RDP: Release 11

SeqMatch :: Result



Sequential: version 3 **RDP Data:** release11_6

Data Set: both type and non-type strains, both environmental (uncultured) sequences and isolates, both near-full-length or short sequences, good quality

sequences

Comments: 3351829 sequences were included in the search

The screening was based on 7-base oligomers

Query Submit Date: Thu Mar 23 10:48:25 EDT 2023

Match hit format: short ID, orientation, similarity score, S_ab score, unique common oligomers and sequence full name. More help is available.

Lineage:

Results for Query Sequence: LL5, 694 unique oligos

```
rootrank Root (20) (match sequences)
    domain Bacteria (20)
      phylum Proteobacteria (20)
        class Alphaproteobacteria (20)
          order Caulobacterales (20)
            family Caulobacteraceae (20)
              genus Brevundimonas (20)
                  S000016026
                                   not_calculated 0.991 1321 Brevundimonas vesicularis; ATCC 11426 (T); AJ007801
                  S000017941
                                   not_calculated 0.991 1219 alpha proteobacterium VUN10077; AF137356
                   S000112396
                                   not_calculated 0.991 1344 Brevundimonas vesicularis; LMG 2350 (T); AJ227780
                  S000112771
                                   not_calculated 0.991 1344 Brevundimonas vesicularis; LMG 11141; AJ227781
                  S000112773
                                   not_calculated 0.991 1344 Brevundimonas sp. V4.BO.07; AJ227800
                  S000113250
                                   not_calculated 0.991 1344 Brevundimonas intermedia; ATCC 15262(T); AJ227786
                  S000371153
                                   not_calculated 1.000 0544 uncultured bacterium; Kazan-MN12BT3-285; AY593393
                                   not_calculated 1.000 0505 uncultured bacterium; C2_65H09f; AB483509 not_calculated 1.000 0505 uncultured bacterium; C2_65J2If; AB483510 not_calculated 1.000 0505 uncultured bacterium; C2_64A01f; AB483597 not_calculated 1.000 0505 uncultured bacterium; C2_54D12f; AB483598
                  S001420253
                  S001420254
                  S001420341
S001420342
                                   not_calculated 1.000 0505 uncultured bacterium; C2_S4H0f; AB483599 not_calculated 1.000 0505 uncultured bacterium; C2_S4H0f; AB483600
                  S001420343
                  S001420344
                                   not_calculated 1.000 0505 uncultured bacterium; N2_12B20f; AB484339
                  S001421083
                  S001421084
                                   not_calculated 1.000 0505 uncultured bacterium; N2_12F08f; AB484340
                   S001421085
                                   not_calculated 1.000 0505 uncultured bacterium; N2_12P07f; AB484341
                  S001422066
                                   not_calculated 1.000 0505 uncultured bacterium; N2_S4F03f; AB485322
                  S002411029
                                   not_calculated 1.000 0536 Brevundimonas sp. CB1-1; HQ876726
                  S003614866
                                   not_calculated 1.000 0511 Brevundimonas sp. TW_LB_DL4; JX402644
                  S004483400
                                   not_calculated 1.000 0533 Brevundimonas sp. sed039; KR067623
```

Lineage:

Results for Query Sequence: LL4, 602 unique oligos

```
rootrank Root (20) (match sequences)
    domain Bacteria (20)
      phylum Proteobacteria (20)
        class Alphaproteobacteria (20)
          order Sphingomonadales (20)
            family Sphingomonadaceae (20)
              genus Sphingobium (20)
                  S000127496
                                  not_calculated 1.000 1333 Sphingobium yanoikuyae; KF706; AB109749
                  S000130603
                                  not_calculated 1.000 1341 Sphingomonas sp.; B1; X94099
                  S000130607
                                  not_calculated 1.000 1345 Sphingobium yanoikuyae; PAH-degrading; X85023
                  S000379067
                                  not_calculated 1.000 1227 Sphingobium yanoikuyae; DD109; AY574367
                  S000391716
                                  not_calculated 1.000 1316 Sphingobium yanoikuyae; AF331661
                  $000437529
$000538425
                                  not_calculated 1.000 1336 Sphingobium yanoikuyae; B1; U37524
                                  not_calculated 1.000 1258 estrogen-degrading bacterium KC14; DQ066444 not_calculated 1.000 1001 Sphingomonas sp. 14DN-61; AB200352 not_calculated 1.000 1331 Sphingomonas sp. PF-D; DQ202285
                  S000568813
                  S000605852
                                  not_calculated 1.000 1356 Sphingomonas sp. H-1; EF012277 not_calculated 1.000 1356 Sphingomonas sp. ZnH-1; EF061133 not_calculated 1.000 1249 uncultured delta proteobacterium; COREB41; EF562226
                  S000751080
                  S000752101
                  S000905547
                  S000907483
                                  not_calculated 1.000 0656 uncultured alpha proteobacterium; MS071A1_A02; EF697268
                  S000907536
                                  not_calculated 1.000 0640 uncultured alpha proteobacterium; MS071A1_F01; EF697321
                  S000907639
                                  not_calculated 1.000 0672 uncultured alpha proteobacterium; MS072A1_G12; EF697424
                  S000907643
                                  not_calculated 1.000 0568 uncultured alpha proteobacterium; MS072A1_H04; EF697428
                  S000915046
                                  not_calculated 1.000 0672 uncultured alpha proteobacterium; MS136A1_C11; EF704831
                  S001034313
                                  not_calculated 1.000 1174 uncultured Sphingomonas sp.; 1P-1-C04; EU704732
                  S001034601
                                  not_calculated 1.000 1170 uncultured Sphingomonas sp.; 1P-2-E24; EU705020
                  S001177388
                                  not_calculated 1.000 1281 uncultured Sphingobium sp.; GI3-S-1-B02; FJ191702
```

Lineage:

Results for Query Sequence: LLX12A, 634 unique oligos

```
rootrank Root (20) (match sequences)
    domain Bacteria (20)
phylum Actinobacteria (20)
        class Actinobacteria (20)
          order Mycobacteriales (20)
            family Dietziaceae (20)
              genus Dietzia (20)
                  S000001586
                                   not_calculated 1.000 1234 Dietzia sp. R19; Y08315
                   S000002346
                                   not_calculated 1.000 1234 Dietzia sp. R23; Y08316
                  S000007762
                                   not_calculated 1.000 1234 Dietzia sp. R30; Y08317
                                   not_calculated 1.000 1234 Dietzia sp. R18; Y08314 not_calculated 1.000 1234 Dietzia sp. R32; Y08318
                  S000021256
                  S000022367
                  S000331657
                                   not_calculated 1.000 1346 Dietzia daqingensis; 263; AY603001
```

