```
  1         11        21        31        41        51        61        71        81        91        101       111       121       131       141      147
  |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
1 -----CCAGUC-GGC--CGGAUGGCC-GCU---CUCC-GUCAU---CGUC-CCCGGG-------CCACC------CCCGAUGGAC-C----GU-CG-G-GGGGAGGAAAGUCCGGGCUC-C-------------------ACG-GG   87 Rhodospi
1 -----CCAGUU-GGC--CGGGCAGCC-GCG---CCUU-A--CCAAUGUC---------------GAAA---------------GA-C----GG-UA-A-GGUGAGGAAAGUCCGGGCUC-C-------------------ACG-GA   72 Agrobact
1 -----AAAGCA-GGC--CAGGCAACC-GCU---GCCU-G--CA---CC----------------GCAA----------------G-G----UG-CA-G-GGGGAGGAAAGUCCGGACUC-C-------------------AC--AG   66 Alcalige
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUG-C-------------------AU--AG   22 Pseudomo
1 -----GGAGUG-GGC--CAGGCGACC-GCC---GCGG-A-------------------------GCAA--------------------------UC-C-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   58 Thiobaci
1 -----GAAGCU-GAC--CAGACAGUC-GCC---GCUU-C--GU---CGUCGUCCUC--------UUCG--------GGGG-AGAC-G---GGC-GG-A-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   82 Escheric
1 -----GAAGCU-GAC--CAGACAGUC-GCC---GCUU-C--GU---CGUCGUCCU---------UUCG---------GGG-AGAC-G---GGC-GG-A-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   80 Salmonel
1 -----GAAGCU-GAC--CAGACAGUC-GCC---GCUU-C--GU---CGUCGUCCUCC-------UUCG-------GGGGG-AGAC-G---GGC-GG-A-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   84 Klebsiel
1 -----GAAGCU-GAC--CAGACAGUC-GCC---GCUU-C--GU---CGUCGUCCUCC-------UUCG-------GGGGG-AGAC-G---GGC-GG-A-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   84 Erwinia-
1 -----GGAGUU-GAC--CAGACAGUC-GCC---GCUU-C--AU---UGCCGUCCUC--------UUCG--------GGGG-AGAC-A---GAU-GG-A-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   82 Serratia
1 -----AGAGUC-GAU--UGGACAGUC-GCU---GCCC-U--CU---AU----------------GAAA----------------A-U---UAG-GG-G-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   67 Pseudomo
1 -----GGAGUC-GGC--CAGACAGUC-GCU---UCCG-U--C----------------------CUGGU-----------------------G-AC-G-GGGGAGGAAAGUCCGGGCUC-C-------------------AU--AG   61 Chromati
1 -----GGAGUC-GGA--CGGAUCGUC-GCC---GCGG-G--G----------------------GCAA------------------------C-UC-C-GGGGAGGAAAGUCCGGGCUC-C-------------------AA--AG   60 Desulfov
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AG--AG   22 Myxococc
1 -----CGAGCC-GGG--CGGGCGGCC-GCG---UGGG-G--GU---C-----------------UUCG-------------------G---AC-CU-C-CCCGAGGAACGUCCGGGCUC-C-------------------AC--AG   64 Streptom
1 --AUGCAGGAA-AUG--CGGGUAGCC-GCU---GCCG-C--AA---UCGU--------------CUCG--------------GCG-A----UUGGC-G-GUAGAGGAAAGUCCAGGCUCGCCCAA-GC-UGAGAUGCUUGGAGUG--   93 Bacillus
1 --GUUCUUAAC-GUU--CGGGUAAUC-GCU---GCAG-A--U----------------------CUUGA-----------------------A-UC-U-GUAGAGGAAAGUCCAUGCUCGCACGGUGC-UGAGAUGCCCGUAGUG--   84 Bacillus
1 --GUUAAUCAU-GCU--CGGGUAAUC-GCU---GCGG-C--CG---------------------GUUU-----------------------CG-GC-C-GUAGAGGAAAGUCCAUGCUCGCACGGUGC-UGAGAUGCCCGUAGUG--   85 Bacillus
1 --UGAAAUAAC-GUU--CAGGUAAUC-GCU---GCAU-C-------------------------AUUU--------------------------GA-U-GUAGAGGAAAGUCCAUGCUCGCACGGUGC-UGAGAUGCCCGUAGUG--   81 Bacillus
1 ----------G-CAC--AAGUCAAUC-GCA---GGUA-U--AA---UCAA-AAUAUU-AUUUUAUAAAUAUAAAUUAUAU-UUUG-A----UUAAU-A-UUUGAGGAAAGUCCGCGCUAGCACUA-CC-UGUGA-GGUAGUAGUG--  109 Mycoplas
1 ---------UG-CAC--AAGUCAAUU-GCA---GAUA-U--AA---UUAA-AUAUAA-UAAUUUUUUUAUAAUUGUUAUA-UUUA-ACAAAUUUAU-A-UUUGAGGAAAGUCCGCGCUAGCACUA-CC-UGAGAUGGUAGUAGUG--  115 Mycoplas
1 GCGGGGAAAGG-AGGC-GAGGCAGUU-GCG---GCUC-A--GG---C-----------------UUCG------------------G----UUAUG-G-GCUGAGGAAAGUCCGGGCUCCC-------------------AAA-AG   73 Anacysti
1 AGGGAGAGAGU-AGGCGUUGGCGGUU-GCA---GACC-A--GU---UA-----------------GCU----------------U-A----AC-UG-A-UUUGAGGAAAGUCCGGACUCCC-------------------GAA-AG   74 Anabaena
1 AAGGAGAGAGU-AGGCGUAGGCGGUU-GCA---GAUC-A--GU---C-----------------ACAAA-----------------A----AC-UGAA-UUUGAGGAAAGUCCGGGCUCCC-------------------GAA-AG   75 Calothri
1 -----GAGAGU-UAG-GGAGGGAGUU-GCG---GAUU-C--CU---G------------------UCA------------------C----AG-GGAA-UCUGAGGAAAGUCCGGGCUUCC-------------------CAA-AG   67 Synechoc
1 -----AAACCGCAAG--UGUGCAGUC-GCU---GUAU-G--GC---------------------UUGAC----------------------GC-UG-U-GCAGAGGAAAGUCCGAACUU-C-------------------AC--AG   64 Chlorobi
1 -----aaaccgcaag--ugugcagUC-GCU---GUAU-G--GU----------------------AUA-----------------------AC-CA-U-GCAGAGGAAAGUCCGAACUU-C-------------------AC--AG   62 Chlorobi
1 -----UAAAGC-AGU--UGGCCGGUCUGUCGCGUGCG-C--G-----------------------UUU-----------------------C--GU-G-CAGGAGGAAAGUCCGGGCAA-C-------------------AC--AG   63 Bacteroi
