marseille	15.84307297
<i>Herbaspirillum seropedicae</i>	15.80412126
<i>Dokdonia</i> sp. 4H-3-7-5	15.65937271
<i>Pleurocapsa minor</i>	15.4129273
<i>Lactobacillus brevis</i>	15.37851826
<i>Magnetospirillum gryphiswaldense</i>	15.37830412
<i>Bifidobacterium bifidum</i>	15.30061486
<i>Pseudomonas fluorescens</i>	15.2374173
<i>Gluconobacter oxydans</i>	14.96755852
<i>Klebsiella pneumoniae</i>	14.83072349
<i>Enterococcus faecalis</i>	14.79114859
<i>Starkeya novella</i>	14.75549804
<i>Clostridium</i> sp. BNL1100	14.66683236
<i>Elusimicrobium minutum</i>	14.4499261
<i>Rhodococcus erythropolis</i>	14.40793075
<i>Halanaerobium praevalens</i>	14.21591278
<i>Mycoplasma mobile</i>	14.00758173
<i>Candidatus Blochmannia floridanus</i>	13.99718515
Falconid herpesvirus 1	13.90787704
<i>Thermincola potens</i>	13.90298791
<i>Burkholderia lata</i>	13.84101264
<i>Herpetosiphon aurantiacus</i>	13.71079915
<i>Cellulomonas fimi</i>	13.65570516
<i>Symbiobacterium thermophilum</i>	13.58457484
<i>Delftia</i> sp. Cs1-4	13.58232518
<i>Francisella tularensis</i>	13.45899297
<i>Microlunatus phosphovorus</i>	13.44145761
<i>Rhodococcus pyridinivorans</i>	13.42004127
<i>Nitrosomonas</i> sp. Is79A3	13.24984869
<i>Hydrogenobaculum</i> sp. HO	13.14180218
<i>Thermotoga neapolitana</i>	13.12000089
<i>Hippea maritima</i>	12.94897097

<i>Glaciecola nitratireducens</i>	12.90879699
<i>Corynebacterium halotolerans</i>	12.90165821
<i>Ruminococcus albus</i>	12.8233891
<i>Corynebacterium resistens</i>	12.77772691
<i>Lactobacillus johnsonii</i>	12.65806154
<i>Bacillus pumilus</i>	12.63503797
<i>Arthrobacter chlorophenolicus</i>	12.60466148
<i>Burkholderia rhizoxinica</i>	12.46501619
<i>Shewanella piezotolerans</i>	12.26626849
<i>Streptomyces venezuelae</i>	12.25769328
<i>Spiroplasma chrysopicola</i>	12.23383237
<i>Cupriavidus metallidurans</i>	12.21181694
Candidatus <i>Portiera aleyrodidarum</i>	12.19449573
<i>Paenibacillus</i> sp. JDR-2	12.19082889
<i>Methanosarcina mazei</i>	12.00593045
<i>Dehalogenimonas lykanthroporepellens</i>	11.99656125
<i>Acinetobacter baumannii</i>	11.96618476
<i>Treponema azotonutricium</i>	11.90097094
secondary endosymbiont of <i>Heteropsylla cubana</i>	11.88748736
<i>Cellulophaga algicola</i>	11.7339928
<i>Geobacillus thermoglucosidasius</i>	11.71096924
<i>Shewanella</i> sp. ANA-3	11.66753746
<i>Arthrobacter</i> sp. FB24	11.53951103
[<i>Clostridium</i>] <i>cellulolyticum</i>	11.46550785
<i>Plautia stali</i> symbiont	11.4565477
<i>Fibrella aestuarina</i>	11.34588584
<i>Rhodospirillum photometricum</i>	11.17809447
uncultured Termite group 1 bacterium	11.11223821
<i>Desulfovibrio piezophilus</i>	11.01559641
<i>Staphylococcus saprophyticus</i>	10.99278699
<i>Thermoanaerobacterium xylanolyticum</i>	10.96832699
<i>Streptococcus</i> phage 5093	10.94487514
<i>Calditerrivibrio nitroreducens</i>	10.7204644
<i>Acidimicrobium ferrooxidans</i>	10.70127847
<i>Fervidobacterium nodosum</i>	10.69557611
<i>Burkholderia cepacia</i>	10.58262124
<i>Clostridium saccharoperbutylacetonicum</i>	10.4974275
<i>Mycoplasma parvum</i>	10.44014645
<i>Enterobacter</i> sp. 638	10.42953572
<i>Synechococcus</i> sp. PCC 7502	10.4277336
<i>Persephonella marina</i>	10.42016653
<i>Formica exsecta</i> virus 1	10.40955581
<i>Xenorhabdus bovienii</i>	10.3887819
<i>Acetohalobium arabaticum</i>	10.38612319
<i>Desulfosporosinus acidiphilus</i>	10.38303619
<i>Bacillus infantis</i>	10.27055296
<i>Thiomicrospira crunogena</i>	10.25258931
<i>Bradyrhizobium diazoefficiens</i>	10.21262947
<i>Helicobacter bizzozeronii</i>	10.20874848
<i>Bacillus weihenstephanensis</i>	10.20426841
<i>Frankia</i> symbiont of <i>Datisca glomerata</i>	10.17410606
<i>Sphaerobacter thermophilus</i>	10.14027687
<i>Rahnella aquatilis</i>	10.12274151

Psychrobacter sp. PRwf-1	10.11682501
Coprothermobacter proteolyticus	10.07463475
Mycoplasma fermentans	10.01000078
Nakamurella multipartita	9.78882859
Acidithiobacillus ferrivorans	9.691801847
Brucella melitensis	9.65306429
Azospirillum brasilense	9.651627863
Francisella sp. TX077308	9.593124533
Citrobacter koseri	9.56988682
Pantoea ananatis	9.556208343
Candidatus Phytoplasma mali	9.523002346
White clover cryptic virus 2	9.445741377
Geobacter uraniireducens	9.364813565
Sulfuricella denitrificans	9.249243331
Komagataeibacter medellinensis	9.243497624
Methanospirillum hungatei	9.178692852
Hirschia baltica	9.137724879
Nitrosomonas sp. AL212	9.079007402
Pepino mosaic virus	9.068610827
Thermobifida fusca	8.994821797
Cellulophaga lytica	8.77322132
Maribacter sp. HTCC2170	8.680888798
Xylella fastidiosa	8.623821894
Treponema caldaria	8.408352064
Rickettsia bellii	8.403828639
Streptomyces avermitilis	8.37366629
Elephantid herpesvirus 1	8.299064028
Mycoplasma pulmonis	8.273381754
Nocardioides sp. JS614	8.270723046
Candidatus Cloacimonas acidaminovorans	8.258096055
Mycobacterium leprae	8.186751587
Paenibacillus mucilaginosus	8.182442308
Ornithobacterium rhinotracheale	8.10091541
Bradyrhizobium japonicum	8.051995423
Halyomorpha halys symbiont	7.993492092
Eggerthella lenta	7.976769967
Kitasatospora setae	7.966373391
Cardinium endosymbiont of Encarsia pergandiella	7.94394891
Bradyrhizobium sp. S23321	7.927849979
Burkholderia sp. CCGE1002	7.821025748
Candidatus Amoebophilus asiaticus	7.812664685
Echinicola vietnamensis	7.774141274
Streptomyces cattleya	7.738062424
Gloeobacter violaceus	7.731351933
Saprospira grandis	7.692614376
Ignavibacterium album	7.629801766
Methylothermobacter versatilis	7.601289989
Blattabacterium sp. (Nauphoeta cinerea)	7.557020871
Pseudomonas resinovorans	7.495473892
Thermotoga thermarum	7.488549256
Spirochaeta sp. L21-RPul-D2	7.327316828
Candidatus Liberibacter asiaticus	7.3199639
Corynebacterium ulcerans	7.314047399

Methylidium petroleiphilum	7.125482124
Staphylococcus pseudintermedius	7.091438787
Hyposoter fugitivus ichnovirus	7.055359937
Nostoc sp. PCC 7120	7.041296519
Syntrophus aciditrophicus	6.947313425
Anabaena sp. 90	6.944055631
Helicobacter hepaticus	6.851508964
Amycolatopsis orientalis	6.812771406
Natranaerobius thermophilus	6.785866851
Saccharophagus degradans	6.784430425
Lactobacillus buchneri	6.77323986
Desulfovibrio africanus	6.752831649
Thioalkalivibrio nitratireducens	6.742649219
Solenopsis invicta virus 3	6.677007107
Xanthobacter autotrophicus	6.669868325
Yersinia pestis	6.664165969
Methanosarcina barkeri	6.637047269
Streptomyces hygroscopicus	6.611364994
Hyphomonas neptunium	6.558778165
Methylobacillus flagellatus	6.500274834
Cupriavidus necator	6.455620775
Emticicia oligotrophica	6.420355158
Chlamydia psittaci	6.414438657
Marinobacter sp. BSs20148	6.397117445
Bdellovibrio bacteriovorus	6.337391833
Desulfotomaculum carboxydivorans	6.310487278
Actinosynnema mirum	6.277452076
Parvularcula bermudensis	6.227309808
Cytophaga hutchinsonii	6.120485577
Spiribacter salinus	6.097247864
Cupriavidus taiwanensis	6.083184446
Streptococcus intermedius	6.083184446
Pantoea vagans	6.038744533
Mycoplasma gallisepticum	6.030597616
Burkholderia sp. YI23	6.024466969
Aquifex aeolicus	5.979018922
Shewanella pealeana	5.926217946
Paramecium bursaria Chlorella virus 1	5.908682589
Candidatus Desulforudis audaxviator	5.904801601
Blastococcus saxobsidens	5.847734697
Shewanella halifaxensis	5.833457133
Aureococcus anophagefferens virus	5.830199339
Mycoplasma bovis	5.737866817
Shewanella oneidensis	5.706053896
Candidatus Nasuia deltocephalinicola	5.686073977
Actinoplanes sp. N902-109	5.660391702
Rhodococcus hoagii	5.627570646
Sulfurovum sp. NBC37-1	5.572110964
Phycisphaera mikurensis	5.555003897
Agrobacterium vitis	5.490798211
Acidithiobacillus caldus	5.477742929
Zunongwangia profunda	5.476520648
Desulfurobacterium thermolithotrophum	5.470604147

Roseburia intestinalis	5.470604147
Azospira oryzae	5.45898529
Brevundimonas subvibrioides	5.451846508
Gemmatimonas aurantiaca	5.43778309
Arcobacter nitrofigilis	5.432294881
Shewanella woodyi	5.426164234
Zobellia galactanivorans	5.41066439
Bradyrhizobium oligotrophicum	5.406184315
Rhodobacter capsulatus	5.399259679
Bifidobacterium animalis	5.373363259
Shewanella amazonensis	5.354819766
Gordonibacter pamelaee	5.345022277
Streptococcus phage Cp-1	5.317903576
Erwinia amylovora	5.185012129
Granulicella tundricola	5.137913509
Thermosynechococcus elongatus	5.1324253
Sphingomonas sp. MM-1	5.126294653
Sulfurospirillum deleyianum	5.10652888
Lactobacillus plantarum	5.066569042
Acinetobacter sp. ADP1	5.003371491
Salinispora tropica	4.989308073
Actinoplanes sp. SE50/110	4.970550434
Arcobacter sp. L	4.969328154
Acidovorax sp. KKS102	4.949348235
Turneriella parva	4.923880106
Shewanella frigidimarina	4.897983686
Polaromonas naphthalenivorans	4.889408477
Pelotomaculum thermopropionicum	4.826639218
Calyptogenia okutanii thioautotrophic gill symbiont	4.820722717
Streptomyces coelicolor	4.806445153
Carboxydotherrmus hydrogenoformans	4.760997105
Paenibacillus larvae	4.73958076
Singulisphaera acidiphila	4.643776298
Methylomonas methanica	4.638073943
Conexibacter woesei	4.630935161
Simkania negevensis	4.596677678
Streptomyces scabiei	4.583836541
Candidatus Moranella endobia	4.578134186
Salinispora arenicola	4.558154267
Blattabacterium punctulatus	4.552451911
Oscillatoria acuminata	4.551015485
Fluviicola taffensis	4.545313129
Wolbachia endosymbiont of Onchocerca ochengi	4.512492073
Raoultella ornithinolytica	4.508011999
Sulfurimonas denitrificans	4.506789718
Rivularia sp. PCC 7116	4.505353291
Anaplasma marginale	4.442369886
Glaciecola sp. 4H-3-7+YE-5	4.377950054
Sorangium cellulosum	4.356747854
Dyadobacter fermentans	4.345128998
Alteromonas sp. SN2	4.325363225
Rhizobium sp. IRBG74	4.312307942
Burkholderia sp. RPE64	4.253804611