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S000331658
                                        not_calculated 1.000 1322 Dietzia daqingensis; 263; AY603002
                     S000537378
                                        not_calculated 1.000 1390 Dietzia sp. P27-19; DQ060380
                                        not_calculated 1.000 1410 Dietzia natronolimnaea; AC21r; AJ717372
                     S000544157
                                       not_calculated 1.000 1405 Dietzia natronolimnaea; AC211; AJ717372 not_calculated 1.000 1405 Dietzia natronolimnaea; CV46; AJ717373 not_calculated 1.000 0806 Dietzia sp. 291_(IO)_102mbsf; DQ344839 not_calculated 1.000 0808 Dietzia sp. LOT4; DQ839173 not_calculated 1.000 1404 Dietzia natronolimnaea; LLA; DQ333285 not_calculated 1.000 1359 Dietzia sp. 1/4_C7/16_33; EF540468 not_calculated 1.000 1372 Dietzia sp. W02TDL; AB266602 not_calculated 1.000 1382 Dietzia sp. W02TDL; AB266603
                     S000544158
                     S000640972
                     S000730707
                     S000775767
                     S000860079
                     S000925437
                     S000925438
                     S000995867
                                        not_calculated 1.000 1367 Dietzia cercidiphylli (T); YIM 65002; EU375846
                     S001093299
                                        not_calculated 1.000 1311 Dietzia dagingensis; JAM-AC0601; AB362252
                     S001095826
                                        not_calculated 1.000 1398 Dietzia natronolimnaea; TPL19; EU373398
                     S001264033
                                        not_calculated 1.000 1359 Dietzia natronolimnaea; DSM 44860; FJ468329
Lineage
Results for Query Sequence: WG23A, 687 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
          class Alphaproteobacteria (20)
            order Caulobacterales (20)
              family Caulobacteraceae (20)
                genus Brevundimonas (20)
                     S000113250
                                       not_calculated 0.983 1344 Brevundimonas intermedia; ATCC 15262(T); AJ227786
                                        not_calculated 0.989 0544 uncultured bacterium; Kazan-MN12BT3-285; AY593393
                     S000371153
                     S000382694
                                        not_calculated 0.983 1336 Brevundimonas intermedia; MBIC2712, ATCC15262; AB023784
                     S000639898
                                        not_calculated 0.983 1347 Brevundimonas sp. CHNTR43; DQ337577
                                        not_calculated 0.983 1141 uncultured Brevundimonas sp.; RBE2CI-150; EF111191
                     S000764930
                     S000841764
                                        not_calculated 0.992 0589 Brevundimonas sp. SSRS6-4; AB299746
                                        not_calculated 0.983 0801 Brevundimonas sp. AKB-2008-JO6; AM988993 not_calculated 0.986 0485 Brevundimonas sp. WH011; FJ866676
                     S001292092
S001352776
                                       not_calculated 0.988 0505 uncultured bacterium; C2_65H09f; AB483509 not_calculated 0.988 0505 uncultured bacterium; C2_65J21f; AB483510 not_calculated 0.988 0505 uncultured bacterium; C2_65J21f; AB483597 not_calculated 0.988 0505 uncultured bacterium; C2_S4A01f; AB483598 uncultured bacterium; C2_S4D12f; AB483598
                     S001420253
                     S001420254
                     S001420341
                     S001420342
                                        not_calculated 0.988 0505 uncultured bacterium; C2_S4H10f; AB483599
                     S001420343
                     S001420344
                                        not_calculated 0.988 0505 uncultured bacterium; C2_S4I05f; AB483600
                     S001421083
                                        not_calculated 0.988 0505 uncultured bacterium; N2_12B20f; AB484339
                     S001421084
                                        not_calculated 0.988 0505 uncultured bacterium; N2_12F08f; AB484340
                     S001421085
                                        not_calculated 0.988 0505 uncultured bacterium; N2_12P07f; AB484341
                     S001422066
                                        not_calculated 0.988 0505 uncultured bacterium; N2_S4F03f; AB485322
                                       not_calculated 0.983 0826 uncultured bacterium; d21112b26; FR687151 not_calculated 0.988 0511 Brevundimonas sp. TW_LB_DL4; JX402644
                     S002415342
                     S003614866
Lineage:
Results for Query Sequence: WG21, 831 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Bacteroidetes (20)
          class Flavobacteriia (20)
            order Flavobacteriales (20)
              family Flavobacteriaceae (20)
                genus Flavobacterium (20)
                     S000722062
                                       not_calculated 0.992 1363 Flavobacterium sp. YO10; DQ778309
                     S000722063
                                        not_calculated 0.994 1369 Flavobacterium sp. YO11; DQ778310
                     S000722064
                                        not_calculated 1.000 1330 Flavobacterium sp. YO15; DQ778311
                                       not_calculated 0.991 0766 Flavobacterium sp. EPACd10; DQ922756 not_calculated 0.984 1325 Flavobacterium johnsoniae; 188; EU730945 not_calculated 0.985 0393 uncultured bacterium; sscpBac_AB2; FM179197 not_calculated 0.982 0394 uncultured bacterium; sscpBac_A2; FM179202 not_calculated 0.982 0394 uncultured bacterium; sscpBac_A8; FM179204
                     $000736238
$001046232
$001168052
                     S001168057
                     S001168059
                                       not_calculated 0.982 0394 uncultured bacterium; sscpBac_B5; FM179207 not_calculated 1.000 0394 uncultured bacterium; sscpBac_B5; FM179236
                     S001168062
                     S001168091
                     S001326244
                                        not_calculated 0.984 0753 uncultured bacterium; MA00094D04; FJ772290
                     S001326249
                                        not_calculated 0.983 0718 uncultured bacterium; MA00094F03; FJ772295
                     S001326347
                                        not_calculated 0.983 0719 uncultured bacterium; MA00070G12; FJ772393
                     S001341637
                                        not_calculated 0.982 0796 uncultured Bacteroidetes bacterium; MEf05cnp11F6; FJ828057
                                        not_calculated 0.988 0782 Flavobacterium sp. B257; FR696355 not_calculated 0.992 1288 Flavobacterium sp. 698-1-08; HE774302
                     S002223161
                     S003277855
                     S003919304
                                        not_calculated 0.983 1296 Flavobacterium sp. T123L.10.P.LAT.SE.H.Kidney.N; JX287857
                                        not_calculated 0.992 1297 Flavobacterium sp. T124L.10.P.LAT.SE.H.Kidney.N; JX287858 not_calculated 0.990 0676 Flavobacterium sp. T123.10.P.LAT.SE.H.Kidney.N; JX287604
                     $003919305
                     S004006057
                                       not_calculated 0.990 0676 Flavobacterium sp. T124.10.P.LAT.SE.H.Kidney.N; JX287605
                     S004006058
Lineage:
Results for Query Sequence: LL1, 598 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Actinobacteria (20)
          class Actinobacteria (20)
            order Micrococcales (20)
              family Micrococcaceae (20)
                genus Kocuria (20)
                     S000711449
                                       not_calculated 0.977 0704 Kocuria sp. A05; AM284987
                     S000903102
                                        not_calculated 0.982 1299 Kocuria sp. TK815; EU045306
                                       not_calculated 0.973 0943 Bacterium PE_IPFFC13; EU476033
not_calculated 0.977 1008 Kocuria rosea; NCCP-718; AB735689
not_calculated 0.988 1290 Kocuria rosea; 72; KC843411
not_calculated 0.977 0952 Kocuria rosea; BD12OL1-R58; FR877712
                     S001015898
                     S003286892
                     S003804637
                     S004043774
                                        not calculated 0.973 0952 Kocuria rosea; BD12OL1-S48; FR877742
                     S004043804
                     S004053346
                                       not_calculated 0.988 1329 Kocuria sp. FB6; KF444432
                                       not_calculated 0.977 1355 Kocuria rosea; 1-Sj-6-1-5-M; KJ009471
                     S004084681
```

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S004454024
                                       not_calculated 0.988 0987 Kocuria rosea; PVL14; KP072779
                                       not_calculated 0.977 0766 Kocuria sp. ET5s10.21; LN615076 not_calculated 0.977 0698 Kocuria sp. ET5sH1.1; LN615077
                    S004457330
                    S004457331
                                      not_calculated 0.977 0645 Kocuria sp. E13s11.2; LN615111 not_calculated 0.977 0712 Kocuria sp. SC5s6.1; LN615112 not_calculated 0.977 0759 Kocuria sp. SC5s4.2; LN615122 not_calculated 0.988 1097 Kocuria sp. SC5s4.2; LN615123 not_calculated 0.988 1097 Kocuria rosea; 0312MAR28B7; LN774766
                    S004457365
S004457376
                    S004457377
                    S004458991
                                       not_calculated 0.977 0525 Kocuria sp. sed333; KR067634 not_calculated 0.975 0512 Kocuria sp. s7r3; KR263100 not_calculated 0.978 0816 Kocuria rosea; HQB635; KT758560
                    S004483411
                    S004488126
                    S004498311
                    S004538049
                                       not_calculated 0.977 1316 Kocuria rosea; KNUSC1032; KP342208
Lineage:
Results for Query Sequence: WG40, 674 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
         class Gammaproteobacteria (20)
           order Pseudomonadales (20)
              family Pseudomonadaceae (20)
                genus Pseudomonas (20)
S000558121 not ca
                                      not_calculated 0.993 1397 Pseudomonas fluorescens; FLM05-1; DQ084459
                    S001015370
                                       not_calculated 0.993 1370 Pseudomonas lundensis; a301; EU434368
                    S001059393
                                       not calculated 0.993 1319 uncultured bacterium; PB1 aai26b05; EU460294
                    S001418535
                                       not_calculated 0.993 1351 Pseudomonas sp. HW08; FJ999660
                     S001495216
                                       not_calculated 0.993 1285 uncultured bacterium; nbw229e06c1; GQ069152
                     S001495227
                                       not_calculated 0.993 1285 uncultured bacterium; nbw229f10c1; GQ069163
                     S001495264
                                       not_calculated 0.993 1281 uncultured bacterium; nbw230b08c1; GQ069200
                    S001495676
                                       not_calculated 0.993 1285 uncultured bacterium; nbw230e08c1; GQ069612
                    S001495736
S001495782
                                       not_calculated 0.993 1285 uncultured bacterium; nbw231e08c1; GQ069672
                                       not_calculated 0.993 1284 uncultured bacterium; nbw232b09c1; GQ069718
                                      not_calculated 0.993 1286 uncultured bacterium; ncd15f11c1; HM251955 not_calculated 0.993 1286 uncultured bacterium; ncd22g02c1; HM251955 not_calculated 0.993 1286 uncultured bacterium; ncd22g02c1; HM252089 not_calculated 0.993 1285 uncultured bacterium; ncd405e02c1; HM314238 not_calculated 0.993 1286 uncultured bacterium; ncd406b11c1; HM323034
                    S002056531
                    S002056981
                    S002057115
                    S002119264
                    S002128060
                    S002128144
                                       not_calculated 0.993 1287 uncultured bacterium; ncd407g05c1; HM323118
                    S002128158
                                       not_calculated 0.993 1285 uncultured bacterium; ncd407f04c1; HM323132
                     S002128351
                                       not_calculated 0.993 1285 uncultured bacterium; ncd410g11c1; HM323325
                    S002134865
                                       not_calculated 0.993 1283 uncultured bacterium; ncd939c02c1; HM329839
                    S002137849
                                       not_calculated 0.993 1284 uncultured bacterium; ncd1062b10c1; HM332823
Lineage
Results for Query Sequence: WG42, 673 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Actinobacteria (20)
         class Actinobacteria (20)
           order Mycobacteriales (20)
              family Mycobacteriaceae (20)
genus Mycobacterium (20)
                    S000250696
                                       not_calculated 1.000 1380 Mycobacterium sacrum; BN 3151; AY235429
                     S000428130
                                       not_calculated 1.000 1254 Mycobacterium sp. CH-1; AF054278
                     S000432488
                                       not_calculated 1.000 1336 Mycobacterium frederiksbergense; VM0531; AF544629
                    S000980941
                                       not_calculated 1.000 0953 marine sponge bacterium FILTER6B101; EU346419
                     S000981040
                                       not_calculated 1.000 0820 marine sponge bacterium plateOTU31; EU346518
                    S001001550
                                       not_calculated 1.000 1144 uncultured Mycobacterium sp.; Sc59; EU375206
                                       not_calculated 1.000 1235 Mycobacterium sp. 18-08; EU167961
                    S001019877
                                      not_calculated 1.000 1235 Mycobacterium sp. 18-08; EU167961
not_calculated 1.000 1284 Mycobacterium sp. 20-01; EU167966
not_calculated 1.000 1293 Mycobacterium sp. 20-02; EU167967
not_calculated 1.000 1292 Mycobacterium sp. 20-05; EU167969
not_calculated 1.000 0758 uncultured bacterium; Mar_CL-090544_OTU-1; EU808564
not_calculated 1.000 0828 Mycobacterium sp. TS-YC6689; EU836191
                    S001019882
S001019883
                    S001019885
                    S001139959
                    S001139963
                    S001154608
                    S001490273
                                       not_calculated 1.000 1261 uncultured bacterium; nbw68c02c1; GQ064209
                    S001493298
                                       not_calculated 1.000 1260 uncultured bacterium; nbw1125b10c1; GQ067234
                     S001611325
                                       not_calculated 1.000 0794 Mycobacterium sp. BALT-12-S17; FM998723
                    S002155999
                                       not_calculated 1.000 1336 Mycobacterium sacrum; Qtx-19; GU201853
                    S002225495
                                       not_calculated 1.000 1281 Mycobacterium sp. CCBAU 25324; HM107174
                    S002687870
                                       not_calculated 1.000 1260 uncultured bacterium; ncd2031f10c1; JF167937
                    S003610779
                                       not_calculated 1.000 1039 Mycobacterium sp. BB36; FR693306
Results for Query Sequence: WG43, 673 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Bacteroidetes (20)
         class Flavobacteriia (20)
order Flavobacteriales (20)
              family Flavobacteriaceae (20)
                genus Flavobacterium (20)
                    S000544095
                                       not_calculated 0.897 1306 Flavobacterium sp. 10B; AJ698832
                     S000701813
                                       not_calculated 0.909 0806 Flavobacterium sp. RI02; DQ530115
                    S000701847
                                       not_calculated 0.893 0727 Flavobacterium johnsoniae; RI27; DQ530149
                                       not_calculated 0.948 0478 uncultured bacterium; MA61_2003T1c_46; EF377830
                    S000808170
                                       not_calculated 0.935 0508 uncultured bacterium; MA61_2003T1c_20; EF377855 not_calculated 0.896 0749 uncultured bacterium; MA43_2003DFb_C11; EF378395 not_calculated 0.906 1392 Flavobacterium sp. R-32568; AM403636
                    S000808195
                    S000808735
S000979099
                                       not_calculated 0.899 0515 uncultured Bacteroidetes bacterium; MA161H04; FJ532826 not_calculated 0.934 0408 uncultured Bacteroidetes bacterium; MA161H01; FJ532859
                    S001253265
                    S001253298
                                       not_calculated 0.914 0521 uncultured Bacteroidetes bacterium; MA00164C04; FJ533129 not_calculated 0.947 0748 uncultured Bacteroidetes bacterium; MEf05b11D11; FJ828123
                    S001253568
                    S001341703
```