1 ------------------------------------------------------------------------------------------------------gaggaaaguccggacAA-C-------------------AC--AG   22 Flavobac
1 -----AGCUGG-CAG--CUAGCCAUC-GCU---UAGU-U--UU---A-----------------UAAU------------------U----AA-AG-C-UAAGAGGAAAGUCCGAGCUC-C-------------------AAUA-A   65 Borrelia
1 GGAACGCGGGG-AAA--CUCCUGGUC-GCG---CCUGAG--CC---GCU---------------UUUUU--------------GG-U----GG-AC-A-GGUGAGGAAAGUCCGGGCAC-C-------------------GC--AG   75 Deincocc
1 UGCCCCAGGAU-AGG--GGUGCGGUC-GCG---CCCG-G--GG---G----------------ACUUCC-----------------C----CC-CU-G-GGUGAGGAAAGUCCGGGCAC-C-------------------AU--AG   71 Thermus-
1 UGGCCCGGGAC-GAG--GGCGCGGUC-GCG---CCGA-G--GG--------------------CCGAAC----------------------CC-CU-CGGGUGAGGAAAGUCCGGGCAC-C-------------------AU--AG   70 Thermus-
1 -----GGAGAG-GAG--CAGGCGGUC-GCG---GGGG-C--GC---A-----------------CACC------------------U----GC-GCUU-CCCGAGGAAAGUCCGGACUC-U-----------------------GG   63 Thermoto
1 -----GGAGAG-GGG--UAGGUGGUC-GCG---GGGA-C--GC---A-----------------CACU------------------C----GC-GUUC-CCCGAGGAAAGUCCGGACUC-U-----------------------GG   63 Thermoto
1 ------------------------------------------------------------------------------------------------------gaggaaagucccggcUG-C-------------------AC--AG   22     Mxa1
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------GC--AG   22  vHge8-3
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--AG   22    ESH7-4
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUU-C-------------------AA--CG   22    ESH7-9
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUA-C-------------------AU--AG   22   ESH7-16
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22 ESH17b-7
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22 ESH20b-4
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUU-C-------------------AC--AG   22 ESH20b-1
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22 ESH21b-4
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUG-C-------------------AC--AG   22   ESH26-4
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAA-C-------------------AC--AG   22   ESH30-3
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--AG   22 ESH46a-1
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAG-U-------------------AC--AG   22   ESH167E
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22   ESH167F
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAC-C-------------------AC--AG   22   ESH183A
1 ------------------------------------------------------------------------------------------------------gaggaaaguacgggcUC-C-------------------AU--AG   22   ESH183D
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-U-------------------AC--AG   22   ESH210B
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcuC-C-------------------AU--CG   22   ESH212C
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--GA   22      PS#1
1 ------------------------------------------------------------------------------------------------------gaggaaagugcgggcUC-C-------------------AC--GG   22      PS#2
1 ------------------------------------------------------------------------------------------------------gaggaaaguccggacAC-C-------------------AA--AG   22      PS#4
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--GG   22      PS#6
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAA-C-------------------AC--AG   22      PS#8
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcCC-C-------------------AC--AG   22     PS#22
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--AU   22     PS#24
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------ACG-GA   23     PS#26
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--GG   22     PS#27
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--GA   22     PS#31
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAC-C-------------------AC--AG   22     PS#33
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAG-C-------------------AC--AG   22     LGA#1
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcCC-C-------------------AC--AG   22     LGA#2
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--AG   22     LGA#6
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--AG   22     LGA#8
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--AG   22     LGB#5
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------U---UG   21    LGA#10
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAU-C-------------------GA--CG   22    LGB#21
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--GA   22    LGB#23
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAA-C-------------------AC--AG   22    LGB#27
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------U---UG   21    LGB#32
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--GG   22    LGB#41