<i>Corallocooccus coralloides</i>	4.240963474
<i>Robiginitalea biformata</i>	4.20548371
<i>Bacteroides xylanisolvens</i>	4.186940218
<i>Runella slithyformis</i>	4.179801436
<i>Azoarcus</i> sp. KH32C	4.168182579
<i>Desulfobacula toluolica</i>	4.154119162
<i>Bacillus clausii</i>	4.141278024
<i>Brachyspira pilosicoli</i>	4.11559575
<i>Anaeromyxobacter dehalogenans</i>	4.108456968
<i>Enterobacter lignolyticus</i>	4.096838112
<i>Aromatoleum aromaticum</i>	4.089913475
<i>Corynebacterium callunae</i>	4.031195999
<i>Choristoneura occidentalis granulovirus</i>	4.019577143
<i>Croceibacter atlanticus</i>	3.978395024
Candidatus <i>Babela massiliensis</i>	3.965553887
<i>Erythrobacter litoralis</i>	3.95393503
<i>Oligotropha carboxidovorans</i>	3.95393503
<i>Azospirillum lipoferum</i>	3.941093893
<i>Desulfitobacterium hafniense</i>	3.927030475
<i>Blattabacterium</i> sp. (<i>Panesthia angustipennis</i> spadica)	3.905614129
Candidatus <i>Pelagibacter</i> sp. IMCC9063	3.888292918
<i>Streptomyces davawensis</i>	3.882590562
gamma proteobacterium HdN1	3.81694845
<i>Flavobacterium johnsoniae</i>	3.815726169
<i>Desulfobacca acetoxidans</i>	3.809809668
<i>Neorickettsia sennetsu</i>	3.802885032
<i>Alistipes finegoldii</i>	3.790043895
<i>Dehalococcoides mccartyi</i>	3.757008693
<i>Nitrosospora multiformis</i>	3.751306337
<i>Phenylobacterium zucineum</i>	3.744167555
<i>Hydrogenobaculum</i> sp. Y04AAS1	3.724187636
<i>Halothece</i> sp. PCC 7418	3.718485281
<i>Streptomyces collinus</i>	3.704207717
<i>Halomonas elongata</i>	3.674045368
<i>Desulfovibrio alaskensis</i>	3.645704387
<i>Burkholderia xenovorans</i>	3.641224312
<i>Maruca vitrata</i> nucleopolyhedrovirus	3.628383175
<i>Bradyrhizobium</i> sp. ORS 278	3.615542038
<i>Halovivax ruber</i>	3.615542038
<i>Zymomonas mobilis</i>	3.615542038
<i>Gloeobacter kilaeensis</i>	3.60147862
<i>Methanococcus voltae</i>	3.595562118
<i>Methylobacterium inferorum</i>	3.594339838
<i>Methylobacterium nodulans</i>	3.582720981
<i>Allochromatium vinosum</i>	3.575582199
<i>Polynucleobacter necessarius</i>	3.569879844
<i>Acidovorax ebreus</i>	3.562741062
<i>Polaromonas</i> sp. JS666	3.562741062
<i>Pandoraea</i> sp. RB-44	3.549899925
<i>Nostoc</i> sp. PCC 7524	3.4398179
<i>Simiduia agarivorans</i>	3.4398179
<i>Geobacillus thermodenitrificans</i>	3.425754482
<i>Azotobacter vinelandii</i>	3.406996844

<i>Listeria innocua</i>	3.392933426
<i>Nostoc</i> sp. PCC 7107	3.391496999
<i>Nitrosococcus halophilus</i>	3.38723107
<i>Mycobacterium gilvum</i>	3.36133465
<i>Bacillus anthracis</i>	3.321588958
<i>Xenorhabdus nematophila</i>	3.30874782
<i>Burkholderia</i> sp. CCGE1003	3.308533675
<i>Thermus thermophilus</i>	3.295906683
<i>Agrobacterium fabrum</i>	3.2828514
<i>Akkermansia muciniphila</i>	3.270010263
<i>Xanthomonas albilineans</i>	3.270010263
<i>Cyanothece</i> sp. PCC 7424	3.257169126
<i>Phaeocystis globosa</i> virus	3.237189207
<i>Methanothermococcus okinawensis</i>	3.217209288
<i>Nocardia cyriacigeorgica</i>	3.211506932
<i>Rhodomicrobium vannielii</i>	3.211506932
<i>Erwinia tasmaniensis</i>	3.178685876
<i>Pectobacterium atrosepticum</i>	3.164408312
<i>Calothrix</i> sp. PCC 7507	3.118746119
<i>Pseudomonas</i> sp. UW4	3.081444988
<i>Lactobacillus helveticus</i>	3.080222707
<i>Pseudomonas entomophila</i>	3.074520352
<i>Vicia cryptic</i> virus	3.061465069
<i>Methylocystis</i> sp. SC2	3.054540433
<i>Streptomyces violaceusniger</i>	3.048623932
<i>Nitratifactor salsuginis</i>	3.041699296
<i>Leuconostoc gasicomitatum</i>	3.040262869
<i>Morganella morganii</i>	3.035782795
<i>Salinarchaeum</i> sp. Harcht-Bsk1	3.035782795
Human herpesvirus 7	3.015802876
<i>Desulfosporosinus orientis</i>	2.995822957
<i>Candidatus Arthromitus</i> sp. SFB-mouse	2.976057183
<i>Choristoneura rosaceana</i> entomopoxvirus 'L'	2.924478489
<i>Orientia tsutsugamushi</i>	2.911637351
<i>Mycobacterium bovis</i>	2.90449857
<i>Desulfovibrio desulfuricans</i>	2.878816295
<i>Thioflavicoccus mobilis</i>	2.878816295
<i>Bartonella australis</i>	2.845995239
<i>Rhizobium leguminosarum</i>	2.833154102
<i>Desulfosporosinus meridiei</i>	2.82601532
Papaya leaf curl alphasatellite	2.814396463
<i>Blattabacterium</i> sp. (<i>Blaberus giganteus</i>)	2.813174183
<i>Bacillus licheniformis</i>	2.798896619
<i>Mycobacterium chubuense</i>	2.781575407
<i>Pseudovibrio</i> sp. FO-BEG1	2.76873427
<i>Vibrio tasmaniensis</i>	2.76873427
<i>Thermobaculum terrenum</i>	2.767511989
<i>Chloroherpeton thalassium</i>	2.761809634
<i>Desulfococcus oleovorans</i>	2.761809634
<i>Desulfovibrio aespoeensis</i>	2.761809634
<i>Pseudoxanthomonas suwonensis</i>	2.748754351
<i>Dactylococcopsis salina</i>	2.74753207
<i>Pseudomonas brassicacearum</i>	2.735913214

<i>Vibrio nigripulchritudo</i>	2.735913214
<i>Rhodospirillum centenum</i>	2.723072077
<i>Mycoplasma synoviae</i>	2.696167521
<i>Staphylothermus hellenicus</i>	2.683326384
Cyprinid herpesvirus 2	2.677409883
<i>Ehrlichia ruminantium</i>	2.677409883
<i>Deinococcus radiodurans</i>	2.670271101
<i>Bordetella pertussis</i>	2.637450045
<i>Synechococcus</i> sp. JA-2-3B'a(2-13)	2.624608908
<i>Nautilia profundicola</i>	2.611767771
<i>Thalassolituus oleivorans</i>	2.591787851
<i>Asticcacaulis excentricus</i>	2.586085496
<i>Leptospira biflexa</i>	2.571807932
<i>Desulfotomaculum kuznetsovii</i>	2.566105577
<i>Rhodococcus jostii</i>	2.538986876
Streptococcus phage SM1	2.513304602
<i>Nitrobacter winogradskyi</i>	2.501685745
<i>Pseudomonas protegens</i>	2.501685745
Streptococcus phage PH10	2.480483545
<i>Xanthomonas oryzae</i>	2.468864689
<i>Caldisericum exile</i>	2.467642408
<i>Shewanella denitrificans</i>	2.467642408
<i>Stanieria cyanosphaera</i>	2.456023552
<i>Chlorobium limicola</i>	2.423202496
<i>Acidovorax avenae</i>	2.410361358
<i>Sphingomonas wittichii</i>	2.410361358
<i>Parvibaculum lavamentivorans</i>	2.390381439
<i>Planctomyces brasiliensis</i>	2.390381439
<i>Campylobacter lari</i>	2.344719246
Candidatus <i>Nitrospira defluvii</i>	2.324739327
<i>Meiothermus ruber</i>	2.31189819
<i>Haliscomenobacter hydrossis</i>	2.266235996
<i>Nonlabens dokdonensis</i>	2.220573803
<i>Thermotoga lettingae</i>	2.213435021
<i>Thermacetogenium phaeum</i>	2.207732665
<i>Sulfuricurvum kujiense</i>	2.200593884
Cercopithecine herpesvirus 2	2.188975027
Laodelphax striatella honeydew virus 1	2.188975027
Prunus necrotic ringspot virus	2.188975027
<i>Spiribacter</i> sp. UAH-SP71	2.188975027
<i>Granulicella mallensis</i>	2.156153971
<i>Terriglobus roseus</i>	2.149229335
<i>Burkholderia</i> sp. CCGE1001	2.143312834
<i>Cynomolgus macaque cytomegalovirus</i> strain Ottawa	2.143312834
<i>Methylobacterium</i> sp. 4-46	2.143312834
<i>Fervidobacterium pennivorans</i>	2.123332915
<i>Arthrobacter aurescens</i>	2.09765064
<i>Hyphomicrobium</i> sp. MC1	2.09765064
<i>Burkholderia vietnamiensis</i>	2.090511858
<i>Yersinia</i> phage phiA1122	2.064829584
<i>Beijerinckia indica</i>	2.051988447
<i>Lactobacillus rhamnosus</i>	2.051988447
<i>Actinoplanes missouriensis</i>	2.044849665

Bacillus halodurans	2.044849665
candidate division WWE3 bacterium RAAC2_WWE3_1	2.032008528
Mycobacterium ulcerans	2.01916739
Deinococcus maricopensis	2.006326253
Helicobacter felis	1.96066406
Rhodobacter sphaeroides	1.959227633
Micavibrio aeruginosavorus	1.953525278
Haemophilus phage Aaphi23	1.88218081
Actinomyces phage Av-1	1.876264309
Cupriavidus pinatubonensis	1.876264309
Melon yellow spot virus	1.876264309
Novosphingobium sp. PP1Y	1.876264309
Thermus scotoductus	1.876264309
Helicobacter mustelae	1.869339673
Sphingobium sp. SYK-6	1.843443253
Enterobacteriaceae bacterium strain FGI 57	1.830602116
Methanosarcina acetivorans	1.830602116
Pseudomonas fulva	1.830602116
Candidatus Accumulibacter phosphatis	1.810622196
Corynebacterium terpenotabidum	1.810622196
Chloroflexus aggregans	1.797781059
Borrelia crocidurae	1.784939922
Cyanobium gracile	1.784939922
Mycoplasma haemofelis	1.784939922
Modestobacter marinus	1.77780114
Candidatus Kinetoplastibacterium crithidii	1.739277729
Deinococcus geothermalis	1.71929781
Chlamydia pneumoniae	1.712159028
Nocardia brasiliensis	1.69931789
Geobacter sulfurreducens	1.693615535
Maricaulis maris	1.693615535
Nitrosomonas europaea	1.693615535
Rhodococcus opacus	1.693615535
Clostridium ljungdahlii	1.686476753
Pseudomonas syringae	1.686476753
Exiguobacterium sibiricum	1.647953342
Nitrobacter hamburgensis	1.563553591
Pseudoxanthomonas spadix	1.563553591
Psychrobacter arcticus	1.563553591
Sinorhizobium fredii	1.563553591
Thermoplasma volcanium	1.563553591
Acidovorax sp. JS42	1.530732535
Anaeromyxobacter sp. Fw109-5	1.530732535
Candidatus Kinetoplastibacterium desouzaii	1.530732535
Cronobacter sakazakii	1.530732535
Exiguobacterium sp. MH3	1.530732535
Trichodesmium erythraeum	1.517891397
Ictalurid herpesvirus 1	1.497911478
Methylotenera mobilis	1.485070341
Spiroplasma taiwanense	1.485070341
Aeromonas veronii	1.472229204
Anabaena variabilis	1.472229204
Hahella chejuensis	1.472229204