not calculated 0.911 1398 Flavobacterium banpakuense (T); 15F3; GQ281770

S001576873

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S002056081
                                               not_calculated 0.902 1285 uncultured bacterium; ncd09c06c1; HM251055
                                               not_calculated 0.899 0807 Flavobacterium sp. B167; FR696336 not_calculated 0.963 1405 Flavobacterium chungbukense (T); CS100; HM627539
                         S002223142
                         S002232284
                                              not_calculated 0.892 1289 uncultured bacterium; nby263c01c1; HM803222 not_calculated 0.892 1289 uncultured bacterium; nby262b11c1; HM803287 not_calculated 0.963 1366 Flavobacterium sp. 200Cs-4; AB897657 not_calculated 0.908 1317 Flavobacterium sp. TV3aMay; KJ482884
                        S002240951
S002245916
                        S004078079
                         S004089498
                         S004595568
                                               not_calculated 0.891 0569 uncultured bacterium; I-R_A12; LC023463
Lineage:
Results for Query Sequence: LLX17, 673 unique oligos
rootrank Root (20) (match sequences)
      domain Bacteria (20)
phylum Actinobacteria (20)
           class Actinobacteria (20)
              order Propionibacteriales (20)
                 family Nocardioidaceae (20)
                   genus Aeromicrobium (20)
                                             not_calculated 0.897 0632 Nocardioides sp. 2.20; AJ299233
not_calculated 0.914 0603 Nocardioides sp. 2.14; AJ299232
not_calculated 0.912 0442 uncultured actinomycete; ACT-A2; AJ427636
not_calculated 0.972 1342 Aeromicrobium sp. 1_C7_65; EF540459
not_calculated 0.896 1336 Aeromicrobium sp. 1/4_C7/16_31; EF540466
not_calculated 0.874 1315 Aeromicrobium kwangyangensis; CW35; EF693740
not_calculated 0.984 0492 bacterium EP1.29; EU279889
                         S000027750
S000028280
                         S000433700
                         S000860070
                         S000860077
                         S000893634
                         S000968355
                         S001154138
                                               not_calculated 0.872 1337 Aeromicrobium kwangyangensis; DS23; EU834249
                         S001199074
                                               not_calculated 0.869 1286 Aeromicrobium sp. I_Gauze_W_12_4; FJ267536
                         S001255820
                                               not_calculated 0.889 0751 uncultured bacterium; C042; FJ561558
                         S002973444
                                               not_calculated 0.877 0740 uncultured bacterium; A083_BATS; HM032273
                         S002973478
S003537983
                                               not_calculated 0.897 0741 uncultured bacterium; A171_BATS; HM032307
                                              not_calculated 0.897 0741 uncultured bacterium; A171_BA15; HM032307 not_calculated 0.869 1368 uncultured bacterium; AC12BD02; JQ428031 not_calculated 0.868 1297 Aeromicrobium sp. Sr29; JX949248 not_calculated 0.869 1332 Aeromicrobium sp. Es15; JQ977434 not_calculated 0.886 1306 Aeromicrobium sp. W-NaCl-1; KM083518 not_calculated 0.871 0680 Aeromicrobium sp. VO41-3; KT152267 not_calculated 0.900 1319 Aeromicrobium sp. VO40-3; KM406763
                         S003747861
                         S003789365
                         S004231673
                         S004492038
                        S004531243
                         S004594968
                                               not_calculated 0.869 0564 uncultured bacterium; RB-A-1_G09; LC022863
                         S004596305
                                               not_calculated 0.888 0561 uncultured bacterium; TB-A-1_H04; LC024200
Lineage
Results for Query Sequence: LL9, 601 unique oligos
rootrank Root (20) (match sequences)
      domain Bacteria (20)
        phylum Actinobacteria (20)
           class Actinobacteria (20)
              order Propionibacteriales (20)
                 family Nocardioidaceae (20)
                   genus Aeromicrobium (20)
$000027750 not calc
                                              not_calculated 0.884 0632 Nocardioides sp. 2.20; AJ299233
                                              not_calculated 0.912 0442 uncultured actinomycete; ACT-A2; AJ427636 not_calculated 0.882 1277 Nocardioides sp. 43/14; AY571805
                         S000433700
                         S000533383
                         S000605629
                                               not_calculated 0.908 1244 Nocardioidaceae bacterium SM2; DQ195813
                         S000860070
                                               not_calculated 0.983 1342 Aeromicrobium sp. 1_C7_65; EF540459
                                               not_calculated 0.908 1336 Aeromicrobium sp. 1/4_C7/16_31; EF540466 not_calculated 0.884 1315 Aeromicrobium kwangyangensis; CW35; EF693740
                         S000860077
                         S000893634
                         S000968355
                                               not_calculated 0.939 0492 bacterium EP1.29; EU279889
                         S001154138
                                               not_calculated 0.882 1337 Aeromicrobium kwangyangensis; DS23; EU834249
                        $001134138
$001255820
$001874242
$002973430
$002973444
                                              not_calculated 0.902 0751 uncultured bacterium; C042; FJ561558 not_calculated 0.890 0846 Aeromicrobium sp. CNRA13; GU300713 not_calculated 0.884 0732 uncultured bacterium; A062_BATS; HM032259 not_calculated 0.910 0740 uncultured bacterium; A083_BATS; HM032273 not_calculated 0.912 0741 uncultured bacterium; A171_BATS; HM032307
                         S002973478
                                              not_calculated 0.897 0/31 uncultured bacterium; A171_BA1S; HM03. not_calculated 0.887 0934 uncultured bacterium; gs186; JF420792 not_calculated 0.892 1332 Aeromicrobium sp. Es15; JQ977434 not_calculated 0.897 1306 Aeromicrobium sp. W-NaCl-1; KM083518 not_calculated 0.903 0690 Aeromicrobium sp. VO38-3; KT152266
                         S003054374
                         S003789365
                         S004231673
                         S004492037
                                              not_calculated 0.912 0680 Aeromicrobium sp. VO41-3; KT152267 not_calculated 0.913 1319 Aeromicrobium sp. VO40-3; KM406763
                         S004492038
                         S004531243
Lineage:
Results for Query Sequence: LL8, 642 unique oligos
rootrank Root (20) (match sequences)
      domain Bacteria (20)
         phylum Proteobacteria (20)
            class Gammaproteobacteria (20)
              order Pseudomonadales (20)
                 family Pseudomonadaceae (20)
                   genus Pseudomonas (20)
S000966025 not ca
                                              not_calculated 0.991 1333 Pseudomonas sp. G3DM-12; EU037274
                         S000966026
                                               not_calculated 0.991 1363 Pseudomonas sp. G3DM-13; EU037275
                         S000966040
                                               not_calculated 0.991 1404 Pseudomonas sp. G3DM-86; EU037289
                         S001167883
                                               not_calculated 0.991 0719 uncultured bacterium; P3bac_4; FM179028
                         S001167903
                                               not_calculated 0.991 0732 uncultured bacterium; P3bac_29; FM179048
                         S001167912
                                               not_calculated 0.991 0777 uncultured bacterium; P3bac_38; FM179057
                         S001167913
                                               not_calculated 0.991 0701 uncultured bacterium; P3bac_71; FM179058
                                              not_calculated 0.991 0675 uncultured bacterium; P3bac_73; FM179060 not_calculated 0.991 0716 uncultured bacterium; P3bac_83; FM179066 not_calculated 0.991 0767 uncultured bacterium; P3bac_85; FM179068
                        S001167915
S001167921
S001167923
```

not_calculated 0.991 0765 uncultured bacterium; P3bac_93; FM179070 not_calculated 0.991 0732 uncultured bacterium; P3bac_90; FM179073 not_calculated 0.991 0757 uncultured bacterium; P3bac_96; FM179078

not_calculated 0.991 0740 uncultured bacterium; P3bac_102; FM179082

not calculated 0.991 0732 uncultured bacterium; P3bac 106; FM179086

S001167925 S001167928 S001167933 S001167937

S001167941

```
S001167943
                                        not_calculated 0.991 0777 uncultured bacterium; P3bac_108; FM179088
                     S002957124
                                        not_calculated 1.000 0660 Pseudomonas sp. PE-R2A-2; JN571350
                                        not_calculated 0.992 0892 uncultured bacterium; SAB14; KT900430
                     S004593561
                                        not_calculated 0.992 0892 uncultured bacterium; SAB23; KT900437 not_calculated 0.992 0887 uncultured bacterium; SAB29; KT900441
                     S004593568
                     S004593572
Lineage:
Results for Query Sequence: WG58B, 778 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
            order Pseudomonadales (20)
              family Pseudomonadaceae (20)
                genus Pseudomonas (20)
                     S000428774
                                        not_calculated 0.990 1373 Pseudomonas fragi (T); ATCC 4973; AF094733
                     S000536157
                                        not_calculated 0.990 1421 uncultured bacterium; rRNA080; AY958853
                                         not_calculated 0.990 1406 uncultured bacterium; rRNA148; AY958921
                     S000536225
                                        not_calculated 0.990 1424 uncultured bacterium; rRNA212; AY958985 not_calculated 0.990 1397 Pseudomonas sp. FLM05-3; DQ084461
                     S000536289
S000558123
                                        not_calculated 0.990 1411 uncultured bacterium; FS140-145B-02; DQ513010 not_calculated 0.990 1218 Pseudomonas fragi; RBE1CD-130; EF111136 not_calculated 0.990 1323 uncultured bacterium; nbt210d12; EU534753
                     S000689851
                     S000769444
                     S001024544
                     S001026044
                                        not_calculated 0.990 1324 uncultured bacterium; nbt61f02; EU536253
                     S001026785
                                        not_calculated 0.990 1322 uncultured bacterium; nbt218d10; EU536994
                     S001028927
                                        not_calculated 0.990 1323 uncultured bacterium; nbt98g01; EU539136
                     S001029223
                                        not_calculated 0.990 1324 uncultured bacterium; nbt103a10; EU539432
                     S001029494
                                        not_calculated 0.990 1328 uncultured bacterium; nbt244d09; EU539703
                     S001198163
                                         not_calculated 1.000 0594 Pseudomonas sp. R-35717; W12d; AM886082
                     S001938124
                                        not_calculated 0.995 0584 uncultured bacterium; Cast047; GU450374
                                         not_calculated 0.998 0483 uncultured proteobacterium; Upland_8_4649; JF985351
                     S002880240
                                        not_calculated 1.000 0714 Pseudomonas sp. EECC-101; XY908921 not_calculated 1.000 0564 Pseudomonas sp. EECC-140; JX908943
                     S003747029
                     S003747050
                                        not_calculated 0.994 0671 uncultured bacterium; E51; KJ601425 not_calculated 0.990 0687 Ralstonia solanacearum; Rs4; LN794228
                     S004196705
                     S004459013
Lineage:
Results for Query Sequence: WG58A, 699 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
          class Alphaproteobacteria (20)
            order Caulobacterales (20)
              family Caulobacteraceae (20)
                genus Brevundimonas (20)
                                        not_calculated 0.996 1344 Brevundimonas intermedia; ATCC 15262(T); AJ227786
                     S000113250
                                        not_calculated 0.989 0544 uncultured bacterium; Kazan-MN12BT3-285; AY593393 not_calculated 0.996 1336 Brevundimonas intermedia; MBIC2712, ATCC15262; AB023784 not_calculated 0.996 1347 Brevundimonas sp. CHNTR43; DQ337577 not_calculated 1.000 0443 uncultured alpha proteobacterium; PA-B06; DQ295368 not_calculated 0.996 1141 uncultured Brevundimonas sp.; RBE2CI-150; EF111191
                     S000371153
                     S000382694
                     S000639898
                     S000703344
                     S000764930
                                        not_calculated 0.996 0801 Brevundimonas sp. AKB-2008-J06; AM988993 not_calculated 0.990 0485 Brevundimonas sp. WH011; FJ866676
                     S001292092
                     S001352776
                     S002411029
                                        not_calculated 0.989 0536 Brevundimonas sp. CB1-1; HQ876726
                     S002415342
                                        not_calculated 0.996 0826 uncultured bacterium; d21112b26; FR687151
                     S002415354
                                        not_calculated 0.996 0825 uncultured bacterium; d21112b38; FR687163
                     S002492014
                                         not_calculated 0.989 0563 uncultured Brevundimonas sp.; ABLBc26; JF268938
                     S002492015
                                        not_calculated 0.989 0563 uncultured Brevundimonas sp.; ABLBc27; JF268939 not_calculated 0.996 0958 uncultured bacterium; gs180; JF420786
                     S003054368
                                        not_calculated 0.990 1381 uncultured Brevundimonas sp.; ASC787; JQ358589 not_calculated 0.996 1042 uncultured bacterium; B-2-10STMZ-29; AB948492 not_calculated 0.996 1005 uncultured bacterium; B-2-10Surface-27; AB948516
                     S003513097
                     S004131700
                     S004131724
                                        not_calculated 0.990 0550 Brevundimonas sp. Na-MWM53; LK985487 not_calculated 0.996 1262 Caulobacteraceae bacterium HP4O; KM187473
                     S004224911
                     S004530724
                     S004597548
                                        not_calculated 0.996 1365 uncultured Brevundimonas sp.; DCP24-1; LC093420
Lineage
Results for Query Sequence: LL13, 779 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
          class Betaproteobacteria (20)
            order Neisseriales (20)
              family Chromobacteriaceae (20)
                genus Vogesella (20)
S000389572 no
                                        not_calculated 0.981 1330 bacterium str. 82348; AF227863
not_calculated 0.965 1415 uncultured bacterium; S23_1117; EF573018
                     S000865003
                                        not_calculated 0.978 1338 Vogesella perlucida (T); DS-28; EF626691 not_calculated 0.976 1404 freshwater bacterium LH6-8; EU626190
                     S000892547
                     S001098505
                                        not_calculated 0.965 0801 Vogesella sp. AKB-2008-TE22; AM989121 not_calculated 0.965 1347 Vogesella sp. TPS6; FJ821602
                     S001292220
                     S001351715
                                        not_calculated 0.967 0643 Vogesella sp. GRC-1; JN571330 not_calculated 0.974 0645 uncultured beta proteobacterium; DG-KL-A6; AB635924
                     S002957107
                     S002984458
                     S002984462
                                         not_calculated 0.978 0692 uncultured beta proteobacterium; DG-KL-D10; AB635928
                     S003258422
                                         not_calculated 0.965 1366 Vogesella perlucida; GR-9; HE614874
                     S004041235
                                         not_calculated 0.967 0520 uncultured bacterium; BF_M25; HF947371
                                        not_calculated 0.976 0520 uncultured bacterium; BF_M23; HF947378 not_calculated 0.976 0521 uncultured bacterium; BF_M51; HF947395 not_calculated 0.970 0504 uncultured bacterium; BF_M55; HF947398 not_calculated 0.974 0496 uncultured bacterium; BF_M66; HF947407
                     S004041242
                     S004041258
                     S004041261
                     S004041269
```

not_calculated 0.974 0509 uncultured bacterium; BF_M88; HF947425 not_calculated 0.974 0509 uncultured bacterium; BF_M94; HF947431

not_calculated 0.965 1296 Vogesella perlucida; HME9289; KF911331

S004041287 S004041293 S004081650