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22    LGW#17
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------GC--AG   22    LGW#18
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22    LGW#23
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcAC-C-------------------AU--AG   22    LGW#46
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AC--GG   22   LGW#113
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------GC--AG   22   LGW#116
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-A-------------------GAG-GG   23   EM14b-9
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AA--AG   22 EM14b-11
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22    PF#101
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22    BH#145
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22     P#126
1 ------------------------------------------------------------------------------------------------------gaggaaaguccgggcUC-C-------------------AU--AG   22     P#131
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    148       158       168       178       188       198       208       218       228       238       248       258       268       278       288     294
    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |     |
 88 AAC-ACGG-UGCC-GGG----------------UAACG------------------CCC--GGCGG-GG----------------------------GCGA-----------------------------CCCUAG-GGA-------   129 Rhodospi
 73 AAU-ACGG-UGCC-GGA----------------UAACG------------------UCC--GGCGG-GG----------------------------GCGA-----------------------------CCCCAG-GGA-------   114 Agrobact
 67 GGC-AGGG-UGUU-GGC----------------UAACA------------------GCC--AUCCA-CG----------------------------GCAA-----------------------------CGUGCG-GAA-------   108 Alcalige
 23 GGC-GGCG-UAGC-AGC----------------UAACA------------------GCU--GUCCA-CC----------------------------GUGA-----------------------------GGUGAG-GAU-------    64 Pseudomo
 59 GGC-AAGG-CGCC-GGU----------------UAACG------------------GCC--GGGGG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------   100 Thiobaci
 83 GGC-AGGG-UGCC-AGG----------------UAACG------------------CCU--GGGGG-G-----------------------------GAAA------------------------------CCCAC-GAC-------   122 Escheric
 81 GGC-AGGG-UGCC-AGG----------------UAACG------------------CCU--GGGGG-G-----------------------------GAAA------------------------------CCCAC-GAC-------   120 Salmonel
 85 GGC-AAGG-UGCC-AGG----------------UAACG------------------CCU--GGGGG-GUG---------------------------UCAC----------------------------AGCCCAC-GAC-------   128 Klebsiel
 85 GGC-AAGG-UGCC-AGG----------------UAACG------------------CCU--GGGGG-GUG---------------------------UCAC----------------------------AGCCCAC-GAC-------   128 Erwinia-
 83 GGC-AGGG-UGCC-AGG----------------UAACG------------------CCU--GGGAG-GC----------------------------GCAA-----------------------------GCCUAC-GAC-------   124 Serratia
 68 GGC-GAAG-UGCC-AGG----------------UAAUG------------------CCU--GGGGG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------   109 Pseudomo
 62 GGC-AGGG-UGCC-AGG----------------UAACG------------------CCU--GGGGG-GC----------------------------GAGA-----------------------------GUCCAC-GGA-------   103 Chromati
 61 GGC-AGAA-CGCU-GGA----------------UAACA------------------UCC--AGGGA-GG----------------------------GCAA-----------------------------CCUC-C-GGA-------   101 Desulfov
 23 GGC-AGGG-UGCU-GGC----------------UAACG------------------GCC--AGUCG-AG----------------------------GCGA-----------------------------CUCGCA-GGA-------    64 Myxococc
 65 AGC-AGGG-UGGU-GGC----------------UAACG------------------GCC--ACCCG-GG----------------------------GUGA-----------------------------CCCGCG-GGA-------   106 Streptom
 94 ----UUCG-UACCUGGC-----------------GCAA------------------GCCA-GGGCAAGUGAGG-C----------------------GCAA----------------------GCCU-CGCUGAC-GGC-GUGGAAA   151 Bacillus
 85 ----UUCG-UGCCUAGC--------------GAAGUCAUAA---------------GCUA-GGGCA-GUCU--------------------------UUAG-------------------------A-GGCUGAC-GGCAGGAAAAA   142 Bacillus
 86 ----UUCG-UGCCUAGC--------------GAAUCCAUAA---------------GCUA-GGGCA-GCCUGG-C----------------------UUCG----------------------GCUG-GGCUGAC-GGC-GGGGAAA   148 Bacillus
 82 ----UUCG-UGCCUAGU--------------GAAAAAAUAA---------------GCUA-GGGCA-GCUUGG-CU---------------------UAU-------------------A--GCUU-AGCUGAC-GGC-GGGAAAA   145 Bacillus
110 ----UUCA-UGUUGGGU---------------CUAAUAA-----------------ACCC-AAGC--------------------------------UUA--------------------------------GAC-GAC-------   145 Mycoplas
116 ----UUCA-UGUUGGAU---------------CUAAUAA-----------------AUCC-AAGC--------------------------------UUUA-------------------------------GAC-GAC-------   152 Mycoplas
