**Table S1. Overview of all 183 bacterial phylotypes along with their relative abundances per endometrial community (n=19)**

|  |  |  |
| --- | --- | --- |
| *phylotype*  | *annotation* | subject/sample number |
|  |  | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 | S13 | S14 | S15 | S16 | S17 | S18 | S19 |
| 5 | *Lactobacillus crispatus* | 20090 | 0 | 8582 | 12763 | 0 | 5 | 960 | 0 | 0 | 1043 | 21 | 0 | 11 | 1771 | 5842 | 0 | 4140 | 438 | 0 |
| 4 | *Lactobacillus iners* | 0 | 13837 | 0 | 25 | 0 | 227 | 0 | 4390 | 0 | 0 | 508 | 0 | 342 | 0 | 0 | 621 | 0 | 0 | 0 |
| 30 | *Lactobacillus jensenii* | 121 | 0 | 2963 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 305 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 119 | *Lactobacillus* | 1789 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 10 | *Prevotella timonensis* | 12 | 0 | 0 | 0 | 456 | 0 | 0 | 0 | 54 | 0 | 0 | 0 | 7919 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | *Atopobium vaginae* | 6 | 0 | 0 | 0 | 594 | 35 | 0 | 39 | 183 | 0 | 0 | 0 | 3231 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 | *Prevotella amnii* | 55 | 0 | 0 | 6 | 4594 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | *Prevotella* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 4505 | 0 | 0 | 0 | 0 | 0 | 0 |
| 56 | *Prevotella disiens* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 612 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55 | *Dialister* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 4 | 0 | 0 | 0 | 619 | 0 | 0 | 0 | 0 | 0 | 0 |
| 67 | *Moryella* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 885 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38 | *Porphyromonas uenonis* | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 72 | 5 | 0 | 0 | 0 | 1199 | 0 | 0 | 0 | 0 | 0 | 0 |
| 72 | *Peptostreptococcus anaerobius* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 493 | 0 | 0 | 0 | 0 | 0 | 0 |
| 42 | *Megasphaera* | 5 | 0 | 0 | 0 | 341 | 0 | 0 | 233 | 7 | 0 | 0 | 0 | 768 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44 | *Saccharofermentans* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 891 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 | *Peptoniphilus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 513 | 0 | 0 | 0 | 0 | 0 | 0 |
| 47 | *Mobiluncus curtisii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 1301 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | *Bacteroides fragilis* | 560 | 1563 | 2019 | 1774 | 2800 | 3739 | 3063 | 2847 | 3301 | 2831 | 3304 | 2749 | 397 | 2123 | 2472 | 3034 | 3330 | 2416 | 3386 |
| 1 | *Bacteroides xylanivorans* | 488 | 2025 | 1737 | 1698 | 2694 | 4215 | 2176 | 2756 | 3766 | 2558 | 4244 | 3771 | 258 | 2623 | 2645 | 2745 | 2881 | 3373 | 2539 |
| 2 | *Bacteroides thetaiotaomicron* | 478 | 1250 | 1875 | 959 | 1802 | 3062 | 2899 | 2658 | 2732 | 3360 | 2921 | 3339 | 167 | 2579 | 1997 | 2012 | 2727 | 3104 | 2310 |
| 20 | *Bacteroides ovatus* | 72 | 437 | 291 | 170 | 332 | 162 | 729 | 142 | 318 | 543 | 685 | 303 | 24 | 445 | 339 | 516 | 154 | 212 | 503 |