```
S004220001
                                         not_calculated 0.965 1360 Vibrio cholerae; N4; uncultured; KJ725364
                      S004598837
                                          not_calculated 0.974 0500 uncultured bacterium; A8; LN794362
Lineage:
Results for Query Sequence: WG27, 601 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
order Alteromonadales (20)
               family Shewanellaceae (20)
                 genus Shewanella (20)
                      S000014684
                                          not_calculated 0.987 1408 Shewanella putrefaciens; LMG 26268 T; X81623
                      S000495369
                                          not_calculated 0.988 0693 Shewanella putrefaciens; KIN80; AY136079
                      S001169977
                                          not_calculated 0.988 1349 Shewanella sp. S03; FJ002584
                      S001874667
                                          not_calculated 0.988 1350 Shewanella putrefaciens; WST; GU329909
                      S001930127
                                          not_calculated 0.988 1372 uncultured bacterium; SedNCB56; FJ849517
                      S001930134
                                          not_calculated 0.988 1372 uncultured bacterium; SedNCB8; FJ849524
                                          not_calculated 0.988 1442 Shewanella sp. W3-18-1; CP000503 not_calculated 0.988 0752 Shewanella sp. U3-18-1; CP000681 not_calculated 0.988 0752 Shewanella sp. 02; JF444787 not_calculated 0.988 1410 uncultured bacterium; 227; FR853476 not_calculated 0.988 1406 uncultured bacterium; 749; FR853638
                      S002287632
S002290338
                      S002447549
                      S002474582
                      S002474744
                                          not_calculated 0.988 1313 Shewanella putrefaciens; NBRC 3908; AB680167 not_calculated 0.988 1376 Shewanella putrefaciens; NBRC 101726; AB681550
                      S003262058
                      S003263441
                      S003720041
                                          not_calculated 0.988 1310 Shewanella putrefaciens; K530; KC607513
                      S003720042
                                          not_calculated 0.988 1316 Shewanella putrefaciens; K313; KC607514
                      S003720046
                                          not_calculated 0.988 1289 Shewanella putrefaciens; Sh4; KC607518
                                          not_calculated 0.988 1296 Shewanella putrefaciens; GIII41; KC607525
                      S003720053
                                         not_calculated 0.988 1326 Shewanella sp. S5-8; KC202266 not_calculated 0.988 1349 Shewanella sp. S5-28; KC202274 not_calculated 0.988 1442 Shewanella putrefaciens CN-32; CP000681
                      S003752424
                      S003752432
                      S004064561
Lineage
Results for Query Sequence: WG26, 645 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Actinobacteria (20)
          class Actinobacteria (20)
            order Mycobacteriales (20)
               family Nocardiaceae (20)
                 genus Rhodococcus (20)
                      S000394065
                                          not_calculated 0.938 1400 Rhodococcus corynebacterioides (T); DSM 20151; AF430066
                      S000499980
                                          not_calculated 0.935 1351 glacial ice bacterium SB12K-2-5; AF479363
                      S000560272
                                          not_calculated 0.938 1387 Rhodococcus corynebacterioides; type strain: DSM 20151; X80615
                      S000892351
S001199107
                                          not_calculated 0.938 1379 Rhodococcus sp. OS-11; EF612310
                                         not_calculated 0.936 1305 Rhodococcus sp. I_GA_W_11_12; FJ267569 not_calculated 0.938 1313 Rhodococcus sro.penstedtii; 2P04AA; EU977670 not_calculated 0.935 1273 uncultured bacterium; ncd297g05c1; HM272575 not_calculated 0.935 1274 uncultured bacterium; ncd550b01c1; HM274298 not_calculated 0.935 1274 uncultured bacterium; ncd532b02c1; HM276972
                      S001133107
S001610073
                      S002077601
                      S002079324
                      S002081998
                                          not_calculated 0.935 1275 uncultured bacterium; ncd561b09c1; HM278919 not_calculated 0.940 1302 Rhodococcus trifolii (T); type strain: T8; FR714843 not_calculated 0.958 1277 uncultured bacterium; ncd1313b02c1; JF096959
                      S002083945
                      S002304573
                      S002616892
                      S002705025
                                          not_calculated 0.958 1278 uncultured bacterium; ncd2152a07c1; JF185092
                                          not_calculated 0.961 1429 Rhodococcus sp. MN4-1; JQ396538 not_calculated 0.947 0652 bacterium nfme09x71p1; JQ657663
                      S003280428
                      S003283700
                      S004082718
                                          not_calculated 0.983 0940 bacterium H02; KF939249
                                          not_calculated 0.946 1276 uncultured bacterium; ncd1074a04c1; KF083087
                      S004155869
                                          not_calculated 0.938 1416 Rhodococcus sp. A2-67; KF441597
                      S004215196
                                         not_calculated 0.936 1343 Rhodococcus corynebacterioides; HN-41; KT003280 not_calculated 0.938 1354 Rhodococcus sp. NA23; LN832018
                      S004491239
                      S004507026
Lineage:
Results for Query Sequence: WG44, 644 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
            order Pseudomonadales (20)
               family Pseudomonadaceae (20)
                 genus Pseudomonas (19)
                      S000401983
                                          not_calculated 0.994 1402 uncultured bacterium; 172ds20; AY212623
                                          not_calculated 1.000 1437 uncultured bacterium; 226ds5; AY212720 not_calculated 1.000 1073 uncultured bacterium; 26ds5; AY212720 not_calculated 1.000 1380 uncultured bacterium; M0509_40; EU104125 not_calculated 1.000 0789 uncultured bacterium; MBR-30_HF_AS43; FM201040
                      S000402033
S000402080
                      S001157789
                      S001262399
                                          not_calculated 1.000 0942 uncultured Pseudomonadaceae bacterium; GC12m-1-52; EU640649 not_calculated 1.000 0729 Pseudomonas sp. T11(2009); FJ765363 not_calculated 1.000 1365 bacterium GC26(2011); HQ179034
                      S001276148
                      S001588598
                      S002409004
                      S002515960
                                          not_calculated 1.000 1414 uncultured bacterium; Dianchi-6; HQ324855
                      S003218143
                                          not_calculated 1.000 1416 uncultured Pseudomonas sp.; 4.6m32; JN679142
                                          not_calculated 1.000 1347 Pseudomonas sp. Z2_S_TSA13; KC213924 not_calculated 1.000 1359 Pseudomonas sp. Z2_S_TSA10; KC213925 not_calculated 0.997 1212 Pseudomonas sp. 4S_B3_9CS2014; KP762233
                      S003752725
                      S003752726
                      S004476839
                                          not_calculated 1.000 0668 Pseudomonas sp. F_31; KR088558 not_calculated 1.000 1321 Pseudomonas sp. HP3H; KM187448 not_calculated 1.000 0897 uncultured bacterium; CB-12; KT900387
                      S004484221
                      S004530699
                      S004593518
                                          not_calculated 1.000 0900 uncultured bacterium; CB-14; KT900388 not_calculated 1.000 0891 uncultured bacterium; CB-31; KT900402
                      S004593519
                      S004593533
                      S004593641
                                          not_calculated 1.000 0900 uncultured bacterium; WB32; KT900510
                  unclassified_Pseudomonadaceae (1)
                      S004511136 not_calculated 1.000 1406 uncultured bacterium; C102; KJ808096
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Lineage: Results for Query Sequence: LL14, 710 unique oligos

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rootrank Root (20) (match sequences)
     domain Bacteria (20)
phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
             order Chromatiales (20)
                family Chromatiaceae (20)
                  genus Rheinheimera (20)
                       S000728332
                                           not_calculated 0.972 1410 Rheinheimera chironomi (T); K19414; DQ298025
                       S001139762
                                           not_calculated 0.930 0615 uncultured bacterium; Fin_CL-050619_OTU-37; EU808367
                       S001400359
                                           not_calculated 0.924 1272 uncultured bacterium; nbw776d01c1; GQ009419
                                           not_calculated 0.948 0950 uncultured bacterium; HLKB33; GU357731
                       S002030456
                                          not_calculated 0.948 0950 uncultured bacterium; HLRB3; GU35//31 not_calculated 0.962 1288 Rheinheimera sp. 09BSZB-9; HM566014 not_calculated 0.982 0622 uncultured bacterium; TFAgeg93; HE659041 not_calculated 0.982 0622 uncultured bacterium; MayA12067; JQ327676 not_calculated 0.969 1311 Rheinheimera sp. 208; JQ012966 uncultured bacterium; SEAC1AC041; KC432474 not_calculated 0.956 1270 uncultured bacterium; SEAD1BE121; KC432488 not_calculated 0.963 0988 uncultured bacterium; SEAD1AA081; KC432507
                      S002230662
S002973046
S003255692
                       S003619283
                       S003695264
                       S003695278
                       S003695297
                                           not_calculated 0.935 1275 uncultured bacterium; SEAD1AH021; KC432553 not_calculated 0.938 0497 uncultured bacterium; MR7; KC515578
                       S003695343
                       S003765723
                                           not_calculated 0.925 1322 uncultured gamma proteobacterium; vj2_a3; JQ867280 not_calculated 0.966 1328 Rheinheimera sp. IW-212; KF556693
                       S003944008
                       S004055490
                                           not_calculated 0.975 1246 Rheinheimera chironomi; Movanagher 3; KF578016 not_calculated 0.934 1333 Rheinheimera sp. THG-LS118; KF999725
                       S004056011
                       S004084215
                                          not_calculated 0.963 1419 uncultured bacterium; FMWB33; KF975537 not_calculated 0.955 1327 Rheinheimera sp. 61DPR4; KP182151 not_calculated 0.932 1318 Rheinheimera sp. MIH20; KP196826
                      S004114091
                       S004534248
                      S004534641
Lineage:
Results for Query Sequence: LL37, 593 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
phylum Proteobacteria (20)
          class Betaproteobacteria (20)
            order Burkholderiales (20)
               family Comamonadaceae (2)
                   unclassified_Comamonadaceae (2)
                       S003229912 not_calculated 0.922 1431 uncultured bacterium; s63; JN868744
                       S003551764
                                           not_calculated 0.922 1407 uncultured bacterium; A8; JQ814729
               family Burkholderiales_incertae_sedis (15)
                  genus Paucibacter (15)
S000994740 not
                                          not_calculated 0.953 1394 Antarctic bacterium YT0017; AB376088
                       S001277206
                                          not_calculated 0.934 0960 uncultured Burkholderiales bacterium; GC12m-2-30; EU641707 not_calculated 0.976 0892 uncultured Burkholderiales bacterium; LW18m-1-63; EU642240
                      S001277739
                                           not_calculated 0.944 1397 uncultured bacterium; ZWB4-10; FI801207 not_calculated 1.000 1269 uncultured bacterium; ncd232f04c1; HM262613
                       S001327468
                       S002067639
                                           not_calculated 0.943 0667 uncultured gamma proteobacterium; CM01189X1A09; HM535516 not_calculated 0.939 0789 uncultured bacterium; TFAgeg90; HE659040
                       S002332952
                       S002973045
                                           not_calculated 0.939 0754 uncultured bacterium; W031c9_8924; JQ375387
                       S003575148
                       S003771739
                                           not_calculated 1.000 0750 uncultured bacterium; bacflank_0447; KC606691
                                           not_calculated 0.922 1383 Paucibacter toxinivorans; 51_1; HG530244 not_calculated 1.000 0762 uncultured bacterium; GS2P_8F_b04; KC711777
                       S003918272
                       S003971361
                                           not_calculated 0.925 0576 uncultured bacterium; 1-8-11-8; KJ613050 not_calculated 0.937 0575 uncultured bacterium; 1-8-11-34; KJ613071 not_calculated 0.927 1273 Paucibacter sp. CH; KM365439
                       S004197669
                       S004197690
                       S004447365
                                           not_calculated 0.936 1307 Paucibacter sp. HP2F; KM187432
                      S004530683
                unclassified Burkholderiales (3)
                                        not_calculated 0.922 0797 uncultured Roseateles sp.; GASP-MB3W2_E10; EF665936
not_calculated 0.922 0752 uncultured bacterium; WIR12Powerb6_8926; JQ375389
                    S000886176
                    S003575150
                    S004215236 not_calculated 0.924 1410 Pelomonas sp. 7A-206; KF441637
Lineage
Results for Query Sequence: LL12, 641 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
             order Pseudomonadales (20)
               family Pseudomonadaceae (20)
                  genus Pseudomonas (20)