<i>Pseudomonas poae</i>	1.472229204
<i>Borrelia recurrentis</i>	1.465090422
<i>Streptomyces albus</i>	1.465090422
<i>Verrucosipora maris</i>	1.465090422
<i>Yersinia pseudotuberculosis</i>	1.465090422
<i>Mycobacterium vanbaalenii</i>	1.452249285
<i>Thiomonas intermedia</i>	1.452249285
<i>Mycoplasma mycoides</i>	1.439408148
<i>Wolinella succinogenes</i>	1.439408148
<i>Bartonella quintana</i>	1.419428229
<i>Burkholderia phenoliruptrix</i>	1.406587091
<i>Mesorhizobium ciceri</i>	1.393745954
<i>Geobacillus</i> sp. WCH70	1.386607172
<i>Dickeya zeae</i>	1.380904817
<i>Blattabacterium</i> sp. (<i>Periplaneta americana</i>)	1.373766035
<i>Mycoplasma agalactiae</i>	1.373766035
<i>Thermodesulfovibrio yellowstonii</i>	1.360924898
Candidatus <i>Arthromitus</i> sp. SFB-rat-Yit	1.348083761
Candidatus <i>Phytoplasma solani</i>	1.348083761
<i>Sulfurimonas autotrophica</i>	1.348083761
<i>Aggregatibacter</i> phage S1249	1.335242623
<i>Brachyspira intermedia</i>	1.335242623
<i>Synechococcus</i> sp. CC9605	1.335242623
<i>Caulobacter</i> sp. K31	1.250842873
<i>Chlorobium phaeovibrioides</i>	1.250842873
<i>Emiliana huxleyi</i> virus 86	1.250842873
<i>Enterobacter aerogenes</i>	1.250842873
<i>Frankia</i> sp. CcI3	1.250842873
<i>Frankia</i> sp. EAN1pec	1.250842873
Human herpesvirus 6B	1.250842873
<i>Shewanella</i> sp. MR-7	1.250842873
<i>Sphingobium japonicum</i>	1.250842873
Candidatus <i>Chloracidobacterium thermophilum</i>	1.218021816
Eel picornavirus 1	1.218021816
<i>Aeromonas hydrophila</i>	1.205180679
<i>Rhizoctonia solani</i> dsRNA virus 2	1.205180679
<i>Thermomicrobium roseum</i>	1.205180679
<i>Desulfovibrio magneticus</i>	1.172359623
<i>Enterobacter</i> sp. R4-368	1.172359623
<i>Sphaerochaeta pleomorpha</i>	1.172359623
<i>Blattabacterium</i> sp. (<i>Blattella germanica</i>)	1.159518486
<i>Methylocella silvestris</i>	1.159518486
<i>Pseudomonas monteilii</i>	1.159518486
<i>Chelativorans</i> sp. BNC1	1.152379704
beta proteobacterium CB	1.139538567
<i>Desulfocapsa sulfexigens</i>	1.139538567
<i>Arthrobacter</i> sp. Rue61a	1.126697429
<i>Pelobacter carbinolicus</i>	1.126697429
<i>Pseudoalteromonas</i> sp. SM9913	1.126697429
<i>Methanohalophilus mahii</i>	1.119558648
<i>Mycoplasma conjunctivae</i>	1.119558648
<i>Saccharothrix espanaensis</i>	1.119558648
<i>Streptococcus</i> phage EJ-1	1.119558648

Calothrix parietina	1.113856292
Stigmatella aurantiaca	1.113856292
Thermosynechococcus sp. NK55a	1.113856292
Aeromonas phage phiAS5	1.10671751
Clostridium phage c-st	1.10671751
Methylovorus glucosotrophus	1.093876373
Ruegeria sp. TM1040	1.093876373
Wolbachia endosymbiont of Drosophila simulans	1.093876373
Lacinutrix sp. 5H-3-7-4	1.081035236
Octadecabacter antarcticus	1.081035236
Sulfurospirillum barnesii	1.081035236
Aeromonas salmonicida	1.068194099
Deinococcus peraridilitoris	1.068194099
Acidovorax citrulli	0.938132154
Aquamavirus A	0.938132154
Bordetella bronchiseptica	0.938132154
Candidatus Nitrososphaera gargensis	0.938132154
Citrobacter rodentium	0.938132154
Cryptophlebia leucotreta granulovirus	0.938132154
Erinnyis ello granulovirus	0.938132154
Halorubrum lacusprofundi	0.938132154
Marinomonas mediterranea	0.938132154
Methanothermus fervidus	0.938132154
Paracoccus aminophilus	0.938132154
Polymorphum gilvum	0.938132154
Rose rosette virus	0.938132154
Rosellinia necatrix partitivirus 2	0.938132154
Salmonella bongori	0.938132154
Streptococcus phage Dp-1	0.938132154
Alcanivorax dieselolei	0.905311098
Frankia alni	0.905311098
Pseudomonas sp. TKP	0.905311098
Pseudomonas sp. VLB120	0.905311098
Chamaesiphon minutus	0.892469961
Geobacter sp. M18	0.892469961
Methylovorus sp. MP688	0.892469961
Stenotrophomonas phage S1	0.892469961
Streptomyces fulvissimus	0.892469961
Anabaena cylindrica	0.872490042
Enterobacter asburiae	0.872490042
Neorickettsia risticii	0.872490042
Streptomyces sp. SirexAA-E	0.872490042
Caulobacter vibrioides	0.859648905
Ectocarpus siliculosus virus 1	0.859648905
Geobacillus sp. C56-T3	0.846807768
Mycobacterium avium	0.846807768
Shewanella violacea	0.846807768
Thermoanaerobacter italicus	0.846807768
Brachyspira hyodysenteriae	0.839668986
Erwinia billingiae	0.839668986
Desulfitobacterium dehalogenans	0.813986711
Helicobacter acinonychis	0.813986711
Acaryochloris marina	0.801145574

Geodermatophilus obscurus	0.801145574
Pelagibacterium halotolerans	0.801145574
Prosthecochloris aestuarii	0.801145574
Rickettsia akari	0.801145574
Spiroplasma apis	0.801145574
Sulfurihydrogenibium sp. YO3AOP1	0.801145574
Acidithiobacillus ferrooxidans	0.625421436
Alcanivorax borkumensis	0.625421436
Azorhizobium caulinodans	0.625421436
Candidatus Koribacter versatilis	0.625421436
Deinococcus deserti	0.625421436
Edwardsiella ictaluri	0.625421436
Glypta fumiferanae ichnovirus	0.625421436
Grapevine Syrah virus 1	0.625421436
Haloquadratum walsbyi	0.625421436
Marinobacter adhaerens	0.625421436
Methanobrevibacter ruminantium	0.625421436
Methanococcus vannieli	0.625421436
Methanomethylovorans hollandica	0.625421436
Myxococcus xanthus	0.625421436
Rhizobium tropici	0.625421436
Saimiriine herpesvirus 1	0.625421436
Stenotrophomonas phage phiSMA7	0.625421436
Streptococcus phage IC1	0.625421436
Streptococcus phage TP-778L	0.625421436
Alcelaphine herpesvirus 1	0.59260038
Bdellovibrio exovorus	0.59260038
Candidatus Kinetoplastibacterium oncopeltii	0.59260038
Hyphomicrobium denitrificans	0.59260038
Rhizobium etli	0.59260038
Chlamydia pecorum	0.579759243
Desulfohalobium retbaense	0.579759243
Erwinia sp. Ejp617	0.579759243
Geobacter sp. M21	0.579759243
Gloeocapsa sp. PCC 7428	0.579759243
Leptospira interrogans	0.579759243
Onion yellows phytoplasma	0.579759243
Streptococcus phage DCC1738	0.579759243
Tomato zonate spot virus	0.579759243
Waddlia chondrophila	0.579759243
Xanthomonas alfalfae	0.579759243
Yaba monkey tumor virus	0.579759243
Arthrospira platensis	0.559779324
Bartonella bacilliformis	0.559779324
Ehrlichia muris	0.559779324
Fowl aviadenovirus D	0.559779324
Macacine herpesvirus 1	0.559779324
Mesorhizobium opportunistum	0.559779324
Pelodictyon luteolum	0.559779324
Pelodictyon phaeoclathratiforme	0.559779324
Psychrobacter cryohalolentis	0.559779324
Rhodopirellula baltica	0.559779324
Synechococcus sp. JA-3-3Ab	0.559779324

Tistrella mobilis	0.559779324
Bacillus sp. JS	0.546938187
Candidatus Methanomassiliicoccus intestinalis	0.546938187
Desulfovibrio gigas	0.546938187
Microcoleus sp. PCC 7113	0.546938187
Serratia liquefaciens	0.546938187
Shewanella putrefaciens	0.546938187
Sphaerochaeta coccoides	0.546938187
Bartonella tribocorum	0.534097049
Caldicellulosiruptor kristjanssonii	0.534097049
Chlamydia muridarum	0.534097049
Listeria seeligeri	0.534097049
Mycoplasma crocodyli	0.534097049
Paracoccus denitrificans	0.534097049
Streptomyces rapamycinicus	0.534097049
Ureaplasma parvum	0.534097049
Agrobacterium sp. H13-3	0.312710718
Agrobacterium tumefaciens	0.312710718
Agrotis epsilon multiple nucleopolyhedrovirus	0.312710718
Bartonella vinsonii	0.312710718
Bovine herpesvirus 5	0.312710718
Candidatus Atelocyanobacterium thalassa	0.312710718
Candidatus Blochmannia vafer	0.312710718
Candidatus Liberibacter americanus	0.312710718
Caulobacter segnis	0.312710718
Chrysoideixis chalcites nucleopolyhedrovirus	0.312710718
Cotesia congregata bracovirus	0.312710718
Desulfovibrio hydrothermalis	0.312710718
Dinoroseobacter shibae	0.312710718
Enterococcus sp. 7L76	0.312710718
Francisella noatunensis	0.312710718
Francisella philomiragia	0.312710718
Goatpox virus	0.312710718
Halomicrobium mukohataei	0.312710718
Human herpesvirus 5	0.312710718
Human mastadenovirus C	0.312710718
Invertebrate iridescent virus 31	0.312710718
Jannaschia sp. CCS1	0.312710718
Leptolyngbya sp. PCC 7376	0.312710718
Leuconostoc sp. C2	0.312710718
Mesorhizobium australicum	0.312710718
Methanobrevibacter smithii	0.312710718
Methanocella conradii	0.312710718
Methanosaeta harundinacea	0.312710718
Natronococcus occultus	0.312710718
Nitrosococcus watsonii	0.312710718
Ovine herpesvirus 2	0.312710718
Penaeus monodon nudivirus	0.312710718
Phaseolus vulgaris endornavirus	0.312710718
Rice grassy stunt virus	0.312710718
Saimiriine herpesvirus 4	0.312710718
Sinorhizobium medicae	0.312710718
Staphylococcus pasteurii	0.312710718

Streptococcus phage YMC-2011	0.312710718
Streptomyces sp. PAMC26508	0.312710718
Synechocystis sp. PCC 6803	0.312710718
Thermaerobacter marianensis	0.312710718
Thermosipho africanus	0.312710718
Thermotoga maritima	0.312710718
Thottapalayam virus	0.312710718
Vernonia yellow vein Fujian virus betasatellite	0.312710718
White spot syndrome virus	0.312710718
Xanthomonas euvesicatoria	0.312710718
Acanthocystis turfacea Chlorella virus 1	0.279889662
Acidiphilium cryptum	0.279889662
Acidobacterium capsulatum	0.279889662
Archaeoglobus fulgidus	0.279889662
Bacillus atrophaeus	0.279889662
Borrelia miyamotoi	0.279889662
Candidatus Blochmannia chromaiodes	0.279889662
Candidatus Midichloria mitochondrii	0.279889662
Cercopithecine herpesvirus 5	0.279889662
Chimpanzee alpha-1 herpesvirus	0.279889662
Chlorobium phaeobacteroides	0.279889662
Clostridium autoethanogenum	0.279889662
Coralimargarita akajimensis	0.279889662
Escherichia fergusonii	0.279889662
Exiguobacterium antarcticum	0.279889662
Invertebrate iridescent virus 6	0.279889662
Methanocaldococcus infernus	0.279889662
Methanococcoides burtonii	0.279889662
Methanoculleus marisnigri	0.279889662
Mycobacterium intracellulare	0.279889662
Mycoplasma capricolum	0.279889662
Pseudomonas phage phi297	0.279889662
Rickettsia rhipicephali	0.279889662
Shewanella sp. W3-18-1	0.279889662
Thermosipho melanesiensis	0.279889662
Trichormus azollae	0.279889662
Wheat streak mosaic virus	0.279889662
Acidilobus saccharovorans	0.267048525
Aciduliprofundum sp. MAR08-339	0.267048525
Desulfatibacillum alkenivorans	0.267048525
Ehrlichia chaffeensis	0.267048525
Geobacillus thermoleovorans	0.267048525
Gordonia bronchialis	0.267048525
Halogeometricum borinquense	0.267048525
Lactobacillus casei	0.267048525
Lactobacillus paracasei	0.267048525
Liberibacter crescens	0.267048525
Methanosaeta thermophila	0.267048525
Mycobacterium marinum	0.267048525
Pelobacter propionicus	0.267048525
Roseiflexus castenholzii	0.267048525
Shewanella sediminis	0.267048525
Streptococcus phage K13	0.267048525

Suid herpesvirus 1	0.267048525
Sulfurihydrogenibium azorense	0.267048525
Synechococcus sp. PCC 6312	0.267048525
Synechococcus sp. WH 7803	0.267048525
Synechococcus sp. WH 8102	0.267048525
Vibrio alginolyticus	0.267048525
Vibrio sp. Ex25	0.267048525