| 3 | *Pelomonas* | 316 | 1160 | 842 | 961 | 1785 | 1727 | 2067 | 1115 | 1686 | 1441 | 1526 | 1880 | 185 | 1919 | 1857 | 1814 | 1558 | 1975 | 3089 |
| 6 | *Betaproteobacteria* | 278 | 470 | 612 | 1048 | 579 | 980 | 580 | 1044 | 1145 | 1057 | 1340 | 1715 | 169 | 1069 | 1039 | 1290 | 880 | 922 | 1440 |
| 13 | *Pseudomonas sp.* | 11 | 114 | 82 | 47 | 31 | 44 | 130 | 90 | 122 | 1063 | 944 | 1615 | 95 | 1252 | 450 | 1040 | 833 | 1233 | 1507 |
| 11 | *Escherichia/Shigella* | 250 | 264 | 662 | 297 | 660 | 967 | 1374 | 480 | 949 | 724 | 809 | 808 | 125 | 964 | 803 | 1015 | 823 | 1155 | 607 |
| 12 | *Bacteroides vulgatus* | 105 | 402 | 317 | 311 | 1039 | 899 | 649 | 950 | 790 | 1179 | 626 | 1198 | 87 | 878 | 574 | 763 | 814 | 843 | 590 |
| 14 | *Pelomonas* | 68 | 330 | 347 | 148 | 178 | 459 | 105 | 426 | 661 | 859 | 549 | 737 | 16 | 743 | 319 | 591 | 716 | 673 | 756 |
| 8 | *Escherichia/Shigella* | 193 | 521 | 702 | 413 | 600 | 1347 | 631 | 638 | 772 | 1257 | 1020 | 489 | 76 | 1636 | 910 | 1014 | 707 | 965 | 462 |
| 9 | *Chitinophagaceae* | 60 | 316 | 313 | 390 | 728 | 670 | 682 | 901 | 1168 | 1196 | 1020 | 770 | 54 | 905 | 562 | 644 | 51 | 1051 | 499 |
| 19 | *Betaproteobacteria* | 47 | 238 | 228 | 447 | 255 | 276 | 465 | 314 | 345 | 155 | 250 | 576 | 16 | 235 | 285 | 195 | 394 | 359 | 65 |
| 21 | *Acidovorax* | 16 | 211 | 314 | 462 | 405 | 419 | 524 | 345 | 279 | 348 | 223 | 230 | 40 | 36 | 301 | 397 | 279 | 51 | 261 |
| 34 | *Caulobacter* | 25 | 18 | 107 | 18 | 228 | 307 | 50 | 46 | 52 | 72 | 74 | 156 | 35 | 68 | 120 | 248 | 179 | 176 | 332 |
| 16 | *Aeromonas* | 0 | 0 | 0 | 5 | 0 | 6 | 0 | 10 | 0 | 549 | 690 | 695 | 55 | 517 | 441 | 928 | 416 | 849 | 1315 |
| 27 | *Clostridium XlVa* | 6 | 150 | 424 | 211 | 164 | 146 | 369 | 127 | 89 | 540 | 0 | 0 | 27 | 159 | 227 | 149 | 407 | 361 | 378 |
| 31 | *Clostridium XlVa* | 22 | 186 | 93 | 211 | 189 | 125 | 0 | 2 | 95 | 0 | 134 | 157 | 34 | 96 | 97 | 325 | 331 | 661 | 0 |
| 24 | *Bacteroides cellulosilyticus (intestinalis)* | 56 | 0 | 73 | 238 | 195 | 56 | 354 | 193 | 161 | 271 | 505 | 159 | 0 | 192 | 316 | 238 | 320 | 0 | 100 |
| 25 | *Betaproteobacteria* | 0 | 121 | 0 | 120 | 91 | 441 | 275 | 48 | 360 | 300 | 79 | 0 | 25 | 327 | 212 | 91 | 313 | 246 | 180 |
| 26 | *Parabacteroides merdae* | 0 | 18 | 4 | 233 | 215 | 268 | 490 | 93 | 303 | 4 | 143 | 179 | 28 | 201 | 166 | 210 | 313 | 224 | 134 |
| 33 | *Undibacterium jejuense* | 8 | 32 | 0 | 139 | 289 | 89 | 259 | 61 | 156 | 104 | 134 | 0 | 14 | 72 | 109 | 225 | 242 | 146 | 168 |
| 35 | *Bacteroides uniformis* | 0 | 100 | 328 | 144 | 0 | 362 | 73 | 171 | 423 | 66 | 65 | 0 | 0 | 309 | 70 | 0 | 202 | 91 | 109 |
| 37 | *Pseudomonas sp.* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 563 | 211 | 192 | 13 | 391 | 84 | 0 | 195 | 366 | 107 |
| 40 | *Clostridium XlVa* | 22 | 244 | 0 | 4 | 303 | 157 | 112 | 357 | 386 | 428 | 66 | 129 | 29 | 83 | 232 | 428 | 164 | 375 | 478 |
| 80 | *Bacteria* | 0 | 0 | 0 | 0 | 0 | 117 | 0 | 0 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 154 | 0 | 0 |
| 59 | *Bacteria* | 39 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 251 | 0 | 0 | 59 | 0 | 139 | 0 | 178 |