$000966025 not_ca

$000966026 not_ca
                                           not_calculated 0.966 1333 Pseudomonas sp. G3DM-12; EU037274
                                           not_calculated 0.966 1363 Pseudomonas sp. G3DM-13; EU037275
                                           not_calculated 0.966 1404 Pseudomonas sp. G3DM-86; EU037289
not_calculated 0.989 0568 uncultured bacterium; N06Jun-53; EU443003
                       S000966040
                       S001002084
                       S001167883
                                           not_calculated 0.966 0719 uncultured bacterium; P3bac_4; FM179028
                       S001167903
                                           not_calculated 0.966 0732 uncultured bacterium; P3bac_29; FM179048
                       S001167912
                                           not_calculated 0.966 0777 uncultured bacterium; P3bac_38; FM179057
                       S001167913
                                           not_calculated 0.966 0701 uncultured bacterium; P3bac_71; FM179058
                      S001167915
S001167921
S001167923
                                           not_calculated 0.966 0675 uncultured bacterium; P3bac_73; FM179060
                                           not_calculated 0.966 0716 uncultured bacterium; P3bac_83; FM179066
                                          not_calculated 0.966 0767 uncultured bacterium; P3bac_85; FM179068 not_calculated 0.966 0765 uncultured bacterium; P3bac_87; FM179070 not_calculated 0.966 0732 uncultured bacterium; P3bac_90; FM179073 not_calculated 0.966 0757 uncultured bacterium; P3bac_96; FM179078 not_calculated 0.975 0660 Pseudomonas sp. PE-R2A-2; JN571350
                      S001167925
S001167925
S001167928
                       S001167933
                       S002957124
                                           not_calculated 0.970 0797 uncultured bacterium; 56-M13F; KJ483151 not_calculated 0.970 0795 uncultured bacterium; 77-M13F; KJ483152
                       S004119785
                       S004119786
                       S004593561
                                           not_calculated 0.967 0892 uncultured bacterium; SAB14; KT900430
                       S004593568
                                           not_calculated 0.967 0892 uncultured bacterium; SAB23; KT900437
                       S004593572
                                           not_calculated 0.967 0887 uncultured bacterium; SAB29; KT900441
```

```
Results for Query Sequence: WG28, 772 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Firmicutes (20)
class Bacilli (20)
           order Bacillales (20)
              family Bacillaceae 1 (20)
                genus Metabacillus (20)
                     S000366697
                                       not_calculated 0.987 1434 Metabacillus indicus (T); type strain: Sd/3; AJ583158
                     S000426321
                                       not_calculated 0.987 1421 Bacillus sp. JL-79; AY745815
                     S000559375
                                       not_calculated 0.987 1339 Bacillus sp. HU28; DQ109578
                    S001095431
                                       not_calculated 0.994 1364 Bacillus sp. B311Ydz-hh; EU070359
                                       not_calculated 0.987 1345 Bacillus sp. HU13.1; FI897767 not_calculated 0.987 1348 Bacillus sp. HU16.1; FI897768 not_calculated 0.987 1344 Bacillus sp. HU19.1; FI897769 not_calculated 0.987 1350 Bacillus sp. HU33.1; FI897772 not_calculated 0.988 1374 Bacillus sp. P10; GU113080
                    S001610269
                    S001610270
                    S001610271
                    S001610274
                    S001745350
                                       not_calculated 0.987 1391 Bacillus sp. M71_S53; FM992830
not_calculated 0.987 1376 Bacillus sp. G3(2010); HQ418487
                    S002222174
                    S002419290
                                       not_calculated 0.987 1379 Bacillus indicus; KU12; JF895483
                    S002913904
                     S002913906
                                       not_calculated 0.987 1375 Bacillus indicus; KU14; JF895485
                     S003315291
                                       not_calculated 0.987 1360 Bacillus sp. DHC04; JQ904715
                    S003614137
                                       not_calculated 0.994 1334 Bacillus sp. G2(2012); JX293287
                    S003745652
                                       not_calculated 0.994 1334 Bacillus sp. M2(2012); JX849024
                                       not_calculated 0.987 1341 Bacillus sp. 135B221Y11; KC815841
                    S004077231
                                      not_calculated 0.987 1366 Bacillus indicus; L15; KF791344
not_calculated 0.987 1362 Bacillus indicus; JB 174; KJ920924
not_calculated 0.990 0974 Bacillus indicus; HQB816; KT758609
                    S004080219
                    S004228529
                    S004498360
Lineage:
Results for Query Sequence: WG49, 780 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
phylum Proteobacteria (20)
         class Gammaproteobacteria (20)
           order Pseudomonadales (20)
              family Pseudomonadaceae (20)
                genus Pseudomonas (20)
                     S000382845
                                      not_calculated 0.970 0396 Pseudomonas sp. MIS38; AB028923
                     S001612356
                                       not_calculated 0.966 0500 Pseudomonas sp. Air371; GQ484952
                                       not_calculated 0.963 0429 Pseudomonas putida; 2-14 (1); FJ639237 not_calculated 0.964 1414 uncultured bacterium; X1-3; JN013931 not_calculated 0.958 1397 Pseudomonas sp. BCRC 80328; JQ361087
                    S001872976
                    S002884375
                    S003259754
                                       not_calculated 0.956 0545 | Pseudomonas sp. DCRC 00320, 30361567 | not_calculated 0.956 0545 | Pseudomonas sp. C10-2(2015); KM819177 | not_calculated 0.978 0544 | Pseudomonas sp. C10-5; KM819180
                    S004451822
                    S004451825
                                       not_calculated 1.000 0543 Pseudomonas sp. C11-6; KM819190 not_calculated 1.000 0543 Pseudomonas sp. C12-6; KM819198
                    S004451835
                    S004451843
                     S004451848
                                       not_calculated 1.000 0543 Pseudomonas sp. C1-5; KM819203
                    S004451896
                                       not_calculated 1.000 0543 Pseudomonas sp. C7-5; KM819251
                     S004451902
                                       not_calculated 0.991 0544 Pseudomonas sp. C8-3; KM819257
                    S004451917
                                       not_calculated 0.978 0544 Pseudomonas sp. N10-2; KM819272
                    S004451943
                                       not_calculated 1.000 0543 Pseudomonas sp. N1-4; KM819298
                                       not_calculated 1.000 0543 Pseudomonas sp. N4-6; KM819324
                    S004451969
                    S004451972
                                       not_calculated 1.000 0543 Pseudomonas sp. N5-1; KM819327
                                       not_calculated 1.000 0543 Pseudomonas sp. N5-3; KM819329 not_calculated 1.000 0543 Pseudomonas sp. N7-8; KM819349
                    $004451974
                    S004451994
                                       not_calculated 0.978 0544 Pseudomonas sp. N8-1; KM819350 not_calculated 0.955 1323 Pseudomonas sp. PDD-59b-37; KR922166
                    S004451995
                    S004490876
Lineage
Results for Query Sequence: LL18, 695 unique oligos
     domain Bacteria (20)
       phylum Bacteroidetes (20)
         class Flavobacteriia (20)
           order Flavobacteriales (20)
              family Flavobacteriaceae (20)
                genus Flavobacterium (20)
                    S000623924
                                      not_calculated 0.934 1420 Flavobacterium sp. WB 4.3-34; AM177631
```

```
rootrank Root (20) (match sequences)
                                                 not_calculated 0.934 1420 Flavobacterium sp. wB 4.3-34; AM17/631 not_calculated 0.934 0487 uncultured bacterium; MA61_2003T1c_80; EF377797 not_calculated 0.924 0515 uncultured bacterium; MA61_2003T1c_72; EF377805 not_calculated 0.925 0521 uncultured bacterium; MA61_2003T1c_37; EF377839 not_calculated 0.946 0502 uncultured bacterium; MA61_2003T1c_35; EF377841 not_calculated 0.925 0521 uncultured bacterium; MA61_2003T1c_10; EF377847 not_calculated 0.925 0518 uncultured bacterium; MA61_2003T1c_10; EF377864
                          S000808137
                          S000808145
                          S000808179
                          S000808181
                          S000808187
                          S000808204
                                                  not_calculated 0.925 0519 uncultured bacterium; MA61_2003T1c_4; EF377870 not_calculated 0.928 0499 uncultured bacterium; MA61_2003T1c; EF377874
                          S000808210
                          S000808214
                          S000905742
                                                  not_calculated 0.938 0650 uncultured Flavobacteriales bacterium; MS003A1_H03; EF695527
                          S000905760
                                                  not_calculated 0.939 0659 uncultured Flavobacteriales bacterium; MS004A1_B01; EF695545
                          S000905881
                                                  not_calculated 0.933 0594 uncultured Flavobacteriales bacterium; MS008A1_E11; EF695666
                                                  not_calculated 0.925 0630 uncultured Flavobacteriales bacterium; MS018A1_A07; EF695985
                          S000906200
                          S000911359
                                                  not_calculated 0.944 0426 uncultured Flavobacteriales bacterium; MS028A1_A07; EF701144
                                                 not_calculated 0.924 0502 uncultured Flavobacteriales bacterium; MS028A1_R07; EF701182 not_calculated 0.956 0499 uncultured Flavobacteriales bacterium; MS028A1_G04; EF701188
                          S000911397
                          S000911403
                                                  not_calculated 0.925 0521 uncultured Bacteroidetes bacterium; MA161D0c; FJ532837 not_calculated 0.926 0528 uncultured Bacteroidetes bacterium; MA161D02; FJ532850
                          S001253276
                          S001253289
                                                 not_calculated 0.925 0518 uncultured Bacteroidetes bacterium; MA161A07; FJ532856 not_calculated 0.925 0523 uncultured Bacteroidetes bacterium; MA161F08; FJ532861
                          S001253295
                          S001253300
```

Lineage

Results for Query Sequence: WG22, 755 unique oligos