NAseq in OLP patients and healthy individuals

Healthy Control	
Microbiome Species	Average Counts (normalized)
<i>Veillonella parvula</i>	3724871.081
<i>Rothia mucilaginosa</i>	3400094.702
<i>Neisseria meningitidis</i>	588859.8523
<i>Achromobacter xylosoxidans</i>	437267.0777
<i>Fusobacterium nucleatum</i>	353136.9482
<i>Haemophilus parainfluenzae</i>	316376.3645
<i>Campylobacter concisus</i>	117352.6669
<i>Prevotella melaninogenica</i>	97702.18592
<i>Streptococcus parasanguinis</i>	86517.21503
<i>Selenomonas sputigena</i>	45974.20639
<i>Haemophilus influenzae</i>	44555.85145
<i>Rothia dentocariosa</i>	42870.05608
<i>Atopobium parvulum</i>	39603.98125
<i>Leptotrichia buccalis</i>	35762.97248
<i>Megasphaera elsdenii</i>	28452.14891
<i>Streptococcus mitis</i>	26744.71887
<i>Hyphomicrobium nitratorans</i>	25381.94056
<i>Streptococcus pneumoniae</i>	22132.21855
<i>Aggregatibacter aphrophilus</i>	21874.52533
<i>Selenomonas ruminantium</i>	21136.28642
<i>Streptococcus pyogenes</i>	21028.21579
<i>Streptococcus oligofermentans</i>	20861.04881
<i>Pseudogulbenkiania</i> sp. NH8B	19012.63351
<i>Porphyromonas asaccharolytica</i>	17612.37212
<i>Streptococcus constellatus</i>	16750.70875
<i>Tannerella forsythia</i>	16560.70017
<i>Dichelobacter nodosus</i>	14403.63067
<i>Taylorella equigenitalis</i>	12259.22948
<i>Streptococcus dysgalactiae</i>	12199.90474
<i>Prevotella intermedia</i>	11708.79333
<i>Capnocytophaga ochracea</i>	11180.09989
<i>Neisseria lactamica</i>	9853.277387
<i>Candidatus Saccharimonas aalborgensis</i>	9621.6254
[<i>Eubacterium</i>] <i>eligens</i>	9541.268338
<i>Mannheimia haemolytica</i>	9187.991104
<i>Streptococcus sanguinis</i>	8994.986067
<i>Prevotella</i> sp. oral taxon 299	8615.378326
<i>Riemerella anatipestifer</i>	8418.870748
[<i>Clostridium</i>] <i>saccharolyticum</i>	7866.75479
<i>Kocuria rhizophila</i>	7733.736486
<i>Magnetococcus marinus</i>	7368.207455
<i>Alteromonas macleodii</i>	7234.179811
<i>Campylobacter jejuni</i>	7018.583919
<i>Eubacterium rectale</i>	6690.587909
<i>Clostridium</i> sp. SY8519	6251.304172
<i>Propionibacterium avidum</i>	6030.84647
<i>Jonesia denitrificans</i>	5765.872779
<i>Mobiluncus curtisii</i>	5570.453145
<i>Leadbetterella byssophila</i>	5295.564957
<i>Escherichia coli</i>	5173.880001

<i>Streptococcus pseudopneumoniae</i>	4980.888944
<i>Streptococcus equi</i>	4830.356386
<i>Bacteroides vulgatus</i>	4717.370455
<i>Beutenbergia cavernae</i>	4495.038065
<i>Streptococcus</i> sp. I-P16	4389.27256
<i>Lachnoclostridium phytofermentans</i>	4316.653098
butyrate-producing bacterium SSC/2	4312.543628
Flavobacteriaceae bacterium 3519-10	4113.611124
<i>Macrococcus caseolyticus</i>	4076.907326
<i>Thauera</i> sp. MZ1T	4027.346287
<i>Chitinophaga pinensis</i>	4009.422643
<i>Corynebacterium argentoratense</i>	4003.707466
<i>Mycoplasma hyopneumoniae</i>	3782.295088
<i>Paludibacter propionicigenes</i>	3781.083388
<i>Coprococcus catus</i>	3689.858213
<i>Niastella koreensis</i>	3160.068531
<i>Neisseria gonorrhoeae</i>	3082.300459
<i>Porphyromonas gingivalis</i>	3082.158003
<i>Brachybacterium faecium</i>	3070.00558
<i>Streptococcus gordonii</i>	2757.068213
<i>Marivirga tractuosa</i>	2536.469026
<i>Campylobacter curvus</i>	2412.02812
<i>Pedobacter heparinus</i>	2213.08841
<i>Carnobacterium maltaromaticum</i>	2123.228035
Candidatus <i>Saccharibacteria</i> bacterium RAAC3 TM7_1	2102.107879
<i>Thiocystis violascens</i>	2057.371828
<i>Ruminiclostridium thermocellum</i>	2048.161031
<i>Staphylococcus haemolyticus</i>	2007.143841
<i>Clostridium acetobutylicum</i>	1996.934232
<i>Kribbella flavida</i>	1900.031785
<i>Prevotella ruminicola</i>	1893.32894
<i>Campylobacter hominis</i>	1813.711047
<i>Lactobacillus fermentum</i>	1785.793544
[<i>Clostridium</i>] <i>stercorarium</i>	1763.357169
<i>Halanaerobium hydrogeniformans</i>	1738.783522
<i>Roseburia hominis</i>	1727.431342
[<i>Eubacterium</i>] <i>siraeum</i>	1696.004277
<i>Syntrophobacter fumaroxidans</i>	1665.604872
<i>Streptococcus</i> sp. I-G2	1610.082493
<i>Alkaliphilus metalliredigens</i>	1592.506089
<i>Streptococcus salivarius</i>	1590.901435
<i>Azoarcus</i> sp. BH72	1560.033169
<i>Methylophaga nitratreducenticrescens</i>	1508.359836
<i>Aggregatibacter actinomycetemcomitans</i>	1505.691993
<i>Arcanobacterium haemolyticum</i>	1485.478593
<i>Bibersteinia trehalosi</i>	1450.248625
<i>Campylobacter fetus</i>	1419.002542
<i>Streptococcus macedonicus</i>	1397.518183
Tick-borne encephalitis virus	1378.887338
<i>Butyrivibrio proteoclasticus</i>	1374.303182
<i>Ralstonia solanacearum</i>	1326.811592
<i>Collimonas fungivorans</i>	1241.451202
<i>Sebaldella termitidis</i>	1231.364165

Streptococcus suis	1209.310297
Jingmen tick virus	1203.381553
Bronchotrix virus Thermophacta bacteriophage	1199.944349
Thiobacillus denitrificans	1197.759013
Thioalkalivibrio sulfidiphilus	1195.614474
Bacillus virus SPO1	1183.753657
Clostridium botulinum	1175.968151
Peptoclostridium difficile	1119.425713
Comamonas testosteroni	1091.797667
Acidothermus cellulolyticus	1090.659401
Pseudonocardia dioxanivorans	1089.683468
Saccharopolyspora erythraea	1063.587127
Mycobacterium sp. JDM601	1013.647973
Ilyobacter polytropus	962.0787043
Lactobacillus reuteri	938.6877164
Capnocytophaga canimorsus	924.0536112
Streptococcus uberis	910.1287803
Pasteurella multocida	900.8000043
Anaplasma centrale	882.1163733
Actinobacillus succinogenes	872.7187188
Streptococcus anginosus	869.5390025
[Mannheimia] succiniciproducens	864.5040963
Tetragenococcus halophilus	856.9720045
Geitlerinema sp. PCC 7407	843.7771703
[Ruminococcus] torques	840.8249326
Micrococcus luteus	823.4066623
Oscillibacter valericigenes	812.563426
Parabacteroides distasonis	806.1804601
Megamonas hypermegale	795.9129307
Leptothrix cholodnii	772.9800965
Rhodospirillum rubrum	739.2925072
Bacillus cytotoxicus	738.9923677
Candidatus Carsonella ruddii	660.3265729
Candidatus Puniceispirillum marinum	652.3874627
Prevotella dentalis	622.9592803
Corynebacterium diphtheriae	612.8530431
Mycoplasma hyorhinis	595.5852883
Nocardiopsis alba	594.9108397
Bacillus thuringiensis	590.5780325
Frateuria aurantia	590.5309074
Enterococcus hirae	576.4713361
Haemophilus parasuis	571.6545051
Solitalea canadensis	562.9073323
Gramella forsetii	537.6464659
Oceanithermus profundus	535.2875811
Clostridium tetani	520.5732011
Streptococcus agalactiae	494.4126379
Staphylococcus epidermidis	484.0694306
Sodalis glossinidius	479.2489577
Sulfurimonas denitrificans	477.5548574
Olsenella uli	477.3555713
Corynebacterium efficiens	473.1340779
Nocardia farcinica	472.9352812

<i>Pseudomonas aeruginosa</i>	472.0516469
<i>Methylobacterium alcaliphilum</i>	442.0175434
<i>Planctomyces limnophilus</i>	441.458204
<i>Caldicellulosiruptor kronotskyensis</i>	436.1607413
<i>Flavobacterium indicum</i>	422.3165745
<i>Actinobacillus pleuropneumoniae</i>	412.886012
<i>Segniliparus rotundus</i>	396.9615908
<i>Thioalkalimicrobium cyclicum</i>	393.9781366
<i>Histophilus somni</i>	385.1014007
<i>Clostridium kluyveri</i>	347.1385217
Dill cryptic virus 2	338.6464254
<i>Actinobacillus suis</i>	329.5166589
<i>Dickeya dadantii</i>	327.4899538
<i>Streptococcus thermophilus</i>	313.2142669
<i>Treponema denticola</i>	312.2699798
Candidatus <i>Zinderia insecticola</i>	308.4677183
Spring beauty latent virus	302.6421953
<i>Streptococcus mutans</i>	295.5675
<i>Haemophilus ducreyi</i>	294.4475409
<i>Lactococcus garvieae</i>	292.4641919
<i>Desulfurispirillum indicum</i>	280.6237649
<i>Mahella australiensis</i>	275.6328761
<i>Alkalilimnicola ehrlichii</i>	265.1045754
<i>Lactobacillus sanfranciscensis</i>	263.3641413
<i>Propionibacterium propionicum</i>	255.7635965
<i>Amycolicococcus subflavus</i>	254.2935929
<i>Buchnera aphidicola</i>	254.0760216
Candidatus <i>Azobacteroides pseudotrichonymphae</i>	250.5065662
<i>Kinetoplastibacterium blastocrithidii</i>	248.6164897
<i>Treponema pedis</i>	244.818501
<i>Cellulosilyticum lentocellum</i>	243.002531
<i>Cryptobacterium curtum</i>	241.8045812
<i>Sulfobacillus acidophilus</i>	240.9539418
<i>Flavobacterium branchiophilum</i>	233.7224899
<i>Bacillus subtilis</i>	232.8633112
Mouse astrovirus M-52/USA/2008	229.1894991
<i>Tsukamurella paurometabola</i>	206.0722012
<i>Helicobacter cinaedi</i>	200.3456722
<i>Owenweeksia hongkongensis</i>	199.6222087
<i>Amphibacillus xylanus</i>	198.5334131
<i>Aerococcus urinae</i>	198.0931861
<i>Methanococcus maripaludis</i>	193.4058905
<i>Ethanoligenens harbinense</i>	192.3229931
<i>Halothiobacillus neapolitanus</i>	189.2970059
<i>Eubacterium limosum</i>	177.5542408
<i>Coprococcus</i> sp. ART55/1	172.7705604
<i>Anaerococcus prevotii</i>	160.7524485
<i>Burkholderia multivorans</i>	157.900127
<i>Stenotrophomonas maltophilia</i>	151.3554265
<i>Bifidobacterium thermophilum</i>	149.1115916
<i>Desulfomonile tiedjei</i>	148.1586541
Candidatus <i>Methylobacterium mirabilis oxyfera</i>	145.9763262
<i>Gallibacterium anatis</i>	145.8546676