 74 ACC-AGACUUGCU-GGG----------------UAACG------------------CCC--AGUGC-GG----------------------------GUGA-----------------------------CCGUGA-GGA-------   116 Anacysti
 75 ACC-AGACUUGCU-GGA----------------UAACG------------------UCC--AGUGC-GA----------------------------GCGA-----------------------------UCGUGA-GGA-------   117 Anabaena
 76 ACC-AAACUUGCU-GGA----------------UAACG------------------UCC--AGUGC-GA----------------------------GCGA-----------------------------UCGUGA-GGA-------   118 Calothri
 68 GCC-AAACUUGCU-GGG----------------UAACG------------------CCC--AGUGC-GC----------------------------GCGA-----------------------------GCGUGA-GGA-------   110 Synechoc
 65 GGC-AGGGU-GCCGGUC--GAG-----------AACCUG-G-----------UUCAAGGCC-GGGGG-CAGCGG-U---------------------GCAA-----------------------ACCGUCUGUCAC-AGA-------   129 Chlorobi
 63 GGC-AGGGU-GCCGGUC--GAG-----------AACGUUUG-----------UUCAAGACC-GGGGG-CAGCGG-C---------------------GCAA-----------------------GCUGUCUGUCAC-AGA-------   128 Chlorobi
 64 AGC-AUCC-UACU-UCC----------------UAACA------------------GAA--AGCUG-UCC---------------------------GCGA----------------------------GGGUA-G-AG--------   105 Bacteroi
 23 AGC-AACU-CACU-UCC----------------UAACG------------------GGA--AGGCU-CCGU--------------------------UCAG--------------------------GCGGAGAC-AGC--------    68 Flavobac
 66 GAACAUAA-UGCU-AGG----------------UAAUG------------------CCU--AGGGG-UU----------------------------UUA------------------------------AACC-UAAGA-------   107 Borrelia
 76 GGCAAGGA-UGCC-AGC----------------UAACG------------------GCU--GGUCG-GCGAGU-CGAGCGCCCGCCUG-----AGCGCCGAGGG----CAGG-CGGAAAGC--GGCGAAGCCGAA-GGA-------   161 Deincocc
 72 GGC-AGGG-UGCC-AGC----------------UAACG------------------GCU--GGGCG-GG----------------------------GCAA-----------------------------CCCGAC-GGA-------   113 Thermus-
 71 GGC-AGGG-UGCC-AGG----------------UAACG------------------CCU--GGGCG-GG----------------------------GUAA-----------------------------CCCGAC-GGA-------   112 Thermus-
 64 AGC-GGGG-UGCC-GGG----------------UAACG------------------CCC--GGGAG-GG----------------------------GUGA-----------------------------CCCU-C-GGA-------   104 Thermoto
 64 AGC-GGGG-UGCC-GGG----------------UAACG------------------CCC--GGGAG-GG----------------------------GUGA-----------------------------CCCU-C-GGA-------   104 Thermoto
 23 AGC-GGGA-UGAC-GGC----------------UAACG------------------GCC--GUACG-CUGAAA-GCU-G-------------------GUAA------------------CAG--UAUA-AGGCGAG-GAA-------    80 Mxa1
 23 GGC-AGGG-UGCC-GGG----------------UAACU------------------CCC--GGUGA-AG----------------------------GUGA-----------------------------CUUCAA-GGA-------    64 vHge8-3
 23 GGC-AGGA-UGCU-GGC----------------UAACG------------------GCC--AGGCG-UC----------------------------GCGA-----------------------------GGCGAC-GGA-------    64 ESH7-4
 23 GGC-AAGG-UGCC-AGG----------------UAACG------------------CCU--GGGCG-GC----------------------------GUGA-----------------------------GCCGAC-GGA-------    64 ESH7-9
 23 GGC-AGCG-UGCC-AGC----------------UAACG------------------GCU--GGGCA-GG----------------------------GUAA-----------------------------CUUGAC-GAC-------    64 ESH7-16
 23 GGC-GGAG-UGCC-AGG----------------UAAUG------------------CCU--GGGGG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------    64 ESH17b-7
 23 GGC-AGAG-CGCC-AGG----------------UAACA------------------CCU--GGGAG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------    64 ESH20b-4
 23 GGC-AGGA-UGCC-AGA----------------UAACG------------------UCU--GGCGG-AG----------------------------GCGA-----------------------------CUCCAG-GGA-------    64 ESH20b-1
 23 GGC-GAAG-UGCC-AGG----------------UAAUG------------------CCU--GGGAG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------    64 ESH21b-4
 23 AGC-GGGA-UGAC-GGC----------------UAACG------------------GCC--GUACG-CUGAAA-GCU-G-------------------GCAA------------------CAG--UAUA-AGGCGAG-GAA-------    80 ESH26-4
 23 AGC-AUCC-UACU-UCU----------------UAACG------------------GGA--AGCUA-UCU---------------------------GCGA----------------------------AGGUA-G-AGU-------    65 ESH30-3
 23 AGC-AGAA-UGCC-GGC----------------UAACG------------------GCC--GGGCG-CG----------------------------GCAA-----------------------------CGCGAC-GGA-------    64 ESH46a-1
 23 AGC-AACC-CACC-GGU----------------GAACA------------------GCC--GGCCA-CC----------------------------AAUU-----------------------------GGUGAG-AGA-------    64 ESH167E
 23 AGC-AGGG-UGAU-GGC----------------UAACG------------------ACC--AUCCA-CG----------------------------GUGA-----------------------------CGUGCG-GAA-------    64 ESH167F
 23 GGC-UGGUC-GCU-GGG----------------UAAUG------------------CCC--AGUGC-GC----------------------------GUGA-----------------------------GCGUGA-GGA-------    64 ESH183A