| 36 | *Enterobacteriaceae* | 7 | 0 | 109 | 0 | 239 | 340 | 251 | 205 | 253 | 0 | 272 | 183 | 28 | 129 | 105 | 642 | 133 | 186 | 143 |
| 32 | *Phascolarctobacterium faecium* | 25 | 91 | 87 | 82 | 247 | 230 | 126 | 60 | 171 | 180 | 0 | 388 | 24 | 0 | 22 | 200 | 117 | 72 | 94 |
| 141 | *Enterobacteriaceae* | 28 | 31 | 21 | 21 | 81 | 52 | 136 | 79 | 106 | 96 | 25 | 59 | 10 | 86 | 111 | 48 | 103 | 137 | 127 |
| 63 | *Sediminibacterium* | 41 | 24 | 58 | 0 | 59 | 0 | 0 | 79 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 0 |
| 48 | *Acidaminococcus intestinis* | 0 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 351 | 5 | 113 | 44 | 0 | 89 | 105 | 108 |
| 54 | *Pedomicrobium* | 11 | 16 | 16 | 114 | 0 | 0 | 61 | 12 | 0 | 46 | 24 | 155 | 10 | 64 | 0 | 0 | 86 | 0 | 131 |
| 41 | *Mesorhizobium* | 15 | 42 | 16 | 89 | 0 | 192 | 396 | 75 | 102 | 0 | 56 | 54 | 9 | 17 | 45 | 65 | 85 | 82 | 132 |
| 43 | *Burkholderiales* | 23 | 27 | 53 | 92 | 99 | 31 | 118 | 0 | 15 | 91 | 124 | 80 | 17 | 267 | 7 | 0 | 85 | 61 | 284 |
| 130 | *Fusobacterium nucleatum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 0 | 0 |
| 18 | *Ralstonia pickettii/insidiosa* | 2 | 307 | 0 | 103 | 211 | 571 | 333 | 156 | 319 | 566 | 464 | 396 | 79 | 535 | 69 | 173 | 82 | 446 | 325 |
| 88 | *Clostridium XlVa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152 | 0 | 0 | 0 | 0 | 0 | 170 | 79 | 0 | 0 |
| 86 | *Clostridium XlVa* | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 8 | 72 | 0 | 0 | 66 | 57 | 0 |
| 39 | *Burkholderia* | 0 | 0 | 0 | 154 | 0 | 146 | 129 | 378 | 0 | 55 | 278 | 99 | 5 | 400 | 0 | 50 | 65 | 30 | 0 |
| 46 | *Bacteroides* | 29 | 83 | 0 | 32 | 93 | 167 | 0 | 64 | 93 | 0 | 249 | 0 | 0 | 71 | 146 | 0 | 64 | 0 | 69 |
| 69 | *Sediminibacterium* | 0 | 0 | 0 | 38 | 0 | 90 | 71 | 0 | 24 | 0 | 31 | 0 | 7 | 0 | 0 | 49 | 63 | 0 | 62 |
| 107 | *Achromobacter* | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 0 | 62 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 60 | 0 | 33 |
| 78 | *Serratia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 237 | 0 | 87 | 16 | 66 | 27 | 293 | 58 | 68 | 144 |
| 22 | *Propionibacterium acnes* | 3 | 38 | 79 | 48 | 49 | 215 | 737 | 1520 | 208 | 0 | 0 | 154 | 36 | 139 | 86 | 75 | 56 | 47 | 85 |
| 53 | *Sediminibacterium* | 0 | 0 | 28 | 0 | 24 | 59 | 84 | 128 | 0 | 55 | 85 | 0 | 0 | 31 | 0 | 356 | 55 | 73 | 0 |
| 58 | *Bacillus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 66 | 0 | 4 | 148 | 157 | 87 | 54 | 93 | 96 |
| 140 | *Enterobacteriaceae* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 42 | 50 | 28 | 0 |
| 128 | *Roseburia faecis* | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 0 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 0 | 0 |
| 71 | *Gammaproteobacteria* | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 115 | 42 | 254 | 0 |
| 154 | *Clostridium XlVa* | 0 | 28 | 40 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 90 | 0 | 9 | 0 | 38 | 52 | 39 | 0 | 0 |
| 106 | *Staphylococcus epidermidis/capitis* | 0 | 0 | 0 | 0 | 9 | 0 | 238 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 63 | 37 | 0 | 0 |