Lactobacillus salivarius	140.6022544
Frankia sp. Eu11c	137.96555
Filifactor alocis	134.7828868
Halobacteroides halobius	133.1329501
Streptobacillus moniliformis	131.3285733
Erysipelothrix rhusiopathiae	125.9551407
Candidatus Sulcia muelleri	124.2681865
Bacillus coagulans	121.3731777
Salinibacter ruber	119.0097034
Kineococcus radiotolerans	117.7624774
Sphingobacterium sp. 21	117.0316585
Lactococcus lactis	116.5067402
Clostridium perfringens	111.2642735
Burkholderia gladioli	107.2308349
Flexistipes sinusarabici	103.8389915
Candidatus Baumannia cicadellinicola	103.6381554
Meiothermus silvanus	103.4068339
Pedobacter saltans	103.2453682
[Clostridium] sticklandii	102.1414601
Mycobacterium kansasii	101.2542022
Propionibacterium acnes	100.5032214
Desulfitobacterium dichloroeliminans	100.4663668
Streptococcus iniae	99.80942201
Streptococcus lutetiensis	99.61262661
Variovorax paradoxus	97.09748344
Candidatus Hamiltonella defensa	97.03381751
Chromobacterium violaceum	96.78156288
Hop trefoil cryptic virus 2	96.37412963
Salmonella enterica	94.7750895
Odoribacter splanchnicus	94.74114756
Gottschalkia acidurici	94.47600146
Allochromatium vinosum	94.10207599
Caldanaerobacter subterraneus	93.83311612
Desulfomicrobium baculatum	92.93661868
Caldicellulosiruptor saccharolyticus	92.74325009
Rhodospirillum photometricum	89.59946302
Prochlorococcus marinus	89.36796972
Streptococcus parauberis	88.73475099
Renibacterium salmoninarum	88.62621866
Faecalitalea cylindroides	88.55822253
Shimwellia blattae	84.18082959
Torque teno midi virus 2	83.5300322
Lysinibacillus sphaericus	82.60557293
Bacteroides thetaiotaomicron	81.85287987
Microbacterium testaceum	79.40482173
Desulfobacterium autotrophicum	79.0300052
Staphylococcus aureus	78.56456703
Syntrophomonas wolfei	77.64259361
Rickettsia australis	75.97795573
Vibrio cholerae	75.43460247
Thermosediminibacter oceani	75.11992755
Staphylococcus lugdunensis	74.93736136
Thermobispora bispora	73.57867516

Rubrobacter xylanophilus	73.2763851
Streptococcus pasteurianus	72.3529166
Corynebacterium kroppenstedtii	72.11215047
Hepatitis C virus	71.57745059
Pseudomonas denitrificans	70.02068128
Treponema primitia	69.21674704
Bacillus amyloliquefaciens	68.72869337
Leptospirillum ferriphilum	68.37758053
Streptococcus infantarius	67.76125183
Bifidobacterium adolescentis	65.14778693
Ruminococcus sp. SR1/5	64.57596544
Arthrobacter arilaitensis	64.57217403
Tropheryma whipplei	64.27830253
Cyanobacterium stanieri	61.62112175
Listeria monocytogenes	61.14054578
Propionibacterium freudenreichii	60.51905797
Ilumatobacter coccineus	60.15106281
Alistipes shahii	59.92181052
Streptomyces bingchenggensis	59.16821398
Serratia symbiotica	58.76493904
Bacteroides fragilis	58.50644713
Desulfotalea psychrophila	57.87321607
Cyanothece sp. PCC 7425	57.41164908
alpha proteobacterium HIMB59	55.79034032
Desulfobulbus propionicus	53.98289354
Bacteroides salanitronis	53.25189255
Treponema brennaborensis	53.15195607
Corynebacterium urealyticum	53.04834323
Treponema succinifaciens	51.93913118
Cellulophaga lytica	51.85439233
Thermomonospora curvata	51.71274919
Mycobacterium smegmatis	51.03151424
Clostridium cellulovorans	50.77265543
Thermotoga neapolitana	50.46622709
Acetobacterium woodii	50.32158617
Mycoplasma hominis	50.0689048
Cyclobacterium marinum	50.01642571
Flavobacterium columnare	49.6171317
Lactobacillus kefiranofaciens	49.32197238
Rhodanobacter denitrificans	48.65284759
Aliivibrio fischeri	47.46012468
Caldilinea aerophila	47.25860462
Weissella koreensis	46.5881444
Bacillus cereus	46.58632241
Melissococcus plutonius	46.21683216
Geobacillus sp. GHH01	45.48563394
Treponema azotonutricium	45.32390114
Leifsonia xyli	44.90390112
Enterococcus faecium	44.04443779
Yersinia enterocolitica	43.79692546
Acholeplasma palmae	43.48803352
Corynebacterium matruchotii	42.38345392
Vibrio campbellii	42.28246674

<i>Ammonifex degensii</i>	41.80200813
<i>Novosphingobium aromaticivorans</i>	41.77469032
<i>Mycobacterium abscessus</i>	41.74784675
<i>Faecalibacterium prausnitzii</i>	40.91612566
<i>Spirochaeta thermophila</i>	40.90158187
<i>Aminobacterium colombiense</i>	40.61963091
<i>Ochrobactrum anthropi</i>	40.16552158
<i>Carnobacterium</i> sp. 17-4	39.23994406
<i>Myxococcus fulvus</i>	38.44913841
<i>Desulfotomaculum acetoxidans</i>	38.02951522
<i>Exiguobacterium</i> sp. AT1b	38.00303855
<i>Providencia stuartii</i>	37.99491934
<i>Paenibacillus polymyxa</i>	37.87647568
<i>Primula malacoides</i> virus 1	37.37674861
<i>Stackebrandtia nassauensis</i>	37.30173389
<i>Kyrpidia tusciae</i>	36.76373699
<i>Ferrimonas balearica</i>	36.40231604
<i>Corynebacterium maris</i>	35.91862023
<i>Bifidobacterium breve</i>	35.87853832
<i>Lactobacillus acidophilus</i>	35.84084255
<i>Burkholderia glumae</i>	35.27966601
<i>Vibrio parahaemolyticus</i>	35.13535972
<i>Halobacillus halophilus</i>	35.01348924
<i>Mycoplasma bovis</i>	34.57651941
Red clover cryptic virus 2	34.48640437
<i>Wigglesworthia glossinidia</i>	34.35560351
<i>Mycobacterium rhodesiae</i>	34.29675735
<i>Pusillimonas</i> sp. T7-7	34.06317717
<i>Moorella thermoacetica</i>	33.85157851
<i>Dickeya</i> phage RC-2014	33.5587078
<i>Sideroxydans lithotrophicus</i>	33.55868786
<i>Shewanella baltica</i>	33.24708287
<i>Blattabacterium</i> sp. (<i>Blatta orientalis</i>)	33.19650564
<i>Bacillus cellulosilyticus</i>	33.16598811
<i>Psychroflexus torquis</i>	33.12588626
<i>Candidatus Profftella armatura</i>	32.33533768
<i>Oenococcus oeni</i>	32.15245449
<i>Streptomyces pratensis</i>	31.85346386
secondary endosymbiont of <i>Ctenarytaina eucalypti</i>	31.7994498
<i>Pyrolobus fumarii</i>	31.41130504
candidate division SR1 bacterium RAAC1_SR1_1	31.39312487
<i>Finegoldia magna</i>	31.274494
<i>Eggerthella</i> sp. YY7918	31.09459095
<i>Kytococcus sedentarius</i>	30.99323686
<i>Glaciecola psychrophila</i>	30.68398803
<i>Oceanobacillus ihyensensis</i>	30.66327441
<i>Xanthomonas campestris</i>	30.52342329
<i>Helicobacter bizzozeronii</i>	30.47429124
<i>Alicyclobacillus acidocaldarius</i>	30.34345039
<i>Brevibacillus brevis</i>	30.17440956
<i>Sphaerochaeta globosa</i>	29.92479812
<i>Streptococcus oralis</i>	29.7258937
<i>Catenulispora acidiphila</i>	28.99599332

Anoxybacillus flavithermus	28.90371935
Bifidobacterium asteroides	28.79193981
Fibrobacter succinogenes	28.74311472
Pantoea sp. At-9b	28.62220515
Verminephrobacter eiseniae	28.53745639
Halorhodospira halophila	28.26239905
Propionibacterium acidipropionici	28.12372602
Acinetobacter calcoaceticus	28.11978497
Proteus mirabilis	28.01216364
Ramlibacter tataouinensis	27.67271428
Laribacter hongkongensis	27.50825841
Photobacterium profundum	27.46214638
Burkholderia pseudomallei	27.28973856
Bacteroides helcogenes	27.18038504
Teredinibacter turnerae	26.56195724
Bordetella petrii	26.55129225
Streptococcus phage SM1	25.85719579
Staphylococcus warneri	25.55467092
Shigella flexneri	25.50886586
Dehalococcoides mccartyi	25.33272425
Clavibacter michiganensis	25.17431845
Bifidobacterium dentium	24.83015675
Halothermothrix orenii	24.78067774
Salivirus FHB	24.77618258
Enterobacter cloacae	24.71950538
Streptococcus phage YMC-2011	24.62233948
Bacteriovorax marinus	24.57271314
Pseudomonas stutzeri	24.24178978
Clostridiales genomsp. BVAB3	24.1929647
Leuconostoc carnosum	24.13570342
Solibacillus silvestris	23.758381
Oceanimonas sp. GK1	23.71012998
Deinococcus proteolyticus	23.64776951
Thermoanaerobacterium thermosaccharolyticum	23.36176015
Lactobacillus delbrueckii	23.13118006
Pandoravirus dulcis	23.1254569
Mycobacterium leprae	23.01933065
Candidatus Uzinura diaspidicola	22.64083015
Geobacter bemidjiensis	22.6245318
Corynebacterium resistens	22.46450124
Carnobacterium sp. WN1359	22.4467478
Thioalkalivibrio sp. K90mix	22.31858011
Klebsiella variicola	22.18298703
Acidaminococcus fermentans	22.17483786
Candidatus Riesia pediculicola	22.02747157
Dechloromonas aromatica	21.99215191
Streptococcus gallolyticus	21.93890152
Kosmotoga olearia	21.85331161
alpha proteobacterium HIMB5	21.81440779
Xylanimonas cellulosilytica	21.73873914
Legionella longbeachae	21.70949951
Truepera radiovictrix	21.59108581
Belliella baltica	21.48139534

Enterococcus mundtii	21.36985292
Rhodothermus marinus	21.36562484
Arthrobacter phenanthrenivorans	21.32736493
Leuconostoc mesenteroides	21.26258847
Frankia symbiont of Datisca glomerata	21.22159557
Acholeplasma brassicae	21.14708505
Anaerobaculum mobile	20.83999516
Bacillus pseudofirmus	20.4502955
Candidatus Endolissoclinum faulkneri	20.42708599
Candidatus Symbiobacter mobilis	20.2142893
Flavobacterium psychrophilum	20.21125926
Pseudomonas mendocina	20.08712241
Desulfarculus baarsii	19.97769903
Corynebacterium jeikeium	19.91080351
Thermobifida fusca	19.90839744
Shewanella loihica	19.88905913
Thermoanaerobacterium xylanolyticum	19.81947051
Staphylococcus carnosus	19.78032957
Lactobacillus sakei	19.76759544
Butyrivibrio fibrisolvens	19.76012014
Marinomonas sp. MWYL1	19.64136951
Enterococcus casseliflavus	19.46596161
[Clostridium] clariflavum	19.43133577
Isosphaera pallida	19.21488507
Clostridium beijerinckii	19.0994515
Paenibacillus sp. JDR-2	18.9316087
Corynebacterium aurimucosum	18.80019379
Malvastrum leaf curl Philippines betasatellite	18.6935034
Arthrobacter sp. FB24	18.61663672
Corynebacterium glutamicum	18.52321464
Tolomonas auensis	18.20010351
Listeria ivanovii	18.15252636
Sanguibacter keddieii	18.04037991
Bacillus megaterium	17.99576296
Pseudoalteromonas haloplanktis	17.99333694
Mycobacterium canettii	17.86408096
Magnetospirillum gryphiswaldense	17.84383165
Lawsonia intracellularis	17.64284807
Thermodesulfobium narugense	17.61872757
Desulfovibrio salexigens	17.60426124
Heliobacterium modesticaldum	17.27271391
Colwellia psychrerythraea	17.22299778
Sphaerobacter thermophilus	17.14190302
Nitratiruptor sp. SB155-2	17.02923242
Advenella kashmirensis	17.01865723
Streptosporangium roseum	17.0135381
Coxiella burnetii	17.00991405
Legionella pneumophila	16.99878474
Candidatus Kinetoplastibacterium galatii	16.78538403
Corynebacterium pseudotuberculosis	16.72540969
Haliangium ochraceum	16.61238221
Helicobacter pylori	16.4529257
Streptococcus phage Cp-1	16.30077722