 23 GGC-AGGG-UGUU-GGC----------------UAAUA------------------GCC--AUCCA-CG----------------------------GCAA-----------------------------CGUGCG-GAA-------    64 ESH183D
 23 AGC-AAAG-UGGU-GGA----------------UAACU------------------UCC--ACCCG-GG----------------------------GCGA-----------------------------CCCGCG-GGA-------    64 ESH210B
 23 ACAUACGG-UGCC-GGA----------------UAACA------------------CCC--GGCGG-GG----------------------------GCGA-----------------------------CCCCAG-GGA-------    65 ESH212C
 23 AACAACGG-UGCC-GGA----------------UAAUG------------------CCC--GGCGG-GG----------------------------GUGA-----------------------------CCCCAG-GGA-------    65 PS#1
 23 AAGCAUGG-UGCC-GGG----------------UAACG------------------CCC--GGCGG-GG----------------------------GCGA-----------------------------CCCCAG-GGA-------    65 PS#2
 23 GGC-UGGUU-GCU-GGG----------------UAACG------------------CCC--AGUGC-GC----------------------------GUGA-----------------------------GCGUGA-GGA-------    64 PS#4
 23 AAC-GCGG-UGCC-GGG----------------UAACG------------------CCC--GGCGG-GG----------------------------GCGA-----------------------------CCCCAG-GGA-------    64 PS#6
 23 AGC-AGGA-UACU-UCU----------------UAACG------------------AGA--AGCAG-UUC---------------------------GCGA----------------------------GGGCU-G-AG--------    64 PS#8
 23 AGC-AGGA-UGCC-GGC----------------UAACG------------------GCC--GGGCG-CC----------------------------GCGA-----------------------------GGCGAC-AGA-------    64 PS#22
 23 AACCACGG-UGCC-GGG----------------UAACG------------------CCC--GGCGG-UCGCGC-CUC-GGACUGCGCUAUU---GCGUG----CGAUAGGGGAAGCCAGACAAGCG-CGGCAAG-GGA-------   111 PS#24
 24 AACGACGG-UGCC-GGA----------------UAAUG------------------UCC--GGCGA-GG----------------------------GUGA-----------------------------CCUUAG-GGA-------    66 PS#26
 23 AAC-GCGG-UGCC-GGG----------------UAACA------------------CCC--GGCGG-GG----------------------------GCGA-----------------------------CCCCAG-GGA-------    64 PS#27
 23 AACAAGGG-UGGC-GGG----------------UAACG------------------CCC--GCCGG-CGUUCC-------------------------UUCG------------------------GGG-GCGCAAG-GGA-------    73 PS#31
 23 GGC-AGGA-UGC--GGC----------------UAACG------------------GCC---GGCG-CC----------------------------GUGA-----------------------------GGCGAC-GGA-------    62 PS#33
 23 AGC-AAUG-CACC-GGU----------------GAAUA------------------GCC--GGGUU-CCGUC--------------------------UUU-------------------------GA-CGGAAAC-AGA-------    69 LGA#1
 23 AGC-AGGA-UGCC-GGC----------------UAACG------------------GCC--GGGCG-CAGCAA-GCU-UC-----------------GCAA-----------------GAAG--CCCA-AGGCGAC-AGA-------    82 LGA#2
 23 GAC-AGAG-UGGU-CGG----------------UAACG------------------CCG--ACCGG-CC----------------------------GAAA-----------------------------GGCUCG-GGA-------    64 LGA#6
 23 GAC-AGAG-UGGU-CGC----------------UAACG------------------GCG--ACCGG-CC----------------------------GCAA-----------------------------GGCUCG-GGA-------    64 LGA#8
 23 GGc-AAGA-UGGU-UGC----------------UAGCG------------------GCA--ACUGU-CCCG-------------------------CUAGU--------------------------C-GGGAUAA-GGA-------    69 LGB#5
 22 GAC-AAAC-UGCC-AGG----------------UAGCA------------------CCU--GGGCA-CAGC-------------------------GAUGA--------------------------G-CUGUGAC-GGA-------    68 LGA#10
 23 GGC-AGGA-UGGU-CUC----------------UAACG------------------GAG--ACUGG-GG----------------------------GUAA-----------------------------CCCUAA-GGA-------    64 LGB#21
 23 AGCAAGGG-UGCC-GGG----------------UAAUG------------------CCC--GGCCG-GG----------------------------GAAA-----------------------------CCCGAG-GGA-------    65 LGB#23
 23 GGC-AGCG-UACU-UCC----------------UAACG------------------GGA--AGGCC-CCGA--------------------------UUAG--------------------------U-CGGGGAC-AGA-------    68 LGB#27
 22 GAC-AAAC-UGCC-AGG----------------UAACA------------------CCU--GGGCA-CAGC-------------------------GAUGA--------------------------G-CUGUGAC-GGA-------    68 LGB#32
 23 AACAACGG-UGCC-GGG----------------UAACG------------------CCC--GGCGG-CUCCUG-C-----------------------CUCG-----------------------GCCG-GAGUUAG-GGA-------    75 LGB#41
 23 GGC-AGGA-UGCC-AGU----------------UAACG------------------GCU--GGGUG-CU-AUACGUC---------------------GCAA--------------------G--ACCA-AGGCAAC-GGA-------    77 LGW#17
 23 GGC-AGUG-UGGU-UCC----------------UAACG------------------GGA--ACCGG-GA----------------------------GUAA-----------------------------UCCCAG-GGA-------    64 LGW#18
 23 GGC-AAGG-UGCC-AGG----------------UAACG------------------CCU--GGGGG-GC----------------------------GCGA-----------------------------GCCCAC-GGA-------    64 LGW#23
 23 GAC-AGGG-UGGU-GGG----------------UAACG------------------CCC--ACCGG-CC----------------------------GUAA-----------------------------GGUUAG-GGA-------    64 LGW#46