| 61 | *Enterococcus faecalis* | 0 | 19 | 0 | 0 | 0 | 81 | 83 | 63 | 307 | 68 | 41 | 0 | 0 | 0 | 0 | 83 | 32 | 43 | 0 |
| 138 | *Stenotrophomonas maltophilia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 60 | 28 | 0 | 32 | 0 | 0 |
| 89 | *Clostridium XlVa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 134 | 0 | 5 | 0 | 138 | 238 | 26 | 0 | 57 |
| 23 | *Herbaspirillum* | 46 | 252 | 97 | 542 | 71 | 511 | 740 | 378 | 351 | 103 | 49 | 0 | 0 | 0 | 4 | 62 | 25 | 60 | 0 |
| 180 | *Clostridium XlVa* | 0 | 8 | 12 | 14 | 10 | 10 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 14 | 21 |
| 101 | *Methylobacillus glycogenes* | 0 | 17 | 0 | 109 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 45 | 24 | 0 | 0 |
| 66 | *Bradyrhizobiaceae* | 4 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 47 | 49 | 0 | 18 | 0 | 350 |
| 51 | *Sphingomonas* | 0 | 116 | 53 | 0 | 54 | 0 | 59 | 96 | 71 | 24 | 57 | 52 | 15 | 74 | 48 | 42 | 17 | 14 | 175 |
| 171 | *Bacteroides* | 0 | 0 | 7 | 12 | 54 | 0 | 29 | 4 | 5 | 50 | 13 | 76 | 0 | 33 | 38 | 93 | 17 | 9 | 23 |
| 112 | *Novosphingobium hassiacum* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 24 | 0 | 39 | 0 | 0 | 0 | 0 | 16 | 36 | 93 |
| 182 | *Pelomonas* | 0 | 3 | 0 | 0 | 0 | 0 | 6 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 15 | 0 | 0 |
| 96 | *Streptococcus* | 9 | 0 | 40 | 0 | 0 | 0 | 159 | 0 | 2 | 7 | 0 | 0 | 2 | 4 | 29 | 0 | 9 | 5 | 0 |
| 181 | *Rothia mucilaginosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 8 | 0 | 0 |
| 149 | *Escherichia/Shigella* | 0 | 0 | 98 | 10 | 0 | 0 | 23 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 42 | 0 |
| 167 | *Granulicatella* | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 6 | 0 |
| 85 | *Bacteria* | 0 | 18 | 9 | 0 | 7 | 53 | 0 | 69 | 8 | 0 | 3 | 26 | 0 | 64 | 1 | 10 | 5 | 19 | 0 |
| 169 | *Streptococcus pneumoniae/mitis* | 4 | 0 | 21 | 0 | 2 | 0 | 1 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 20 |
| 159 | *Neisseria* | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 9 | 0 | 0 | 12 | 12 | 0 | 3 | 3 | 20 | 5 | 0 | 9 |
| 174 | *Bacteroides* | 0 | 3 | 6 | 4 | 9 | 8 | 1 | 1 | 3 | 3 | 9 | 5 | 0 | 2 | 5 | 7 | 4 | 5 | 5 |
| 170 | *Streptococcus* | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 |
| 175 | *Lactobacillus* | 11 | 0 | 23 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 12 | 0 | 3 | 0 | 0 |
| 186 | *Bacteroides* | 0 | 0 | 0 | 3 | 4 | 3 | 4 | 4 | 4 | 6 | 0 | 0 | 0 | 3 | 2 | 7 | 2 | 5 | 6 |
| 29 | *Parabacteroides distasonis* | 112 | 195 | 273 | 79 | 504 | 141 | 264 | 0 | 417 | 112 | 0 | 93 | 0 | 294 | 136 | 369 | 0 | 237 | 132 |
| 45 | *Clostridium XlVa* | 20 | 7 | 0 | 0 | 125 | 212 | 0 | 133 | 114 | 147 | 0 | 133 | 8 | 76 | 112 | 0 | 0 | 149 | 81 |
| 84 | *Clostridium XlVa* | 10 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 0 |
| 64 | *Ruminococcaceae* | 7 | 29 | 0 | 34 | 67 | 59 | 0 | 121 | 23 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 0 |
| 62 | Acidovorax caeni | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 190 | 121 | 164 | 0 | 100 | 110 |
| 126 | *Enterobacteriaceae* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 69 | 0 | 0 | 94 | 0 |