<i>Photorhabdus asymbiotica</i>	16.2926081
<i>Intrasporangium calvum</i>	16.26458644
<i>Hippea maritima</i>	16.24344608
<i>Burkholderia mallei</i>	16.17837256
<i>Rhodopseudomonas palustris</i>	16.10241688
<i>Fusobacterium periodonticum</i>	16.02497614
<i>Bifidobacterium bifidum</i>	15.98609227
<i>Clostridium pasteurianum</i>	15.93212811
<i>Moraxella catarrhalis</i>	15.6413066
Candidatus <i>Liberibacter solanacearum</i>	15.16960119
<i>Clostridium saccharobutylicum</i>	15.06988189
<i>Chthonomonas calidirosea</i>	15.00957062
<i>Nocardioides</i> sp. JS614	14.86010522
<i>Bacillus</i> sp. 1NLA3E	14.85557017
<i>Petrotoga mobilis</i>	14.76092009
<i>Klebsiella oxytoca</i>	14.76002904
<i>Geobacillus thermoglucosidasius</i>	14.69250956
Cardinium endosymbiont of <i>Encarsia pergandiella</i>	14.68647943
<i>Methylobacterium radiotolerans</i>	14.6608838
<i>Dictyoglomus thermophilum</i>	14.50263533
<i>Marinomonas posidonica</i>	14.11596571
<i>Psychromonas</i> sp. CNPT3	13.87603842
Candidatus <i>Tremblaya princeps</i>	13.80431081
<i>Pectobacterium carotovorum</i>	13.59213809
<i>Bacillus weihenstephanensis</i>	13.51409332
<i>Methylophaga frappieri</i>	13.35946891
<i>Muricauda ruestringensis</i>	13.35192376
<i>Cellulomonas flavigena</i>	13.33834849
<i>Clostridium novyi</i>	13.31667395
<i>Nocardiopsis dassonvillei</i>	13.31426788
<i>Trichodesmium erythraeum</i>	13.23922319
<i>Marinitoga piezophila</i>	13.12528471
<i>Polaribacter</i> sp. MED152	13.10209515
<i>Hirschia baltica</i>	13.02039637
<i>Anaerolinea thermophila</i>	12.95439192
<i>Erwinia amylovora</i>	12.86457393
<i>Methylobacterium extorquens</i>	12.79978745
<i>Opitutus terrae</i>	12.72020772
<i>Methanococcus aeolicus</i>	12.69973121
<i>Photorhabdus luminescens</i>	12.62195353
Dill cryptic virus 1	12.39110635
<i>Gloeobacter violaceus</i>	12.37875907
<i>Coprothermobacter proteolyticus</i>	12.2681077
<i>Blastococcus saxosidens</i>	12.24582914
<i>Streptomyces venezuelae</i>	12.22261964
<i>Actinosynnema mirum</i>	12.15149605
<i>Marinobacter hydrocarbonoclasticus</i>	12.11985035
Candidatus <i>Hodgkinia cicadicola</i>	12.08488757
Cyprinid herpesvirus 3	12.01919009
<i>Agrobacterium vitis</i>	11.98509842
<i>Microcoleus</i> sp. PCC 7113	11.91010365
<i>Aliivibrio salmonicida</i>	11.85402045
<i>Desulfovibrio piezophilus</i>	11.74913211

<i>Symbiobacterium thermophilum</i>	11.74399304
Candidatus <i>Rickettsia amblyommii</i>	11.73678483
<i>Methylacidiphilum inferorum</i>	11.70119809
<i>Paenibacillus larvae</i>	11.64573886
<i>Streptomyces cattleya</i>	11.60628092
<i>Fervidobacterium nodosum</i>	11.58126937
<i>Thermanaerovibrio acidaminovorans</i>	11.54027646
<i>Bartonella grahamii</i>	11.45163656
<i>Gallionella capsiferriformans</i>	11.38142398
<i>Marinithermus hydrothermalis</i>	11.29251699
Carp picornavirus 1	11.17710337
<i>Pseudomonas putida</i>	11.1626171
<i>Hydrogenobaculum</i> sp. HO	11.16019108
<i>Salinispora tropica</i>	11.1412296
<i>Idiomarina loihiensis</i>	11.13428847
<i>Thermodesulfobacterium geofontis</i>	11.00861666
<i>Plautia stali</i> symbiont	10.98389213
<i>Streptococcus</i> phage PH10	10.90640148
<i>Geobacter uraniireducens</i>	10.81631641
<i>Rhodococcus erythropolis</i>	10.754847
<i>Klebsiella pneumoniae</i>	10.72740943
<i>Streptomyces avermitilis</i>	10.7232013
[<i>Cellvibrio</i>] <i>gilvus</i>	10.69667472
<i>Acidimicrobium ferrooxidans</i>	10.68884255
<i>Cellulophaga algicola</i>	10.57672606
<i>Staphylococcus saprophyticus</i>	10.57160693
<i>Thermoanaerobacter wiegelsii</i>	10.55985366
<i>Burkholderia</i> sp. KJ006	10.53512913
<i>Wolbachia</i> endosymbiont of <i>Onchocerca ochengi</i>	10.20689888
<i>Bifidobacterium longum</i>	10.16895596
<i>Sulfuricella denitrificans</i>	10.09478239
<i>Fretibacterium fastidiosum</i>	10.07608799
<i>Prevotella denticola</i>	10.05109638
<i>Vibrio vulnificus</i>	10.04506625
<i>Spirochaeta smaragdinae</i>	9.960674371
Candidatus <i>Blochmannia floridanus</i>	9.922711513
<i>Gordonia polyisoprenivorans</i>	9.822942305
<i>Lactobacillus johnsonii</i>	9.7587399
<i>Mesotoga prima</i>	9.729520217
<i>Singulisphaera acidiphila</i>	9.713538868
<i>Slackia heliotrinireducens</i>	9.665604841
<i>Enterococcus faecalis</i>	9.627037959
<i>Gardnerella vaginalis</i>	9.585154001
Candidatus <i>Tremblaya phenacola</i>	9.581816983
<i>Emticicia oligotrophica</i>	9.530298796
<i>Zymomonas mobilis</i>	9.510356459
<i>Rickettsia africae</i>	9.498049068
<i>Spirosoma linguale</i>	9.486899816
<i>Phycisphaera mikurensis</i>	9.446797967
<i>Ornithobacterium rhinotracheale</i>	9.350058804
<i>Saccharomonospora viridis</i>	9.310867953
<i>Psychromonas ingrahamii</i>	9.268072998
<i>Delftia acidovorans</i>	9.263864869

<i>Flexibacter litoralis</i>	9.215306874
<i>Zunongwangia profunda</i>	9.173759856
<i>Oscillatoria nigro-viridis</i>	9.160471612
Human endogenous retrovirus K	9.126132803
<i>Coriobacterium glomerans</i>	9.112270501
<i>Bacillus pumilus</i>	9.106527405
<i>Geobacter lovleyi</i>	9.099319197
<i>Thermobacillus composti</i>	9.059504377
<i>Mycoplasma gallisepticum</i>	9.037829842
<i>Tepidanaerobacter acetatoxydans</i>	8.966993287
<i>Pirellula staleyi</i>	8.920881257
<i>Desulfovibrio vulgaris</i>	8.91576213
<i>Syntrophus aciditrophicus</i>	8.863332946
<i>Ureaplasma parvum</i>	8.842836494
<i>Nitrosomonas eutropha</i>	8.693618237
<i>Enterobacter lignolyticus</i>	8.656853406
<i>Actinoplanes friuliensis</i>	8.634554903
<i>Ralstonia pickettii</i>	8.631237828
<i>Corynebacterium ulcerans</i>	8.631237828
<i>Azospirillum brasilense</i>	8.588709958
<i>Lactobacillus crispatus</i>	8.55651014
<i>Shewanella</i> sp. W3-18-1	8.524864436
<i>Leuconostoc citreum</i>	8.51669532
<i>Clostridium</i> sp. BNL1100	8.496198868
<i>Arcobacter butzleri</i>	8.435333482
<i>Shewanella piezotolerans</i>	8.373844127
<i>Dehalogenimonas lykanthroporepellens</i>	8.283135089
<i>Campylobacter coli</i>	8.281333037
<i>Spiroplasma chrysopicola</i>	8.279530985
<i>Desulfurobacterium thermolithotrophum</i>	8.21832866
<i>Weeksella virosa</i>	8.21804163
<i>Caldicellulosiruptor obsidiansis</i>	8.165899475
<i>Mycobacterium chubuense</i>	8.081507592
<i>Pseudomonas resinovorans</i>	8.0739425
<i>Lactobacillus brevis</i>	8.01218606
<i>Corynebacterium halotolerans</i>	7.878058098
<i>Thermovirga lienii</i>	7.790666135
<i>Chromohalobacter salexigens</i>	7.781318935
<i>Herbaspirillum seropedicae</i>	7.764426588
<i>Arthrobacter chlorophenolicus</i>	7.689094875
<i>Desulfotomaculum reducens</i>	7.684866802
<i>Rhodococcus pyridinivorans</i>	7.602880996
<i>Delftia</i> sp. Cs1-4	7.594157764
Cyprinid herpesvirus 1	7.535985484
<i>Caldicellulosiruptor bescii</i>	7.484754327
<i>Microlunatus phosphovorus</i>	7.469377002
<i>Aequorivita sublithincola</i>	7.447078499
<i>Candidatus Solibacter usitatus</i>	7.416947818
<i>Deinococcus maricopensis</i>	7.411204722
<i>Gordonia</i> sp. KTR9	7.346398293
<i>Cellvibrio japonicus</i>	7.311148485
<i>Burkholderia cenocepacia</i>	7.27106658
<i>Francisella tularensis</i>	7.263234403

Acidithiobacillus ferrivorans	7.204438154
Acholeplasma laidlawii	7.201745048
Halanaerobium praevalens	7.18213965
Streptococcus phage Sfi21	7.181515681
Burkholderia rhizoxinica	7.116155137
Serratia marcescens	7.072736213
Syntrophothermus lipocalidus	7.061586961
Roseobacter denitrificans	7.037486405
Pantoea vagans	7.011870827
Candidatus Cloacimonas acidaminovorans	7.000097606
Azospirillum lipoferum	6.95129247
Parvularcula bermudensis	6.855444361
Formica exsecta virus 1	6.826511708
Pandoravirus salinus	6.783716752
Aquifex aeolicus	6.747842976
Burkholderia thailandensis	6.674313315
Lactobacillus gasseri	6.642667612
Shewanella pealeana	6.641756614
[Ruminococcus] obeum	6.637528541
Gloeobacter kilaueensis	6.61011091
Ruegeria sp. TM1040	6.608308858
Burkholderia lata	6.590525456
Thermincola potens	6.439218118
Burkholderia phytofirmans	6.405146394
Croceibacter atlanticus	6.371698638
Xylella fastidiosa	6.3090312
Calditerrivibrio nitroreducens	6.299684
Rickettsia canadensis	6.288534748
Ruminococcus champanellensis	6.277672526
Acidaminococcus intestini	6.238194645
Listeria welshimeri	6.158634859
Bacillus halodurans	6.037458201
Cupriavidus metallidurans	5.989544119
Mycoplasma putrefaciens	5.922024639
Gemmatimonas aurantiaca	5.861159253
butyrate-producing bacterium SS3/4	5.838236781
Chlamydia pneumoniae	5.724605271
Paenibacillus terrae	5.70653484
Actinoplanes sp. N902-109	5.679117209
Natranaerobius thermophilus	5.59290333
Nitrosomonas sp. Is79A3	5.551019372
Burkholderia ambifaria	5.53987012
Geobacter metallireducens	5.539583091
Rahnella aquatilis	5.532037943
secondary endosymbiont of Heteropsylla cubana	5.513343544
Bifidobacterium animalis	5.471459586
Paenibacillus sp. Y412MC10	5.429555685
Glaciecola nitratireducens	5.418406433
Mycoplasma mobile	5.390988803
Brucella melitensis	5.370492351
Thalassolituus oleivorans	5.345767826
Asticcacaulis excentricus	5.335529573
Desulfurivibrio alkaliphilus	5.29424964

Desulfohalobium retbaense	5.29424964
Maricaulis maris	5.258662893
Bradyrhizobium sp. S23321	5.247513641
Methylobacterium populi	5.246622587
Corynebacterium callunae	5.225215137
Desulfotomaculum ruminis	5.215867938
Acinetobacter oleivorans	5.210748811
Methylococcus capsulatus	5.199599559
Enterobacter asburiae	5.18061813
Streptococcus phage IC1	5.18061813
Rubrivivax gelatinosus	5.163725782
Methanosarcina mazei	5.090196122
Thermotoga thermarum	5.084165997
Adlercreutzia equolifaciens	5.028419737
Bradyrhizobium diazoefficiens	4.995259011
Chlamydia psittaci	4.993456959
Clostridium phage c-st	4.985624782
Erwinia tasmaniensis	4.978079634
Rickettsia bellii	4.96512833
Desulfosporosinus orientis	4.943116856
Kangiella koreensis	4.924135427
Halothece sp. PCC 7418	4.918392331
Cytophaga hutchinsonii	4.84214962
Sulfurospirillum deleyianum	4.832802421
Pseudomonas fluorescens	4.825881242
Phenylobacterium zucineum	4.743895435
Gordonibacter pamelaee	4.734548235
Nitrosococcus oceani	4.688149176
Streptomyces albus	4.68240608
Cellulomonas fimi	4.666137701
Thermodesulfatator indicus	4.623342746
Nostoc sp. PCC 7120	4.619114673
[Clostridium] cellulolyticum	4.576319718
Persephonella marina	4.560051339
Lactobacillus plantarum	4.539554887
Streptomyces coelicolor	4.525088561
Chroococciopsis thermalis	4.507909184
uncultured Termite group 1 bacterium	4.487412732
Stanieria cyanosphaera	4.483184659
Candidatus Liberibacter asiaticus	4.441300702
Bacillus infantis	4.403624873
Sorangium cellulosum	4.392475622
Synechococcus sp. PCC 7502	4.360205949
Anabaena sp. 90	4.346363591
Pseudoalteromonas atlantica	4.342135519
Elusimicrobium minutum	4.269496912
Bradyrhizobium japonicum	4.236960154
Solenopsis invicta virus 3	4.225810902
Saprosira grandis	4.206205505
Candidatus Moranella endobia	4.199284326
Bradyrhizobium sp. BTA11	4.184817999
Ruminococcus albus	4.162519495
Methanospirillum hungatei	4.162519495