 23 AACAACGG-UGCC-GGG----------------UAACG------------------CCC--GGCGG-CUCCUG-C-----------------------CUCG-----------------------GCCG-GAGUUAG-GGA-------    75 LGW#113
 23 GAC-AGGG-UGGU-CGG----------------UAACG------------------CCG--ACCGG-CC----------------------------GCAA-----------------------------GGCUCG-GGA-------    64 LGW#116
 24 UGC-GCGU-AUCCCGUUAAGGCU---------GAUGA-------------AGCCGGAGCG-GGGGC-GU----------------------------GAGA-----------------------------GCGC-C-GGA-------    78 EM14b-9
 23 GGC-AGGG-CGCC-GGG----------------UAAUA------------------CCC--GGGGU-GGGG--------------------------AAA--------------------------C-CCCACAC-GGU-------    67 EM14b-11
 23 GGC-AGGG-CGCUCGUC--GAGACUGGCGGC--GGAA----GUUCGCCAGUCAA--GGCGAGGGAG-UUGCUC-CGG-CG-----------------AGA------------------UGCU--GGGG-CAACUUC-GGA-------   108 PF#101
 23 GGC-GAAG-UGCC-AGG----------------UAAUG------------------CCU--GGGAG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------    64 BH#145
 23 GGC-GAAG-UGCC-AGG----------------UAAUG------------------CCU--GGGAG-GC----------------------------GUGA-----------------------------GCCUAC-GGA-------    64 P#126
 23 GGC-AGGG-UGCC-AGG----------------UAACG------------------CCU--GGGAA-GC----------------------------GCGA-----------------------------GCUUAC-GAC-------    64 P#131
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    295       305       315       325       335       345       355       365       375       385       395       405       415       425       435     441
    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |     |
130 -------------------------------------------------------AAGUGCCACA--GAGAGCA-AACCGCC----------------------GGC-----C----------------------------------  157 Rhodospi
115 -------------------------------------------------------AAGUGCCACA--GAGAGCA-AACCGCC----------------------AUG-----C----------------------------------  142 Agrobact
109 -------------------------------------------------------UAGGGCCACA--GAGA-CG-AGUCUUG----------------------CCG-----CC-GG-G----------------------------  139 Alcalige
 65 -------------------------------------------------------CAGAGCAACA--GAGA-CG-AGUCUGG----------------------CAG-----GA-GU-GCC--------------------------   97 Pseudomo
101 -------------------------------------------------------AAGUGCCACA--GAAAAUA-UACCGCC-------------------AA-GCG-----C----------------------------------  130 Thiobaci
123 -------------------------------------------------------CAGUGCAACA--GAGAGCA-AACCGCC-------------------GA-UGG-----CC-CG-C----------------------------  156 Escheric
121 -------------------------------------------------------CAGUGCAACA--GAGAGCA-AACCGCC-------------------GA-UGG-----CC-CA-C----------------------------  154 Salmonel
129 -------------------------------------------------------CAGUGCAACA--GAGAGCA-AACCGCC-------------------GA-UGG-----CC-CG-C----------------------------  162 Klebsiel
129 -------------------------------------------------------CAGUGCAACA--GAGAGCA-AACCGCC-------------------GA-UGG-----CC-CG-C----------------------------  162 Erwinia-
125 -------------------------------------------------------UAGUGCAACA--GAGAGCA-AACCGCC-------------------GA-UGG-----CC-CG-C----------------------------  158 Serratia
110 -------------------------------------------------------AAGUGCCACA--GAAAAUA--ACCGCC-------------------UAAGCA-----C----------------------------------  139 Pseudomo
104 -------------------------------------------------------AAGUGCCGCA--GAAAAGA-UACCGCC-------------------GACCCC-----GU-C-------------------------------  136 Chromati
102 -------------------------------------------------------CAGCGCCACA--GAAAGCA-AACCGCC----------------------CGG-----C----------------------------------  129 Desulfov
 65 -------------------------------------------------------AAGUGCCACA--GAAAACA-GACCGCC----------------------CGU-----UC-C-------------------------------   94 Myxococc
107 -------------------------------------------------------CAGUGCCACA--GAAAACA-GACCGCC----------------------GGG-----GA-C-------------------------------  136 Streptom
152 G---GGCUC---------UC--UCU--GA--------GGCC-CGAGUACGC-UGAAAGUGCCACA--GAAA-CGUAGCUUUU----------------------CUG----------------------------------------  207 Bacillus
143 A---GCCUA-------CGUC--UUCG-GAUA------UGGC-UGAGUAUCCUUGAAAGUGCCACA--GUGA-CGAAGUCUCA----------------------CUA----------------------------------------  204 Bacillus
149 G--AACCUA-------CGUCCGGCUGGGAUA------UGGUUCGAUUACCC-UGAAAGUGCCACA--GUGA-CGGAGCUCUA----------------------AGG----------------------------------------  214 Bacillus
146 ACC-ACCUA-------AGUC--UUUG-GAUA------UGGU-CGAGUAUCC-UGAAAGUGCCACA--GUGA-CGAAGCUUUG----------------------CUG----------------------------------------  208 Bacillus