| 70 | *Acidovorax* | 0 | 20 | 25 | 72 | 0 | 0 | 0 | 80 | 62 | 102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 60 |
| 52 | *Parabacteroides distasonis* | 23 | 29 | 0 | 0 | 51 | 0 | 0 | 0 | 0 | 196 | 187 | 0 | 19 | 0 | 86 | 0 | 0 | 73 | 0 |
| 108 | *Sediminibacterium* | 0 | 0 | 67 | 52 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 0 |
| 104 | *Saccharibacteria genera incertae sedis* | 0 | 27 | 0 | 0 | 0 | 78 | 28 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 |
| 57 | *Bradyrhizobium* | 5 | 0 | 25 | 0 | 0 | 110 | 0 | 0 | 44 | 86 | 0 | 107 | 17 | 82 | 0 | 0 | 0 | 65 | 72 |
| 110 | *Gp2* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 113 | 0 | 60 | 0 |
| 124 | *Ruminococcus* | 0 | 0 | 0 | 24 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 80 | 0 | 47 | 28 |
| 75 | *Salinicola halophilus* | 0 | 18 | 0 | 22 | 0 | 29 | 81 | 40 | 54 | 74 | 0 | 65 | 0 | 26 | 43 | 146 | 0 | 47 | 35 |
| 123 | *Novosphingobium* | 0 | 18 | 6 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 28 | 0 | 0 | 40 | 0 |
| 122 | *Rhizobiales* | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 |
| 81 | *Rhizobiales* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 78 | 0 | 0 | 26 | 128 |
| 98 | *Bacteria* | 4 | 48 | 12 | 0 | 25 | 13 | 0 | 58 | 0 | 0 | 40 | 0 | 0 | 21 | 0 | 44 | 0 | 25 | 0 |
| 76 | *Hydrogenophaga* | 0 | 0 | 28 | 0 | 0 | 86 | 80 | 0 | 88 | 0 | 52 | 0 | 12 | 0 | 6 | 0 | 0 | 21 | 0 |
| 150 | *Parcubacteria genera incertae sedis* | 5 | 0 | 28 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 8 | 0 |
| 187 | *Enterobacteriaceae* | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 1 | 4 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 6 | 6 |
| 93 | *Haemophilus parainfluenzae* | 0 | 0 | 0 | 7 | 0 | 0 | 185 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 69 | 0 | 3 | 13 |
| 49 | *Saccharofermentans* | 13 | 0 | 0 | 0 | 996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 83 | *Aquicella* | 0 | 0 | 12 | 0 | 47 | 138 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | *Pseudomonas stutzeri* | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 334 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 99 | *Lactobacillus gasseri* | 0 | 0 | 408 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 109 | *Dialister micraerophilus* | 3 | 0 | 0 | 0 | 95 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 |
| 113 | *Escherichia/Shigella* | 0 | 0 | 0 | 47 | 31 | 0 | 0 | 145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 |
| 151 | *Faecalibacterium prausnitzii* | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 152 | *Lachnospiracea incertae sedis* | 0 | 0 | 70 | 0 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 157 | *Pseudoxanthomonas mexicana* | 0 | 0 | 0 | 0 | 65 | 10 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 161 | *Actinomyces* | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 163 | *Streptococcus* | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 164 | *Streptococcus* | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 166 | *Gemella* | 0 | 0 | 4 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 178 | *Streptococcus mutans* | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 179 | *Granulicatella* | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 185 | *Lactobacillus* | 0 | 0 | 62 | 14 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 144 | *Prevotella oris* | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 118 | *Enterobacteriaceae* | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 63 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165 | *Enterobacteriaceae* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 139 | *Faecalibacterium prausnitzii* | 0 | 0 | 22 | 0 | 0 | 0 | 155 | 63 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 121 | *Prevotella copri* | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 0 | 213 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | *Coprococcus eutactus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 92 | *Microbacterium ginsengisoli* | 0 | 0 | 64 | 0 | 0 | 0 | 58 | 56 | 0 | 0 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 133 | *Bacteroides* | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 121 | 0 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 79 | *Gardnerella vaginalis* | 0 | 0 | 0 | 0 | 128 | 27 | 0 | 81 | 147 | 0 | 0 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 | *Acidovorax facilis* | 11 | 0 | 0 | 64 | 0 | 0 | 0 | 56 | 0 | 51 | 42 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 74 | *Staphylococcus aureus* | 9 | 50 | 49 | 64 | 0 | 0 | 93 | 0 | 141 | 0 | 43 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147 | *Deltaproteobacteria* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 127 | *Acinetobacter johnsonii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 116 | *Clostridium XlVa* | 0 | 5 | 0 | 0 | 0 | 175 | 84 | 0 | 0 | 0 | 0 | 135 | 11 | 0 | 0 | 0 | 0 | 0 | 84 |
| 102 | *Clostridium XlVa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 134 | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | *Vampirovibrio* | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 209 | 0 | 0 | 0 | 0 | 0 | 0 | 207 |
| 148 | *Novosphingobium* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 71 |
| 153 | *Caulobacter* | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 4 | 25 | 0 | 0 | 0 | 0 | 0 |
| 156 | *Faecalibacterium* | 0 | 0 | 77 | 0 | 0 | 0 | 70 | 0 | 35 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 |
| 142 | *Methylophilus* | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 34 | 0 | 0 | 0 | 0 | 42 |
| 134 | *Alphaproteobacteria* | 0 | 0 | 0 | 0 | 51 | 14 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 71 |
| 94 | *Ralstonia* | 32 | 42 | 0 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 68 |
| 158 | *Faecalibacterium prausnitzii* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 6 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 0 |
| 120 | *Variovorax* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 134 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 |
| 117 | *Sediminibacterium* | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 |
| 82 | *Undibacterium oligocarboniphilum* | 19 | 38 | 0 | 70 | 0 | 0 | 0 | 56 | 0 | 1 | 0 | 0 | 0 | 155 | 0 | 0 | 0 | 0 | 0 |