```
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Bacteroidetes (20)
          class Flavobacteriia (20)
            family Flavobacteriales (20)
family Flavobacteriaceae (20)
genus Flavobacterium (20)
S000722064 not_calcu
                                          not_calculated 0.954 1330 Flavobacterium sp. YO15; DQ778311
                                          not_calculated 0.961 0487 uncultured bacterium; MA61_2003T1c_80; EF377797 not_calculated 0.947 0491 uncultured bacterium; MA61_2003T1c_12; EF377862
                       S000808137
                      S000808202
                       S000911403
                                          not_calculated 0.960 0499 uncultured Flavobacteriales bacterium; MS028A1_G04; EF701188
                       S001292015
                                          not_calculated 0.952 0858 Flavobacterium sp. AKB-2008-JO31; AM988916
                      S001292018
                                          not_calculated 0.952 0858 Flavobacterium sp. AKB-2008-JO41; AM988919
                      S001326249
                                           not_calculated 0.954 0718 uncultured bacterium; MA00094F03; FJ772295
                                          not_calculated 0.954 0719 uncultured bacterium; MA00070G12; FJ772393 not_calculated 0.952 0815 Flavobacterium sp. B183; FR696343
                      S001326347
                      S002223149
S002223161
                                          not_calculated 0.962 0782 Flavobacterium sp. B257; FR696355
not_calculated 0.950 1311 Flavobacterium sp. T14L.07.B.CHS.SRW.W.Kidney.D; JX287797
not_calculated 0.947 0681 Flavobacterium sp. T13.07.B.CHS.SRW.W.Kidney.D; JX287543
not_calculated 0.962 0679 Flavobacterium sp. T14.07.B.CHS.SRW.W.Kidney.D; JX287544
not_calculated 0.962 0679 Flavobacterium sp. T16.07.C.CHS.SRW.W.Kidney.D; JX287546
                      S003919245
                      S004005996
                      S004005997
                      S004005999
                                          not_calculated 0.954 0676 Flavobacterium sp. T123.10.P.LAT.SE.H.Kidney.N; JX287604 not_calculated 0.954 0676 Flavobacterium sp. T124.10.P.LAT.SE.H.Kidney.N; JX287605
                      S004006057
                      S004006058
                       S004006147
                                          not_calculated 0.962 0679 Flavobacterium sp. S23.05.B.CHS.LM.W.Kidney.D; JX287694
                      S004006151
                                          not_calculated 0.961 0673 Flavobacterium sp. S22.05.B.CHS.LM.W.Kidney.N; JX287698
                      S004006162
                                          not_calculated 0.961 0673 Flavobacterium sp. S27.05.B.CHS.MI.LM.W.Kidney.N; JX287709
                                          not_calculated 0.948 1319 Flavobacterium spartansii (T); T16F.07.C.CHS.SRW.W.Kidney.D; JX287799
                      S004006240
Lineage:
Results for Query Sequence: WG481, 781 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Bacteroidetes (20)
          class Flavobacteriia (20)
             order Flavobacteriales (20)
family Flavobacteriaceae (20)
                 genus Flavobacterium (20)
                       S000808136
                                          not_calculated 0.965 0521 uncultured bacterium; MA61_2003T1c_81; EF377796
                                          not_calculated 0.946 0481 uncultured bacterium; MA61_2003T1c_74; EF377803 not_calculated 0.950 0515 uncultured bacterium; MA61_2003T1c_72; EF377805
                       S000808143
                      S000808145
                      S000808148
                                          not_calculated 0.954 0568 uncultured bacterium; MA61_2003T1c_69; EF377808
                      S000808150
                                           not_calculated 0.949 0513 uncultured bacterium; MA61_2003T1c_67; EF377810
                                          not_calculated 0.949 0499 uncultured bacterium; MA61_2003T1c_54; EF377822 not_calculated 0.949 0506 uncultured bacterium; MA61_2003T1c_54; EF377823 not_calculated 0.949 0501 uncultured bacterium; MA61_2003T1c_52; EF377824 not_calculated 0.946 0502 uncultured bacterium; MA61_2003T1c_52; EF377827 not_calculated 0.950 0515 uncultured bacterium; MA61_2003T1c_49; EF377827 not_calculated 0.950 0515 uncultured bacterium; MA61_2003T1c_44; EF377827 not_calculated 0.950 0515 uncultured bacterium; MA61_2003T1c_44; EF377827
                      S000808162
                      S000808163
                      $000808164
                      S000808167
                      S000808172
                                          not_calculated 0.950 0521 uncultured bacterium; MA61_2003T1c_37; E5377839 not_calculated 0.950 0521 uncultured bacterium; MA61_2003T1c_37; E5377839 not_calculated 0.950 0521 uncultured bacterium; MA61_2003T1c_28; EF377847
                      S000808179
                      S000808187
                                          not_calculated 0.949 0511 uncultured bacterium; MA61_2003T1c_27; EF377848 not_calculated 0.949 0514 uncultured bacterium; MA61_2003T1c_25; EF377850
                       S000808188
                      S000808190
                                          not_calculated 0.948 0503 uncultured bacterium; MA61_2003T1c_14; EF377860 not_calculated 0.950 0518 uncultured bacterium; MA61_2003T1c_10; EF377864
                       S000808200
                      S000808204
                      S000808210
                                           not_calculated 0.950 0519 uncultured bacterium; MA61_2003T1c_4; EF377870
                                          not_calculated 0.951 1398 Flavobacterium johnsoniae; A3; EU860081
                      S001155309
                                          not_calculated 0.946 0501 uncultured Bacteroidetes bacterium; MA00164E10; FJ533081 not_calculated 0.955 0244 uncultured bacterium; 11-2_341f; FJ652075
                      S001253520
                      S001318506
Lineage:
Results for Query Sequence: WG14, 581 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
             order Aeromonadales (20)
               family Aeromonadaceae (20)
                 genus Aeromonas (20)
                      S000014207
                                          not_calculated 0.983 1374 Aeromonas sobria; ATCC 43979T; X74683
                      S000030055
                                          not_calculated 0.987 0552 Aeromonas sobria; S2M10; AF472502
                                          not_calculated 0.987 0552 Aeromonas sobria; S1J6; AF472500
                      S000030064
                      S000030066
                                          not_calculated 0.987 0552 Aeromonas veronii; S3M31; AF472503
                                          not_calculated 0.987 0552 Aeromonas votorin, 53:131, 147:2501 not_calculated 0.983 1425 Vibrio sp. V606; DQ146986 not_calculated 0.983 1388 Aeromonas sobria; 2r; EU916710 not_calculated 0.983 1333 Aeromonas sobria; JCM 2139; AB472942 not_calculated 0.983 1335 Aeromonas sobria; JCM 2141; AB472942
                      S000030068
                      S000634026
                      S001156443
S001548460
                      S001548462
                      S001548470
                                          not_calculated 0.983 1335 Aeromonas sobria; JCM 2137; AB472952
                       S001589168
                                          not_calculated 0.983 1329 bacterium C1(2009); GQ398333
                       S002155982
                                          not_calculated 0.983 1417 Aeromonas sobria; 2CCH202; GU187060
                       S002179130
                                          not_calculated 0.983 1386 uncultured bacterium; SINO519; HM129731
                      S002354895
                                           not_calculated 0.983 1417 Aeromonas sobria; type strain: NCIMB 12065; X60412
                      S002956892
                                           not_calculated 0.985 1366 Aeromonas sobria; YZQ-GL; JN555613
                      S003302942
                                           not_calculated 0.983 1370 Aeromonas sobria; QY1; JX164206
                                          not_calculated 0.983 1364 Aeromonas sobria; M-T-TSA 15; JQ795756
                      S003313985
                                          not_calculated 0.983 1364 Aeromonas sobria; M-T-TSA 98; JQ795757 not_calculated 0.983 1424 uncultured bacterium; C1; JX262557
                      S003313986
                      S003470548
                      S004045511
                                          not_calculated 0.988 0877 Aeromonas sobria; P-Q-1; KC991311
Lineage
Results for Query Sequence: WG16, 683 unique oligos
rootrank Root (20) (match sequences)
```

domain Bacteria (20) phylum Proteobacteria (20)

```
class Alphaproteobacteria (20)
            order Sphingomonadales (20)
              family Sphingomonadaceae (20)
                genus Sphingobium (20)
                                       n (20)
not_calculated 0.993 1333 Sphingobium yanoikuyae; KF706; AB109749
not_calculated 0.993 1341 Sphingomonas sp.; B1; X94099
not_calculated 0.993 1345 Sphingobium yanoikuyae; PAH-degrading; X85023
not_calculated 0.993 1227 Sphingobium yanoikuyae; DD109; AY574367
not_calculated 0.993 1316 Sphingobium yanoikuyae; B1; U37524
not_calculated 0.993 1336 Sphingobium yanoikuyae; B1; U37524
not_calculated 0.993 1258 estrogen degrading bacterium KC14; DO066444
                     S000127496
                     S000130603
                     S000130607
                     S000379067
                     S000391716
                     S000437529
                      S000538425
                                        not_calculated 0.993 1258 estrogen-degrading bacterium KC14; DQ066444
                      S000568813
                                        not_calculated 0.993 1001 Sphingomonas sp. 14DN-61; AB200352
                      S000605852
                                        not_calculated 0.993 1331 Sphingomonas sp. PF-D; DQ202285
                     S000751080
                                         not_calculated 0.993 1356 Sphingomonas sp. H-1; EF012277
                     S000752101
S000905547
                                         not_calculated 0.993 1356 Sphingomonas sp. ZnH-1; EF061133
                                         not_calculated 0.993 1249 uncultured delta proteobacterium; COREB41; EF562226
                                        not_calculated 1.000 0568 uncultured alpha proteobacterium; MS072A1_H04; EF697428 not_calculated 0.993 1174 uncultured Sphingomonas sp.; 1P-1-C04; EU704732 not_calculated 1.000 0414 uncultured bacterium; DGGE gel band EU77; FJ217234 not_calculated 1.000 0414 uncultured bacterium; DGGE gel band EU102; FJ217243 not_calculated 1.000 0414 uncultured bacterium; DGGE gel band EU114; FJ217247 set_calculated 1.000 0414 uncultured bacterium; DGGE gel band EU114; FJ217247
                     S000907643
                     S001034313
                     S001183889
                     S001183898
                     S001183902
                     S001183910
                                        not_calculated 1.000 0414 uncultured bacterium; DGGE gel band EU137; FJ217255
                                        not_calculated 0.993 1260 groundwater planktonic bacterium Y2; FJ204471 not_calculated 1.000 0596 Sphingobium sp. FB4; GU223137
                     S001188774
                      S001873580
Lineage:
Results for Query Sequence: LLX3, 663 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Actinobacteria (20)
          class Actinobacteria (20)
            order Mycobacteriales (20)
              family Nocardiaceae (20)
genus Rhodococcus (20)
                                        not_calculated 0.991 1364 Rhodococcus sp. V4.ME.27; V4.ME.27 = MM_2341; AJ244659 not_calculated 0.991 1408 bacterium CAGY6; AF538745
                     S000098216
                     S000432130
                                        not_calculated 0.955 0944 Rhodococcus sp. RG-14; AY561580
                     S000503459
                     S001154143
                                        not_calculated 0.986 1354 Rhodococcus cercidiphylli; DS30; EU834254
                      S001419310
                                        not_calculated 1.000 0532 uncultured bacterium; C2_E2M13f; AB482566
                     S001487046
                                        not_calculated 0.980 1275 uncultured bacterium; nbw08g02c1; GQ060982
                     S001537228
                                        not_calculated 0.961 1271 uncultured bacterium; nbw621f07c1; GQ111164
                     S001550357
                                         not_calculated 0.950 1412 Rhodococcus sp. HLSBA34; FJ999587
                                        not_calculated 0.950 1318 Rhodococcus sp. HLSBA15; FJ999588 not_calculated 0.950 1344 Rhodococcus fascians; HLSBA48; FJ999590 not_calculated 0.962 1275 uncultured bacterium; ncd529e11c1; HM276843 not_calculated 0.989 0732 Rhodococcus sp. sm460-14; HM537186 not_calculated 0.989 0732 Rhodococcus sp. Desert14; HQ711535 pot_calculated 0.981 1312 Rhodococcus sp. 28 IHJM: IF727669
                     S001550358
S001550360
                     S002081869
                     S002230512
                     S002445738
                                        not_calculated 0.991 1312 Rhodococcus sp. Desetta, 114, 11722669
not_calculated 0.968 1273 uncultured bacterium; ncd1556b09c1; JF135221
                     S002449179
                     S002655154
                      S002954793
                                        not_calculated 0.989 1311 Rhodococcus sp. SS04-04; JN120916
                     S003315049
                                        not_calculated 0.991 1322 Rhodococcus sp. Pp2; JQ861537
                                        not_calculated 0.986 0682 Rhodococcus sp. 111A-02587; KC550139 not_calculated 0.989 0775 Rhodococcus sp. JSM 2215126; KJ685842
                      S004008625
                     S004219015
                                        not_calculated 1.000 0627 Rhodococcus sp. I13A-01690; KR184637
                     S004486051
Lineage
Results for Query Sequence: Methanosarcina, 1292 unique oligos
rootrank Root (20) (match sequences)
     domain Archaea (20)
       phylum Euryarchaeota (20)
          class Methanomicrobia (20)
            order Methanosarcinales (20)
               family Methanosarcinaceae (20)
                genus Methanosarcina (20)
                     S000436500
                                        not_calculated 1.000 1292 Methanosarcina acetivorans (T); DSM 2834; M59137
                     S000642553
                                        not_calculated 0.990 1343 Methanosarcina acetivorans C2A; AE010299
                      S000642555
                                        not_calculated 0.995 1345 Methanosarcina acetivorans C2A; AE010299
                      S000642559
                                        not_calculated 0.995 1345 Methanosarcina acetivorans C2A; AE010299
                     S001272122
                                        not_calculated 0.956 0681 unidentified archaeon LMA134; U87515
                     S001390345
                                         not_calculated 0.951 0384 Methanosarcina sp. enrichment culture clone MSC-3; FJ984744
                     S001449131
                                        not_calculated 0.950 0402 uncultured methanogenic archaeon; SMPFLSS58m(2)_7; FJ982731
                     S001571279
S002915301
                                        not_calculated 0.957 0532 uncultured archaeon; VE07-04-ARC; GQ340375 not_calculated 0.989 0977 Methanosarcina acetivorans; GRAU-9; JN020914
                                        not_calculated 0.958 0527 uncultured archaeon; A0610R001_E17; AB659191 not_calculated 0.953 0532 uncultured archaeon; A1001R001_E12; AB654194
                     S002935479
                     S002937750
                                        not_calculated 0.946 0496 uncultured Methanosarcina sp.; MFC-3barc; HM043286 not_calculated 0.961 0639 uncultured archaeon; C6; JN596403
                     S002973522
                     S003208650
                      S003764635
                                        not_calculated 0.955 0534 uncultured archaeon; Gr13_H01; JX865737
                      S004071290
                                        not_calculated 0.990 1384 Methanosarcina acetivorans C2A; AE010299
                      S004071291
                                         not_calculated 0.995 1386 Methanosarcina acetivorans C2A; AE010299
                     S004071292
                                         not_calculated 0.995 1386 Methanosarcina acetivorans C2A; AE010299
                     S004207966
                                        not_calculated 0.947 0495 uncultured archaeon; AEtH4P12C01; LK026070
                     S004343079
                                        not_calculated 0.971 0729 uncultured archaeon; A-OTU9-XH9; KM221190
                     S004599141
                                        not_calculated 0.947 0525 uncultured Methanosarcinales archaeon; JN413085; LN796110
Lineage
Results for Query Sequence: WG74, 678 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Bacteroidetes (20)
          class Flavobacterija (20)
            order Flavobacteriales (20)
              family Flavobacteriaceae (20)
```