146 -------------------------------------------------------AAGUGCCACA--GAGA-CGAG-CUUAU----------------------UUA-----UU-AA-AUU--CUUC-------------------U  183 Mycoplas
153 -------------------------------------------------------CAGUGCCACA--GAGA-CGAG-UUUAU----------------------UUA-----UU-AA-UUU--GUUU-------------------A  190 Mycoplas
117 -------------------------------------------------------GAGUGCCACA--GAAA-CA-UACCGCC-------------------GA-U-G-----GC-CU-G----------------------------  148 Anacysti
118 -------------------------------------------------------UAGUGCCACA--GAAA-AA-UACCGCC----------------------AAG-----AU-UG-GGG--ACUG--------------------  154 Anabaena
119 -------------------------------------------------------UAGUGCCACA--GAAA-GA-UACCGCC----------------------AAU-----UA-GU-CAU--UAGU--------------------  155 Calothri
111 -------------------------------------------------------CAGUGCCACA--GAAA-AA-UACCGCC-------------------C--UUU-----UU-AG-AAA--ACAG--------------------  148 Synechoc
130 -------------------------------------------------------GAGUGCAACA--GAAAGCA-AACCGCC----------------------CCG-----GC---------------------------------  158 Chlorobi
129 -------------------------------------------------------GAGUGCAACA--GAAAGCA-AACCGCU----------------------CCG-----GC---------------------------------  157 Chlorobi
106 -------------------------------------------------------UAACGUAGAA--GAAAAU--AACCGCC----------------------GCU-----CC-U-------------------------------  134 Bacteroi
 69 -------------------------------------------------------AAGUGCCACA--GAAAAUA-UACCGCC----------------------UUG-----UC---------------------------------   97 Flavobac
108 -------------------------------------------------------AAGUGUCGCA--GAAAAU--UACCGCC-----------------------------------------------------------------  130 Borrelia
162 -------------------------------------------------------CAGUGCCACA--GAAACCA-GACCGCC----------------------ACC-----CC-AC-ACA--GGC---------------------  198 Deincocc
114 -------------------------------------------------------AAGUGCCACA--GAGAAGA-GACCGCC----------------------AGCG----GC-CG-GGG--------------------------  148 Thermus-
113 -------------------------------------------------------AAGUGCCACA--GAGAAGA-GACCGCC----------------------AGCG----GC-CG-GGG--------------------------  147 Thermus-
105 -------------------------------------------------------CAGGGCCAUA--GAGAAGAAGACCGCC----------------------C------------------------------------------  130 Thermoto
105 -------------------------------------------------------CAGGGCCAUA--GAGAAGAAGACCGCC----------------------C------------------------------------------  130 Thermoto
 81 -------------------------------------------------------UAGGGCCACA--GAGA-CG-AGUCGGU----------------------UCG-----ACCAG-UGA--GCAA--------------------  118     Mxa1
 65 -------------------------------------------------------AAGUGCAACA--GAGAU-A-UACCGCG----------------------GGC-----UA-GA-GAA--CAGA--------------------  101  vHge8-3
 65 -------------------------------------------------------AAGUGGAACA--GAGAGCAGAACCGCC-------------------GA-U-G-----GC-CGGCCGGUGCAC--------------------  107    ESH7-4
 65 -------------------------------------------------------AAGUGCAGCA--GAGAGUA-GACCGCC----------------------UUCAAUAUGG-UU-UCG--A-----------------------  104    ESH7-9
 65 -------------------------------------------------------CAGUGCAGCA--GAGAGUA-GACCGCC-------------------UUUGGCUU---AU-AU-GAG--UAUC--------------------  107  ESH7-16
 65 -------------------------------------------------------AAGUGCCACA--GAAAAUA--ACCGCC-------------------UAAGCA-----C----------------------------------   94 ESH17b-7
 65 -------------------------------------------------------AAGUGCCGCA--GAAAAUA--ACCGCC-------------------UAAGCG-----U----------------------------------   94 ESH20b-4
 65 -------------------------------------------------------AAGUGCAACA--GAAAUAU--ACCGCC----------------------GC-----------------------------------------   89 ESH20b-1
 65 -------------------------------------------------------AAGUGCCACA--GAAAAUA--ACCGCC-------------------UAAGCA-----C----------------------------------   94 ESH21b-4
 81 -------------------------------------------------------UAGGGCCACA--GAGA-CG-AGCGUA------------------------------------------------------------------  102  ESH26-4
 66 --------------------------------------------------------AAUGUAGAA--GAAAC---AACCGCC----------------------UUU-----UU-CC------------------------------   94  ESH30-3
 65 -------------------------------------------------------AAGUGGAACA--GAAAGCAAUACCGCC-------------------GA-UGA-----UU-GC-C----------------------------   99 ESH46a-1