| 91 | *Sediminibacterium* | 0 | 0 | 0 | 0 | 63 | 0 | 126 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 |
| 172 | *Bacteria* | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 10 | 0 | 0 | 0 | 0 |
| 65 | *Rhizobiales* | 0 | 0 | 13 | 33 | 77 | 0 | 62 | 27 | 14 | 26 | 0 | 0 | 11 | 71 | 23 | 0 | 0 | 0 | 143 |
| 68 | *Bacteroides eggerthii* | 0 | 58 | 91 | 0 | 0 | 111 | 54 | 0 | 0 | 71 | 0 | 0 | 10 | 0 | 37 | 0 | 0 | 0 | 0 |
| 143 | *Corynebacterium* | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 74 | 0 | 0 | 0 | 0 | 0 | 1 | 37 | 0 | 0 | 0 | 0 |
| 73 | *Bacteroides dorei* | 0 | 0 | 8 | 91 | 0 | 0 | 227 | 73 | 72 | 0 | 0 | 0 | 9 | 0 | 50 | 0 | 0 | 0 | 0 |
| 145 | *Bilophila wadsworthia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 0 | 0 | 0 | 65 | 0 | 0 | 0 | 0 |
| 97 | *Geothrix* | 3 | 0 | 43 | 0 | 162 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 0 |
| 155 | *Clostridium XlVa* | 0 | 0 | 33 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 0 |
| 114 | *Burkholderia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 44 | 102 | 0 | 0 | 0 | 0 |
| 132 | *Anaerostipes hadrus* | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 0 | 0 |
| 100 | *Curvibacter* | 0 | 0 | 0 | 91 | 26 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 4 | 0 | 119 | 0 | 0 | 0 | 0 |
| 177 | *Lactobacillus* | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 162 | 0 | 0 | 0 | 0 |
| 188 | *Pelomonas* | 0 | 2 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 7 |
| 168 | *Abiotrophia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 13 | 13 | 0 | 0 | 0 |
| 173 | *Rothia dentocariosa* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 |
| 189 | *Sediminibacterium* | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 8 | 0 | 15 | 0 | 0 | 0 | 3 | 0 | 28 | 0 | 0 | 0 |
| 135 | *Abiotrophia* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 0 | 29 | 3 | 0 | 0 | 39 | 29 | 0 | 0 | 35 |
| 136 | *Collinsella aerofaciens* | 0 | 0 | 98 | 0 | 0 | 0 | 84 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 |
| 160 | *Faecalibacterium prausnitzii* | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 0 | 40 | 0 | 0 | 0 |
| 125 | *Roseburia intestinalis* | 0 | 0 | 0 | 0 | 0 | 0 | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 0 | 60 | 0 | 0 | 0 |
| 137 | *Comamonadaceae* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 0 | 0 | 81 |
| 146 | *Ruminococcaceae* | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 0 |
| 103 | *Bacillus* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 307 | 40 | 0 | 54 | 0 | 96 | 0 | 0 | 0 |
| 77 | *Parabacteroides* | 0 | 0 | 91 | 86 | 0 | 0 | 99 | 0 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 105 | 0 | 0 | 0 |
| 131 | *Enterobacteriaceae* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 116 | 0 | 0 | 0 |
| 90 | *Lachnospiracea incertae sedis* | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 133 | 0 | 0 | 0 |
| 50 | *Betaproteobacteria* | 21 | 30 | 40 | 0 | 45 | 245 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 0 | 104 | 199 | 0 | 0 | 71 |