```
genus Flavobacterium (20)
                       S000623910
                                           not_calculated 0.991 1421 Flavobacterium sp. WB 3.3.27; AM177617
                       S000623921
                                            not_calculated 0.982 1423 Flavobacterium sp. WB 4.3-15; AM177628
                                           not_calculated 0.973 1211 Bacteroidetes bacterium RBE2CD-132; EF111262
not_calculated 0.953 0426 uncultured Flavobacteriales bacterium; MS028A1_A07; EF701144
not_calculated 0.950 0499 uncultured Flavobacteriales bacterium; MS028A1_G04; EF701188
not_calculated 0.958 0497 uncultured Bacteroidetes bacterium; A19Y015RM; FJ568606
                       S000769495
                       S000911359
                       S000911403
                       S001243446
                       S001258861
                                            not_calculated 0.973 1290 uncultured bacterium; ncd267g02c1; HM270560 not_calculated 0.991 1403 uncultured bacterium; Dianchi-26; HQ324872
                       S002075586
                       S002515977
                                            not_calculated 0.969 1285 Flavobacterium sp. T6L.06.LWF.W.Swimbladder.D; JX287791 not_calculated 0.969 0682 Flavobacterium sp. T6.06.LWF.W.Swimbladder.D; JX287538
                       S003919239
                       S004005991
                       S004006088
                                            not_calculated 0.991 0679 Flavobacterium sp. S126.08.BKT.W.Gill.N; JX287635
                                            not_calculated 0.989 0645 Flavobacterium sp. S149.08.SCU.W.Gill.N; JX287640
                       S004006093
                                           not_calculated 0.99 10645 Flavobacterium sp. $199.08.BNT.W.Gill.N; JX287640 not_calculated 0.991 0679 Flavobacterium sp. $190.08.BNT.W.Gill.N; JX287648 not_calculated 0.991 0679 Flavobacterium sp. $161.08.SCU.W.Gill.N; JX287652 not_calculated 0.989 0645 Flavobacterium sp. $130.08.BNT.W.Gill.N; JX287652 not_calculated 0.991 0679 Flavobacterium sp. $163.08.SCU.W.Gill.N; JX287656 not_calculated 0.957 0679 Flavobacterium sp. $166.08.SCU.W.Gill.N; JX287684 not_calculated 0.957 0679 Flavobacterium sp. $43.04.P.COS.MI.H.Brain.D.M; JX287686 not_calculated 0.984 1338 Flavobacterium sp. FLX-4; KJ660953
                       S004006094
                       S004006101
                       S004006105
                       S004006110
                       S004006137
                       S004006139
                       S004218528
Lineage:
Results for Query Sequence: LL41A, 769 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Proteobacteria (20)
           class Alphaproteobacteria (20)
             order Caulobacterales (20)
                family Caulobacteraceae (20)
                  genus Brevundimonas (20)
                                           not_calculated 1.000 1321 Brevundimonas vesicularis; ATCC 11426 (T); AJ007801 not_calculated 1.000 1219 alpha proteobacterium VUN10077; AF137356 not_calculated 1.000 1344 Brevundimonas vesicularis; LMG 2350 (T); AJ227780
                       S000016026
                       S000017941
                       S000112396
                                           not_calculated 1.000 1344 Brevundimonas vesicularis; LMG 2227781 not_calculated 1.000 1344 Brevundimonas sp. V4.BO.07; AJ227800
                       S000112771
                       S000112773
                                            not_calculated 1.000 1373 thin bent rods; AJ001345
                       S000128774
                       S000254305
                                            not_calculated 1.000 0538 Brevundimonas vesicularis; ICS11202; AY456200
                       S000271297
                                            not_calculated 1.000 0593 Brevundimonas vesicularis; 2.5; AJ626987
                                            not_calculated 1.000 0598 Brevundimonas vesicularis; 5.6; AJ627402
                       S000274136
                       S000334613
                                            not_calculated 1.000 1353 Brevundimonas nasdae (T); GTC1043; AB071954
                       S000369427
                                            not_calculated 1.000 0931 uncultured bacterium; FB34-10; AY527799
                                            not_calculated 1.000 0544 uncultured bacterium; Kazan-MN12BT3-285; AY593393 not_calculated 1.000 1315 alpha proteobacterium MBIC3965; 94-115; AB019037
                       S000371153
                       S000382443
S000399535
                                           not_calculated 1.000 1328 Brevundimonas vesicularis; 28; AY169433
not_calculated 1.000 1344 Brevundimonas sp. LMG 9567t1; AJ244647
not_calculated 1.000 1345 Brevundimonas sp. V4.BO.05; V4.BO.05 = MM_2802; AJ244704
not_calculated 1.000 1195 estrogen-degrading bacterium KC12; DQ066442
not_calculated 1.000 0807 bacterium PSB-1-28; AY822564
                       S000470963
                       S000470967
                       S000538423
                       S000575369
                                            not_calculated 1.000 1193 Brevundimonas vesicularis; O283; DQ111026
                       S000584111
                                            not_calculated 1.000 0639 Brevundimonas sp. 52AD23; AB242678
Lineage
Results for Query Sequence: LL41B, 806 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Proteobacteria (20)
           class Gammaproteobacteria (20)
             order Pseudomonadales (20)
                family Pseudomonadaceae (20)
                  genus Pseudomonas (20)
S000878828 not ca
                                           not_calculated 0.973 1418 uncultured bacterium; Hua-w-88; EF632861
                                           not_calculated 0.999 0568 uncultured bacterium; N06Jun-53; EU443003 not_calculated 0.992 0733 uncultured bacterium; Fin_CL-050626_OTU-44; EU808374
                       S001002084
                       S001139769
                       S001163839
                                            not_calculated 0.973 0633 uncultured bacterium; 071020-ONK-PVA3-3; FJ037675
                       S001163842
                                            not_calculated 0.980 0615 uncultured bacterium; 071020-ONK-PVA3-12; FJ037678
                       S001167903
                                            not_calculated 0.970 0732 uncultured bacterium; P3bac_29; FM179048
                       S001167921
                                            not_calculated 0.971 0716 uncultured bacterium; P3bac_83; FM179066
                       S001167928
                                            not_calculated 0.978 0732 uncultured bacterium; P3bac_90; FM179073
                      S001167928
S001167941
S001167958
S001167962
S002957124
                                            not_calculated 0.978 0732 uncultured bacterium; P3bac_106; FM179086
                                            not_calculated 0.978 0726 uncultured bacterium; P3bac_162; FM179103
                                           not_calculated 0.978 0720 uncultured bacterium; P3bac_162, PM177107 not_calculated 0.970 0702 uncultured bacterium; P3bac_166; FM179107 not_calculated 1.000 0660 Pseudomonas sp. PE-R2A-2; JN571350 not_calculated 0.981 1316 Pseudomonas sp. HKF-3; AB633201 not_calculated 0.970 0759 uncultured bacterium; Cyp1_50; JQ766566 not_calculated 0.970 0750 uncultured bacterium; Cyp1_58; JQ766573
                       S003261491
                       S003548454
                       S003548461
                       S003548464
                                            not_calculated 0.970 0759 uncultured bacterium; Cyp1_61; JQ766576
                       S003548471
                                            not_calculated 0.970 0759 uncultured bacterium; Cyp1_68; JQ766583
                       S003548474
                                            not_calculated 0.970 0759 uncultured bacterium; Cyp1_71; JQ766586
                       S004593579
                                            not_calculated 0.974 0893 uncultured bacterium; SAB37; KT900448
                                            not_calculated 0.974 0895 uncultured bacterium; WB14; KT900494
                       S004593625
Lineage:
Results for Query Sequence: LL43F, 415 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
        phylum Actinobacteria (20)
           class Actinobacteria (20)
             order Mycobacteriales (20)
                family Gordoniaceae (20)
                  genus Williamsia (20)
                       S000019126 not_calculated 0.952 1375 Williamsia murale; MA140-96T; Y17384
                       S000576763 not calculated 0.952 1370 Williamsia marianensis (T); MT8; AY894336
```

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S000577395
                                                not_calculated 0.952 1355 Williamsia muralis; 500/04; AY986734
                                                not_calculated 0.952 1385 Williamsia sp. KTR4; DQ068382 not_calculated 0.952 1312 Williamsia sp. SY3; EU073114
                         S000624861
                         S001152798
                                               not_calculated 0.952 1265 uncultured bacterium; nbw819g10c1; GQ015991 not_calculated 0.952 1268 uncultured bacterium; nbw8819g10c1; GQ064200 not_calculated 0.952 1267 uncultured bacterium; nbw728a08c1; GQ066710 not_calculated 0.952 1268 uncultured bacterium; nbw728d04c1; GQ066739 not_calculated 0.952 1267 uncultured bacterium; nbw731g01c1; GQ067024
                         S001406931
                         S001490264
                         S001492774
                         S001492803
                         S001493088
                         S001493490
                                                not_calculated 0.952 1266 uncultured bacterium; nbw1128f12c1; GQ067426
                         S001523154
                                                not_calculated 0.952 1268 uncultured bacterium; nbw393g11c1; GQ097090
                         S001523172
                                                not_calculated 0.952 1267 uncultured bacterium; nbw394a09c1; GQ097108
                         S002134488
                                                not_calculated 0.952 1267 uncultured bacterium; ncd966f06c1; HM329462
                         S002136570
                                                not_calculated 0.952 1267 uncultured bacterium; ncd967f11c1; HM331544
                                                not_calculated 0.952 1268 uncultured bacterium; ncd1114b01c1; HM338053
                         S002143079
                                                not_calculated 0.952 1390 Williamsia sp. 0713C5-1; HM222683 not_calculated 0.952 1267 uncultured bacterium; ncd1317d05c1; JF108180
                         S002228194
                         S002628113
                                               not_calculated 0.952 1263 uncultured bacterium; ncd1703e11c1; JF149440 not_calculated 0.954 1269 uncultured bacterium; ncm20b10c1; KF086397
                         S002669373
                         S004159179
Lineage:
Results for Query Sequence: WG56, 669 unique oligos
rootrank Root (20) (match sequences)
      domain Bacteria (20)
        phylum Proteobacteria (20)
            class Alphaproteobacteria (20)
              order Sphingomonadales (20)
                 family Sphingomonadaceae (20)
                   genus Sphingomonas (20)
                         S000022290
                                              not_calculated 0.994 1364 Sphingomonas pituitosa (T); EDIV; AJ243751 not_calculated 0.994 1320 Sphingomonas sp. ATCC 53159; AF503283 not_calculated 0.994 1338 Sphingomonas sp. ATCC 21423; AF503277 not_calculated 0.994 1353 Sphingomonas elodea; ATCC 31461; AF503278 not_calculated 0.994 1351 Sphingomonas sp. ATCC 31554; AF503279 not_calculated 0.994 1336 Sphingomonas sp. ATCC 31564; AF503281 not_calculated 0.994 1341 Sphingomonas sp. ATCC 31653; AF503281 not_calculated 0.994 1373 Sphingomonas sp. BR 12187; DQ340850 not_calculated 0.994 1372 Sphingomonas sp. BR 12188; DQ340851 not_calculated 0.994 1377 Sphingomonas sp. BR 12188; DQ340851 not_calculated 0.994 1377 Sphingomonas sp. BR 12189; DQ340850
                                                not_calculated 0.994 1364 Sphingomonas pituitosa (T); EDIV; AJ243751
                         S000322922
S000395523
                         S000395524
                         S000395525
                         S000395527
                         S000395528
                         S000627321
                         S000640151
                         S000640152
                          S000640153
                                                not_calculated 0.994 1377
                                                                                       Sphingomonas sp. BR12189; DQ340852
                         S000640154
                                                not_calculated 0.994 1351 Sphingomonas sp. BR12190; DQ340853
                         S000640157
                                                not_calculated 0.994 1373 Sphingomonas sp. BR12193; DQ340856
                         S000640158
                                                not_calculated 0.994 1367 Sphingomonas sp. BR12194; DQ340857
                                               not_calculated 0.996 1363 Sphingomonas sp. BR12199; DQ340862 not_calculated 1.000 0474 Sphingomonas sp. 47; EF016512 not_calculated 0.995 0634 Sphingomonas sp. SNRW7-1; AB299762 not_calculated 1.000 0635 Sphingomonas sp. FO211; GQ849293 not_calculated 1.000 0534 uncultured bacterium; AETSB2_E03; AB718129
                         S000640163
                         S000751149
                         S000841780
                         S001744415
                         S003556467
                         S003784924
                                               not_calculated 0.999 0972 Sphingomonas sp. L6-3; AB819407
Lineage:
Results for Query Sequence: WG34B, 647 unique oligos
rootrank Root (20) (match sequences)
      domain Bacteria (20)
         phylum Proteobacteria (20)
            class Gammaproteobacteria (20)
              order Pseudomonadales (20)
                 family Pseudomonadaceae (20)
                   genus Pseudomonas (20)
                                               not_calculated 1.000 0473 bacterium F2; EF016529
                         S000751166
S000805644
                                              not_calculated 1.000 0473 bacterium F2; EF016529
not_calculated 1.000 0932 Pseudomonas fluorescens; D18; EF204232
not_calculated 1.000 1356 Pseudomonas jessenii; FB18; AM933510
not_calculated 1.000 1357 Pseudomonas sp. S01; FJ002582
not_calculated 1.000 1357 Pseudomonas sp. OTUC1; FJ210842
not_calculated 1.000 1285 uncultured Pseudomonas sp.; ARN35; AM936588
not_calculated 1.000 1300 uncultured Pseudomonas sp.; OTUM7; EU826658
not_calculated 1.000 1408 Pseudomonas fluorescens; LMG 14577; GU198122
                         S001152156
                         S001169975
                         S001188882
                         S001267980
                         S001553047
                         S001794880
                         S002166950
                                                not_calculated 1.000 0579 Pseudomonas sp. SA014; GU989373
                         S002166988
                                                not_calculated 1.000 0653 Pseudomonas sp. SA062; GU989421
                         S002912398
                                                not_calculated 1.000 0696 Pseudomonas sp. S1IP15; JF743675
                         S002912408
                                                not_calculated 1.000 0696 Pseudomonas sp. S1ID9; JF743685
                         S002912410
                                                not_calculated 1.000 0696 Pseudomonas sp. S1ID14; JF743687
                         S003277992
S003278003
                                                not_calculated 1.000 1431 Pseudomonas sp. HC1-12; JF312924 not_calculated 1.000 1417 Pseudomonas sp. HC1-23; JF312935
                                                not_calculated 1.000 1412 Pseudomonas sp. HC1-27; JF312939
not_calculated 1.000 1430 Pseudomonas sp. HC2-18; JF312957
                         S003278007
S003278025
                                               not_calculated 1.000 0680 Pseudomonas sp. SF-1-07; HE794902
not_calculated 1.000 1348 Pseudomonas fluorescens; M-T-TSA_84; JQ795779
                         S003305516
                         S003314008
                                               not_calculated 1.000 0518 uncultured Pseudomonas sp.; B3_0_022; JN866195
Lineage
Results for Query Sequence: WG36, 757 unique oligos
rootrank Root (20) (match sequences)
      domain Bacteria (20)
         phylum Proteobacteria (20)
            class Gammaproteobacteria (20)
              order Enterobacterales (20)
                 family Yersiniaceae (20)
                   genus Rouxiella (20)

$000721442 no

$000721444 no
                                               not_calculated 1.000 0860 Rahnella aquatilis; SF1-34; AM268335 not_calculated 1.000 0839 Rahnella aquatilis; SF2-49; AM268337
                                               not_calculated 1.000 0861 Rahnella sp. SF2-58; AM268338
not_calculated 1.000 1286 uncultured bacterium; nbw503d11c1; GQ098889
                         S000721445
```