<i>Nocardia cyriacigeorgica</i>	4.142023044
<i>Desulfotomaculum carboxydivorans</i>	4.137794971
<i>Leuconostoc gasicomitatum</i>	4.137794971
<i>Starkeya novella</i>	4.135992919
<i>Thiomicrospira crunogena</i>	4.135992919
<i>Acetohalobium arabaticum</i>	4.104347215
<i>Candidatus Arthromitus</i> sp. SFB-mouse	4.089880888
<i>Ruminococcus bromii</i>	4.04285786
<i>Nakamurella multipartita</i>	4.04285786
<i>Vibrio anguillarum</i>	4.022361409
<i>Lactobacillus rhamnosus</i>	4.00609303
<i>Syntrophobotulus glycolicus</i>	3.953950875
<i>Pediococcus pentosaceus</i>	3.922305171
<i>Blattabacterium</i> sp. (<i>Blaberus giganteus</i>)	3.922305171
<i>Bacillus clausii</i>	3.890659468
<i>Nitrosomonas europaea</i>	3.867736995
<i>Methylothermobacter versatilis</i>	3.857211712
<i>Alkaliphilus oremlandii</i>	3.847864512
<i>Turneriella parva</i>	3.83671526
<i>Calyptogenia okutanii</i> thioautotrophic gill symbiont	3.833398186
<i>Candidatus Sulfuricurvum</i> sp. RIFRC-1	3.819822913
<i>Mycoplasma fermentans</i>	3.786375157
<i>Herminiimonas arsenicoxydans</i>	3.777027958
<i>Dokdonia</i> sp. 4H-3-7-5	3.745382254
<i>Shewanella woodyi</i>	3.740263127
<i>Candidatus Phytoplasma mali</i>	3.729113875
<i>Rhodococcus hoagii</i>	3.729113875
<i>Francisella</i> sp. TX077308	3.664020416
<i>Aureococcus anophagefferens</i> virus	3.651356142
<i>Anabaena variabilis</i>	3.647128069
<i>Deferribacter desulfuricans</i>	3.645326017
<i>Alicyclophilus denitrificans</i>	3.645326017
<i>Lactobacillus buchneri</i>	3.643523965
<i>Xanthobacter autotrophicus</i>	3.619710438
<i>Candidatus Amoebophilus asiaticus</i>	3.611878261
<i>Spirochaeta africana</i>	3.611254292
<i>Acidovorax</i> sp. JS42	3.611254292
White clover cryptic virus 2	3.608561186
<i>Nitrosococcus halophilus</i>	3.590757841
<i>Rhodococcus opacus</i>	3.588064735
<i>Nitrosomonas</i> sp. AL212	3.583836662
<i>Saccharophagus degradans</i>	3.58203461
<i>Bacillus anthracis</i>	3.58203461
<i>Dactylococcopsis salina</i>	3.509396003
<i>Candidatus Portiera aleyrodidarum</i>	3.488899551
<i>Vibrio</i> sp. Ex25	3.463283973
<i>Campylobacter lari</i>	3.457253848
<i>Bartonella australis</i>	3.452134721
<i>Candidatus Nasuia deltocephalinicola</i>	3.440985469
<i>Yersinia pestis</i>	3.388843314
<i>Pseudomonas syringae</i> group genomsp. 3	3.375268041
<i>Burkholderia cepacia</i>	3.363227735
<i>Rhodospirillum centenum</i>	3.354771589

candidate division WWE3 bacterium RAAC2 WWE3 1	3.336701159
<i>Halomonas elongata</i>	3.334899106
<i>Thioalkalivibrio nitratireducens</i>	3.327353959
<i>Methylobacillus flagellatus</i>	3.325551907
<i>Clostridium saccharoperbutylaceticum</i>	3.284559003
<i>Kitasatospora setae</i>	3.284559003
<i>Raoultella ornithinolytica</i>	3.2529133
<i>Mycoplasma pulmonis</i>	3.247794173
<i>Brachyspira murdochii</i>	3.241764048
<i>Cupriavidus necator</i>	3.232416848
<i>Desulfovibrio desulfuricans</i>	3.200771145
<i>Streptococcus phage EJ-1</i>	3.200771145
<i>Actinoplanes sp. SE50/110</i>	3.195652018
<i>Herpetosiphon aurantiacus</i>	3.180274693
<i>Desulfotomaculum gibsoniae</i>	3.150431042
<i>Robiginitalea biformata</i>	3.134162663
<i>Melioribacter roseus</i>	3.118785338
<i>Spirochaeta sp. L21-RPul-D2</i>	3.110062107
<i>Acinetobacter baumannii</i>	3.059722004
<i>Rivularia sp. PCC 7116</i>	3.059722004
<i>Amycolatopsis orientalis</i>	3.054602877
<i>Helicobacter hepaticus</i>	3.016927049
<i>Candidatus Ruthia magnifica</i>	3.007579849
<i>Exiguobacterium sp. MH3</i>	3.005777797
<i>Borrelia recurrentis</i>	2.987083397
<i>Burkholderia sp. YI23</i>	2.98196427
<i>Calothrix sp. PCC 7507</i>	2.975934145
<i>Falconid herpesvirus 1</i>	2.970815018
<i>Methylibium petroleiphilum</i>	2.929822115
<i>Pseudomonas entomophila</i>	2.929822115
<i>Shewanella sp. ANA-3</i>	2.928020063
<i>Desulfococcus oleovorans</i>	2.903295539
<i>Pediococcus clausenii</i>	2.875877908
<i>Mycobacterium gilvum</i>	2.866530708
<i>Deinococcus radiodurans</i>	2.844232204
<i>Synechococcus sp. JA-2-3B'a(2-13)</i>	2.823735753
<i>Streptococcus phage Abc2</i>	2.821309732
<i>Rhodomicrobium vannielii</i>	2.801437249
<i>Polaromonas sp. JS666</i>	2.793892101
<i>Vibrio furnissii</i>	2.769791545
<i>Phaseolus vulgaris endornavirus</i>	2.769791545
<i>Orientia tsutsugamushi</i>	2.749295094
<i>Echinicola vietnamensis</i>	2.728798642
<i>Pectobacterium atrosepticum</i>	2.710104243
<i>Acidovorax sp. KKS102</i>	2.673339412
<i>Methylobacterium nodulans</i>	2.626316384
<i>Aeromonas salmonicida</i>	2.616969184
<i>Saccharothrix espanaensis</i>	2.56725305
<i>Desulfotomaculum kuznetsovii</i>	2.535607346
<i>Erwinia sp. Ejp617</i>	2.535607346
<i>Listeria innocua</i>	2.515110895
<i>Desulfosporosinus meridiei</i>	2.503961643
<i>Shewanella frigidimarina</i>	2.492812391

Enterococcus sp. 7L76	2.492812391
Arthrobacter sp. Rue61a	2.472315939
Nostoc punctiforme	2.46296874
Vibrio tasmaniensis	2.46296874
Nonlabens dokdonensis	2.451819488
Methanosarcina barkeri	2.437353161
Alistipes finegoldii	2.421975836
Candidatus Accumulibacter phosphatis	2.421975836
Paramecium bursaria Chlorella virus 1	2.405707457
Geobacter sp. M18	2.385211006
Xanthomonas albilineans	2.23813174
Leptospira borgpetersenii	2.206486037
Pseudomonas syringae	2.206486037
Geobacillus sp. C56-T3	2.197138837
Escherichia fergusonii	2.197138837
Marinobacter sp. BSs20148	2.176642385
Micavibrio aeruginosavorus	2.176642385
Helicobacter felis	2.174840333
Eggerthella lenta	2.160374006
Leisingera methylohalidivorans	2.160374006
Pantoea ananatis	2.13384743
Elephantid herpesvirus 1	2.128728303
Hyphomonas neptunium	2.12450023
Acidithiobacillus caldus	2.113350978
Polaromonas naphthalenivorans	2.076586148
Polynucleobacter necessarius	2.065436896
Methanosarcina acetivorans	2.065436896
Dickeya zeae	2.056089696
Shewanella oneidensis	2.044940444
gamma proteobacterium HdN1	2.044940444
Carboxydotherrmus hydrogenoformans	2.013294741
Oligotropha carboxidovorans	1.951805386
Oscillatoria acuminata	1.940656134
Enterobacter sp. 638	1.929506882
Ignavibacterium album	1.90901043
Desulfobacca acetoxidans	1.90901043
Leptospira biflexa	1.90901043
Sulfuricurvum kujiense	1.888513979
Arcobacter nitrofigilis	1.877364727
Pseudoalteromonas sp. SM9913	1.877364727
Granulicella tundricola	1.868017527
Fluviicola taffensis	1.856868275
Alteromonas sp. SN2	1.856868275
Streptomyces hygroscopicus	1.851749148
Maruca vitrata nucleopolyhedrovirus	1.851749148
Spiroplasma taiwanense	1.851749148
Human herpesvirus 6B	1.851749148
Bordetella avium	1.836371824
Citrobacter koseri	1.820103445
Cyanothece sp. PCC 7424	1.79537892
Desulfocapsa sulfexigens	1.79537892
Arthrospira platensis	1.79537892
Halovivax ruber	1.788457741

Burkholderia sp. CCGE1002	1.76796129
Bradyrhizobium oligotrophicum	1.76796129
Methylomonas methanica	1.756812038
Azotobacter vinelandii	1.756812038
Caulobacter sp. K31	1.756812038
Aeromonas veronii	1.747464838
Edwardsiella ictaluri	1.747464838
Gordonia bronchialis	1.747464838
Cupriavidus pinatubonensis	1.736315586
Thermosynechococcus sp. NK55a	1.715819135
Paenibacillus mucilaginosus	1.684173431
Mycobacterium bovis	1.684173431
Enterobacter aerogenes	1.673024179
Mycoplasma arthritidis	1.661874927
Rhodobacter capsulatus	1.661874927
Brachyspira pilosicoli	1.661874927
Mycoplasma parvum	1.652527728
Brevundimonas subvibrioides	1.652527728
Chloroherpeton thalassium	1.641378476
Bordetella pertussis	1.632031276
Rhodopirellula baltica	1.632031276
Methylotenera mobilis	1.620882024
Thermosynechococcus elongatus	1.611534824
Conexibacter woesei	1.611534824
Hydrogenobaculum sp. Y04AAS1	1.611534824
Coraliomargarita akajimensis	1.611534824
Treponema caldaria	1.600385572
Clostridium ljungdahlii	1.600385572
Glaciecola sp. 4H-3-7+YE-5	1.559392669
Alcanivorax borkumensis	1.559392669
Rhizobium sp. IRBG74	1.54312429
Methanothermococcus okinawensis	1.54312429
Streptococcus phage Sfi19	1.538896217
Streptomyces scabiei	1.511478587
Salinispora arenicola	1.511478587
Burkholderia xenovorans	1.511478587
Rhizoctonia solani dsRNA virus 2	1.490982135
Geobacillus sp. WCH70	1.479832883
Rose rosette virus	1.479832883
Bartonella henselae	1.479832883
Pelagibacterium halotolerans	1.459336432
Choristoneura rosaceana entomopoxvirus 'L'	1.44818718
Shewanella amazonensis	1.43883998
Erythrobacter litoralis	1.43883998
Bradyrhizobium sp. ORS 278	1.43883998
Nitrospira multiformis	1.427690728
Mycoplasma synoviae	1.427690728
Azorhizobium caulinodans	1.427690728
Geobacillus thermodenitrificans	1.416541476
Sinorhizobium fredii	1.416541476
Rhodoferax ferrireducens	1.396045025
Staphylococcus pseudintermedius	1.396045025
Listeria seeligeri	1.384895773

Bacillus atrophaeus	1.384895773
Cronobacter sakazakii	1.375548573
Stigmatella aurantiaca	1.375548573
Arcobacter sp. L	1.364399321
Bacteroides xylanisolvens	1.343902869
Desulfobacula toluolica	1.343902869
Blattabacterium sp. (Panesthia angustipennis spadica)	1.343902869
Corallocooccus coralloides	1.334555567
Desulfitobacterium hafniense	1.334555567
Xenorhabdus bovienii	1.323406418
Candidatus Babela massiliensis	1.323406418
Vibrio nigripulchritudo	1.323406418
Neorickettsia sennetsu	1.302909966
Streptomyces fulvissimus	1.302909966
Janthinobacterium sp. Marseille	1.282413515
Akkermansia muciniphila	1.282413515
Burkholderia sp. CCGE1003	1.234499432
Haliscomenobacter hydrossis	1.202853729
Emiliana huxleyi virus 86	1.202853729
Frankia sp. CcI3	1.202853729
Erwinia billingiae	1.202853729
Azospira oryzae	1.182357277
Burkholderia vietnamiensis	1.182357277
Corynebacterium terpenotabidum	1.182357277
Desulfatibacillum alkenivorans	1.171208025
Serratia proteamaculans	1.171208025
Cupriavidus taiwanensis	1.150711574
Streptomyces collinus	1.150711574
Candidatus Kinetoplastibacterium desouzaii	1.150711574
Geodermatophilus obscurus	1.139562322
Roseburia intestinalis	1.130215122
Xenorhabdus nematophila	1.130215122
Pseudoxanthomonas suwonensis	1.130215122
Waddlia chondrophila	1.130215122
Candidatus Midichloria mitochondrii	1.130215122
Fibrella aestuarina	1.11906587
Thermacetogenium phaeum	1.107916618
Beijerinckia indica	1.107916618
Streptococcus phage DCC1738	1.107916618
Bartonella clarridgeiae	1.107916618
Pectobacterium sp. SCC3193	1.107916618
Streptococcus intermedius	1.098569418
Planctomyces brasiliensis	1.098569418
Citrobacter rodentium	1.098569418
Synechococcus sp. RCC307	1.087420167
Mycoplasma penetrans	1.087420167
Psychrobacter sp. PRwf-1	1.087420167
Maribacter sp. HTCC2170	1.087420167
Runella slithyformis	1.087420167
Bacillus licheniformis	1.087420167
Caldisericum exile	1.087420167
Methylovorus sp. MP688	1.087420167
Desulfovibrio gigas	1.087420167

Candidatus Pelagibacter sp. IMCC9063	1.078072967
Enterobacteriaceae bacterium strain FGI 57	1.078072967
Methylocystis sp. SC2	1.066923715
Pseudovibrio sp. FO-BEG1	1.066923715
Candidatus Arthromitus sp. SFB-rat-Yit	1.066923715
Lacinutrix sp. 5H-3-7-4	1.066923715
Spiroplasma apis	1.066923715
Thermobaculum terrenum	1.046427263
Frankia sp. EAN1pec	1.046427263
Synechococcus sp. JA-3-3Ab	1.046427263
Thermaerobacter marianensis	1.046427263
Streptococcus phage phiBHN167	1.046427263
Sphingomonas sp. MM-1	1.025930812
Morganella morgani	1.025930812
Shewanella violacea	1.025930812
Desulfotobacterium dehalogenans	1.025930812
Synechococcus elongatus	1.025930812
Vicia cryptic virus	0.925874574
Ehrlichia ruminantium	0.925874574
Rhodococcus jostii	0.925874574
Cryptophlebia leucotreta granulovirus	0.925874574
Bdellovibrio exovorus	0.925874574
Hyposoter fugitivus ichnovirus	0.894228871
Pelotomaculum thermopropionicum	0.894228871
Pandoraea sp. RB-44	0.894228871
beta proteobacterium CB	0.894228871
Pseudomonas sp. VLB120	0.894228871
Methanobrevibacter ruminantium	0.894228871
Laodelphax striatella honeydew virus 1	0.873732419
Rhodobacter sphaeroides	0.873732419
Borrelia crocidurae	0.873732419
Sphingopyxis alaskensis	0.873732419
Bdellovibrio bacteriovorus	0.862583167
Cyanobium gracile	0.862583167
Yersinia pseudotuberculosis	0.862583167
Desulfovibrio magneticus	0.862583167
Trichormus azollae	0.862583167
Candidatus Pelagibacter ubique	0.862583167
Sulfurovum sp. NBC37-1	0.842086716
Streptomyces davawensis	0.842086716
Human herpesvirus 7	0.842086716
Cyprinid herpesvirus 2	0.842086716
Nitrobacter winogradskyi	0.842086716
Cynomolgus macaque cytomegalovirus strain Ottawa	0.842086716
Verrucosipora maris	0.842086716
Hyphomicrobium denitrificans	0.842086716
Methanobrevibacter sp. AbM4	0.842086716
Thermotoga lettingae	0.830937464
Streptococcus phage K13	0.830937464
Geobacillus sp. JF8	0.830937464
Candidatus Desulforudis audaxviator	0.821590264
Enterobacter sp. R4-368	0.821590264
Paracoccus denitrificans	0.821590264

Halyomorpha halys symbiont	0.810441012
Anaeromyxobacter dehalogenans	0.810441012
Thioflavococcus mobilis	0.810441012
Staphylothermus hellenicus	0.810441012
Blattabacterium punctulatus	0.78994456
Rhizobium leguminosarum	0.78994456
Nautilia profundicola	0.78994456
Thermodesulfovibrio yellowstonii	0.78994456
Octadecabacter antarcticus	0.78994456
Staphylococcus pasteurii	0.78994456
Streptomyces violaceusniger	0.769448109
Geobacter sulfurreducens	0.769448109
Sulfurimonas autotrophica	0.769448109
Myxococcus xanthus	0.769448109
Tistrella mobilis	0.769448109
Acinetobacter sp. ADP1	0.617249716
Papaya leaf curl alphasatellite	0.617249716
Cercopithecine herpesvirus 2	0.617249716
Sphingobium sp. SYK-6	0.617249716
Pseudomonas fulva	0.617249716
Pseudomonas poae	0.617249716
Thiomonas intermedia	0.617249716
Chlorobium phaeovibrioides	0.617249716
Sphaerochaeta pleomorpha	0.617249716
Bordetella bronchiseptica	0.617249716
Rosellinia necatrix partitivirus 2	0.617249716
Chlamydia pecorum	0.617249716
Invertebrate iridescent virus 31	0.617249716
Caldisphaera lagunensis	0.617249716
Cucumber green mottle mosaic virus	0.617249716
Haemophilus phage HP1	0.617249716
Impatiens necrotic spot virus	0.617249716
Thermocrinis albus	0.617249716
Shewanella halifaxensis	0.585604013
Dyadobacter fermentans	0.585604013
Azoarcus sp. KH32C	0.585604013
Flavobacterium johnsoniae	0.585604013
Phaeocystis globosa virus	0.585604013
Spiribacter sp. UAH-SP71	0.585604013
Fervidobacterium pennivorans	0.585604013
Psychrobacter arcticus	0.585604013
Mycoplasma conjunctivae	0.585604013
Alcanivorax dieselolei	0.585604013
Leptospira interrogans	0.585604013
Streptococcus phage PH15	0.585604013
Shewanella denitrificans	0.565107561
Methylobacterium sp. 4-46	0.565107561
Methanococcus vannielii	0.565107561
Methanocella paludicola	0.565107561
Desulfovibrio africanus	0.553958309
Spiribacter salinus	0.553958309
Desulfovibrio alaskensis	0.553958309
Simiduia agarivorans	0.553958309

<i>Agrobacterium fabrum</i>	0.553958309
<i>Pseudomonas protegens</i>	0.553958309
<i>Chloroflexus aggregans</i>	0.553958309
Candidatus <i>Kinetoplastibacterium crithidii</i>	0.553958309
<i>Thermoplasma volcanium</i>	0.553958309
<i>Mycoplasma agalactiae</i>	0.553958309
<i>Ectocarpus siliculosus</i> virus 1	0.553958309
<i>Prosthecochloris aestuarii</i>	0.553958309
Candidatus <i>Atelocyanobacterium thalassa</i>	0.553958309
<i>Geobacillus thermoleovorans</i>	0.553958309
<i>Lactobacillus paracasei</i>	0.553958309
<i>Vibrio alginolyticus</i>	0.553958309
<i>Helicobacter cetorum</i>	0.553958309
Human herpesvirus 2	0.553958309
<i>Mycoplasma pneumoniae</i>	0.553958309
<i>Oryctes rhinoceros nudivirus</i>	0.553958309
<i>Serratia plymuthica</i>	0.553958309
<i>Sinorhizobium meliloti</i>	0.553958309
<i>Burkholderia phymatum</i>	0.533461857
<i>Nitratifactor salsuginis</i>	0.533461857
<i>Deinococcus geothermalis</i>	0.533461857
<i>Mycoplasma mycoides</i>	0.533461857
<i>Wolinella succinogenes</i>	0.533461857
<i>Aeromonas hydrophila</i>	0.533461857
<i>Anabaena cylindrica</i>	0.533461857
<i>Sphaerochaeta coccoides</i>	0.533461857
<i>Mycobacterium ulcerans</i>	0.512965406
<i>Modestobacter marinus</i>	0.512965406
<i>Bartonella quintana</i>	0.512965406
<i>Thermomicrobium roseum</i>	0.512965406
<i>Aeromonas</i> phage phiAS5	0.512965406
<i>Paracoccus aminophilus</i>	0.512965406
<i>Salmonella bongori</i>	0.512965406
<i>Thermotoga maritima</i>	0.512965406
<i>Synechococcus</i> sp. PCC 6312	0.512965406
<i>Acidiphilium multivorum</i>	0.512965406
<i>Gluconacetobacter diazotrophicus</i>	0.512965406
<i>Myxococcus stipitatus</i>	0.512965406
<i>Pseudanabaena</i> sp. PCC 7367	0.308624858
Pepino mosaic virus	0.308624858
<i>Burkholderia</i> sp. RPE64	0.308624858
<i>Methanococcus voltae</i>	0.308624858
<i>Lactobacillus helveticus</i>	0.308624858
<i>Xanthomonas oryzae</i>	0.308624858
<i>Sphingomonas wittichii</i>	0.308624858
<i>Granulicella mallensis</i>	0.308624858
<i>Yersinia</i> phage phiA1122	0.308624858
<i>Actinoplanes missouriensis</i>	0.308624858
<i>Pseudoxanthomonas spadix</i>	0.308624858
Ictalurid herpesvirus 1	0.308624858
Eel picornavirus 1	0.308624858
<i>Pelobacter carbinolicus</i>	0.308624858
<i>Acidovorax citrulli</i>	0.308624858

Aquamavirus A	0.308624858
Erinnyis ello granulovirus	0.308624858
Marinomonas mediterranea	0.308624858
Streptomyces sp. SirexAA-E	0.308624858
Caulobacter vibrioides	0.308624858
Mycobacterium avium	0.308624858
Thermoanaerobacter italicus	0.308624858
Rickettsia akari	0.308624858
Glypta fumiferanae ichnovirus	0.308624858
Grapevine Syrah virus 1	0.308624858
Marinobacter adhaerens	0.308624858
Saimiriine herpesvirus 1	0.308624858
Rhizobium etli	0.308624858
Mesorhizobium opportunistum	0.308624858
Agrobacterium sp. H13-3	0.308624858
Candidatus Blochmannia vafer	0.308624858
Caulobacter segnis	0.308624858
Cotesia congregata bracovirus	0.308624858
Francisella noatunensis	0.308624858
Human herpesvirus 5	0.308624858
Human mastadenovirus C	0.308624858
Leuconostoc sp. C2	0.308624858
Natronococcus occultus	0.308624858
Rice grassy stunt virus	0.308624858
White spot syndrome virus	0.308624858
Invertebrate iridescent virus 6	0.308624858
Pelobacter propionicus	0.308624858
Acanthamoeba polyphaga mimivirus	0.308624858
Alcelaphine herpesvirus 2	0.308624858
Bacillus phage phiNIT1	0.308624858
Carnivore amdoparvovirus 1	0.308624858
Deinococcus gobiensis	0.308624858
Enterobacteria phage lambda	0.308624858
Halalkalicoccus jeotgali	0.308624858
Mesorhizobium loti	0.308624858
Micromonospora aurantiaca	0.308624858
Tanapox virus	0.308624858
Ureaplasma urealyticum	0.308624858
Candidatus Protochlamydia amoebophila	0.276979155
Mesoplasma florum	0.276979155
Pleurocapsa minor	0.276979155
Desulfosporosinus acidiphilus	0.276979155
Pseudomonas sp. UW4	0.276979155
Acidovorax avenae	0.276979155
Melon yellow spot virus	0.276979155
Novosphingobium sp. PP1Y	0.276979155
Thermus scotoductus	0.276979155
Helicobacter mustelae	0.276979155
Sphingobium japonicum	0.276979155
Blattabacterium sp. (Blattella germanica)	0.276979155
Pseudomonas monteilii	0.276979155
Methylovorus glucosotrophus	0.276979155
Frankia alni	0.276979155