not calculated 1.000 1288 uncultured bacterium; nbw503e08c1; GQ098896

S001524953 S001524960

```
S001524969
                                         not_calculated 1.000 1290 uncultured bacterium; nbw503f10c1; GQ098905
                      S001524987
                                         not_calculated 1.000 1288 uncultured bacterium; nbw503h08c1; GQ098923
                      S001524993
                                         not_calculated 1.000 1287 uncultured bacterium; nbw504a02c1; GQ098929
                                         not_calculated 1.000 1289 uncultured bacterium; nbw504c03c1; GQ098947 not_calculated 1.000 1285 uncultured bacterium; nbw504h09c1; GQ098995
                      S001525011
S001525059
                                         not_calculated 1.000 1289 uncultured bacterium; nbw505a03c1; GQ098999 not_calculated 1.000 1289 uncultured bacterium; nbw505g09c1; GQ099070 not_calculated 1.000 1289 uncultured bacterium; nbw506a01c1; GQ099085
                      S001525063
                      S001525134
                     S001525149
                      S001525161
                                         not_calculated 1.000 1286 uncultured bacterium; nbw506b01c1; GQ099097
                      S001525173
                                         not_calculated 1.000 1288 uncultured bacterium; nbw506c01c1; GQ099109
                      S001525179
                                         not_calculated 1.000 1287 uncultured bacterium; nbw506c09c1; GQ099115
                      S001525187
                                         not_calculated 1.000 1291 uncultured bacterium; nbw506d05c1; GQ099123
                      S001525242
                                         not_calculated 1.000 1288 uncultured bacterium; nbw507b01c1; GQ099178
                      S001525255
                                         not_calculated 1.000 1288 uncultured bacterium; nbw507c08c1; GQ099191
                      S001525273
                                         not_calculated 1.000 1287 uncultured bacterium; nbw507e12c1; GQ099209
Lineage:
Results for Query Sequence: LL46, 632 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Actinobacteria (20)
class Actinobacteria (20)
order Propionibacteriales (20)
               family Nocardioidaceae (20)
                 genus Aeromicrobium (20)
                      S000027750
                                         not_calculated 0.889 0632 Nocardioides sp. 2.20; AJ299233
                      S000028280
                                         not_calculated 0.907 0603 Nocardioides sp. 2.14; AJ299232
                      S000433700
                                         not_calculated 0.912 0442 uncultured actinomycete; ACT-A2; AJ427636
                      S000605629
                                         not_calculated 0.886 1244 Nocardioidaceae bacterium SM2; DQ195813
                                         not_calculated 0.984 1342 Aeromicrobium sp. 1_C7_65; EF540459 not_calculated 0.913 1336 Aeromicrobium sp. 1/4_C7/16_31; EF540466
                      S000860070
                      S000860077
                      S000893634
                                         not_calculated 0.889 1315 Aeromicrobium kwangyangensis; CW35; EF693740 not_calculated 0.984 0492 bacterium EP1.29; EU279889 not_calculated 0.888 1337 Aeromicrobium kwangyangensis; DS23; EU834249
                      S000968355
                      S001154138
                                         not_calculated 0.884 1286 Aeromicrobium sp. I_Gauze_W_12_4; FJ267536 not_calculated 0.907 0751 uncultured bacterium; C042; FJ561558
                      S001199074
                      S001255820
                                         not_calculated 0.894 0740 uncultured bacterium; A083_BATS; HM032273 not_calculated 0.916 0741 uncultured bacterium; A171_BATS; HM032307
                      S002973444
                      S002973478
                      S003537983
                                         not_calculated 0.884 1368 uncultured bacterium; AC1C2BD02; JQ428031
                      S003789365
                                         not_calculated 0.892 1332 Aeromicrobium sp. Es15; JQ977434
                      S004231673
                                         not_calculated 0.902 1306 Aeromicrobium sp. W-NaCl-1; KM083518
                      S004492037
                                         not_calculated 0.908 0690 Aeromicrobium sp. VO38-3; KT152266
                                         not_calculated 0.916 0680 Aeromicrobium sp. VO41-3; KT152267 not_calculated 0.918 1319 Aeromicrobium sp. VO40-3; KM406763
                      S004492038
                      S004531243
                      S004596305
                                         not_calculated 0.888 0561 uncultured bacterium; TB-A-1_H04; LC024200
Lineage:
Results for Query Sequence: LL24, 687 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
phylum Proteobacteria (20)
          class Alphaproteobacteria (20)
order Caulobacterales (20)
               family Caulobacteraceae (20)
                 genus Brevundimonas (20)
                      S000271297
                                         not_calculated 1.000 0593 Brevundimonas vesicularis; 2.5; AJ626987
                      S000274136
                                         not_calculated 1.000 0598 Brevundimonas vesicularis; 5.6; AJ627402
                                         not_calculated 1.000 0544 uncultured bacterium; Kazan-MN12BT3-285; AY593393
                      S000371153
                                        not_calculated 1.000 0544 uncultured alcharum, Razan-WiN12B15-263, A139339 not_calculated 1.000 0543 uncultured alpha proteobacterium; PA-B06; DQ295368 not_calculated 1.000 0574 Brevundimonas sp. SSRS4-5; AB299738 not_calculated 1.000 0505 uncultured bacterium; C2_65H09f; AB483509 not_calculated 1.000 0505 uncultured bacterium; C2_65J21f; AB483510
                      S000703344
                      S000841756
                      S001420253
                      S001420254
                                         not_calculated 1.000 0505 uncultured bacterium; C2_S4A01f; AB483597 not_calculated 1.000 0505 uncultured bacterium; C2_S4D12f; AB483598
                      S001420341
                      S001420342
                      S001420343
                                         not_calculated 1.000 0505 uncultured bacterium; C2_S4H10f; AB483599
                      S001420344
                                         not_calculated 1.000 0505 uncultured bacterium; C2_S4I05f; AB483600
                                         not_calculated 1.000 0505 uncultured bacterium; N2_12B20f; AB484339 not_calculated 1.000 0505 uncultured bacterium; N2_12F08f; AB484340
                      S001421083
                      S001421084
                      S001421085
                                         not_calculated 1.000 0505 uncultured bacterium; N2_12P07f; AB484341
                                         not_calculated 1.000 0505 uncultured bacterium; N2_S4F03f; AB485322
                      S001422066
                                         not_calculated 1.000 0586 uncultured alpha proteobacterium; CR011C2; HQ532501
                      S002341426
                                         not_calculated 1.000 0672 alpha proteobacterium PM35; HQ607641 not_calculated 1.000 0536 Brevundimonas sp. CB1-1; HQ876726
                      S002352459
                      S002411029
                                        not_calculated 1.000 0550 Bievuliulinonas sp. CB1-1, ItQ070720
not_calculated 1.000 0574 uncultured Brevundimonas sp.; No. 8; AB695098
not_calculated 1.000 0511 Brevundimonas sp. TW_LB_DL4; JX402644
                      S003321035
                      S003614866
Lineage:
Results for Query Sequence: WG59, 724 unique oligos
rootrank Root (20) (match sequences)
     domain Bacteria (20)
       phylum Proteobacteria (20)
          class Gammaproteobacteria (20)
            order Pseudomonadales (20)
               family Pseudomonadaceae (20)
                 genus Pseudomonas (20)
                      S000734902
                                        not_calculated 0.991 0576 Pseudomonas putida; C-1; AB236664
                                        not_calculated 1.000 0539 uncultured bacterium; C2_13J13f; AB482902 not_calculated 0.091 0564 Pseudomonas sp. StFLB093; AB628303 not_calculated 0.991 0564 Pseudomonas sp. StFLB106; AB628316 not_calculated 0.991 0564 Pseudomonas sp. StFLB107; AB628317 ps. StFLB106; AB628317 ps. StFLB106; AB628317 ps. StFLB106; AB628317 ps. StFLB106; AB628318
                     S001419646
S003260799
                      S003260812
                      S003260813
                                        not_calculated 0.991 0564 Pseudomonas sp. StFLB109; AB628318
not_calculated 0.991 0564 Pseudomonas sp. StFLB118; AB628326
                      S003260814
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not_calculated 0.991 0564 Pseudomonas sp. StFLB119; AB628327

S003260822 S003260823

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        Pseudomonas sp. StFLB121; AB628329

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        Pseudomonas sp. StFLB122; AB628330

        S003260827
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        Pseudomonas sp. StFLB123; AB628331

        S003260828
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        Pseudomonas sp. StFLB125; AB628333

        S003261017
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        Pseudomonas sp. StFLB125; AB628333

        S003261084
        not_calculated 1.000 0564
        Pseudomonas sp. StFRB034; AB628521

        S003261416
        not_calculated 0.991 0565
        Pseudomonas sp. StFRB452; AB628920

        S003261421
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        Pseudomonas sp. StFRB452; AB628925

        not_calculated 0.992 0624
        Burkholderia sp. EECC-564; JX909225

        not_calculated 0.993 0561
        Pseudomonas sp. StFCB452; AB628920

        not_calculated 0.992 0624
        Burkholderia sp. EECC-36; JX909250

        not_calculated 0.992 0615
        Pseudomonas sp. StFCB457; AB628925
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Questions/comments: rdpstaff@msu.edu