 65 -------------------------------------------------------AAGUGCCACA--GAAAAUA--ACUGUC----------------------UUG-----CC---------------------------------   92  ESH167E
 65 -------------------------------------------------------UAGGGCCACA--GAGACGA--GUCUUC----------------------GCC-----CC-GG-C----------------------------   95  ESH167F
 65 -------------------------------------------------------UAGUGCCACA--GAAAUGAAAACCGCC----------------------GG-----------------------------------------   91  ESH183A
 65 -------------------------------------------------------UAGGGCCACA--GAGA-CG-AGUCUUG----------------------CCA-----UC-GG-G----------------------------   95  ESH183D
 65 ------------------------------------------------------AUAGUGCAACA--GAGAGUA-AACCGCC----------------------AAA-----A----------------------------------   93  ESH210B
 66 -------------------------------------------------------AAGUGCCACA--GAGAACG-AACCGCC----------------------UUC-----AC---------------------------------   94  ESH212C
 66 -------------------------------------------------------AAGUGCCACACAGAGAGCA-GACCGCC----------------------CCG-----GC---------------------------------   96     PS#1
 66 -------------------------------------------------------CAGCGCCACA--GAGAACA-GACCGCC----------------------CGC-----CU-AC-GCG--------------------------   99     PS#2
 65 -------------------------------------------------------UAGUGCCACA--GAAAUGAAAACCGCC----------------------AGG----------------------------------------   92     PS#4
 65 -------------------------------------------------------AAGUGCCACA--GAGAGCA-GACCGCC-------------------GA-UGG-----CU-CC------------------------------   97     PS#6
 65 -------------------------------------------------------UAGUGUAACA--GAAA-AU-AACCGCC----------------------ACA-----C----------------------------------   91     PS#8
 65 -------------------------------------------------------CAGUGCAACA--GAAAACA-UACCGCC-------------------GA-UGG-----CU-CC------------------------------   97    PS#22
112 -------------------------------------------------------CAGUGCCACA--GAGAGCA-GACCGCC-------------------UA-UGG-----CC-GU-CGU--CCG---------------------  150    PS#24
 67 -------------------------------------------------------AAGUGCCACA--GAGAGCA-AACCGCC-------------------GA-U-G-----GU-CC-U----------------------------   99    PS#26
 65 -------------------------------------------------------CAGUGCCACA--GAGAGCA-GACCGCC-------------------GA-UCG-----GC-GU------------------------------   97    PS#27
 74 -------------------------------------------------------AAGUGCCACA--GAGAGUA-UACCGCC-------------------GA-UGA-----UC-CC-GGA--------------------------  109    PS#31
 63 -------------------------------------------------------AAGUGCAACA--GAAAGA--UACCGCC-------------------GA-U-G-----GC-CC------------------------------   93    PS#33
 70 -------------------------------------------------------CAGUGCCACA--GAAAAU--AACUGCC----------------------UUC-----CC-CU-CUC--C-----------------------  103    LGA#1
 83 ----------------------------------------------------CACCAGUGCAACA--GAAA-CA-UACCGCC-------------------UAAGUC-----C----------------------------------  115    LGA#2
 65 -------------------------------------------------------CAGGGCAACA--GAAAGCA-AACCGCC----------------------GCA-----UG-GG-ACC--GGGC--------------------  102    LGA#6
 65 -------------------------------------------------------AAGUGCAACA--GAAAG-A-CACCGCC----------------------UCC-----GC-GA-G----------------------------   95    LGA#8
 70 -------------------------------------------------------AAGUGCCACA--GAAAAGAAAACCCCC----------------------GCG-----U----------------------------------   98    LGB#5
 69 -------------------------------------------------------AAGUGCCACA--GAAAACA-AACCGCC----------------------AGU-----AC---------------------------------   97   LGA#10
 65 -------------------------------------------------------AAGUGCAACA--GAAAAUA-UACCGCCGCCCGCCUCUGGCGGCACUCA-GGC-----AG-AA-AC---------------------------  118   LGB#21
 66 -------------------------------------------------------AAGCGCCACA--GAGAAGA-GUCUGCC----------------------CCG-----A----------------------------------   93   LGB#23
 69 -------------------------------------------------------AAGUACCACA--GAAAACA-AACUACC--------------------A-UGC-----CC-CG-A----------------------------  101   LGB#27
 69 -------------------------------------------------------AAGUGCCACA--GAAAACA-AACCGCC----------------------AGU-----AC---------------------------------   97   LGB#32
 76 -------------------------------------------------------AAGUGCCACA--GAAG-CA-UACCGCC----------------------UGC-----C----------------------------------  102   LGB#41
 78 -------------------------------------------------------CAGUGCAACA--GAGAACA-GACCGCC-------------------GA-UGG-----CU-UU-GGG--CUGUGCCGCUGCUUGCAGCGGAAA  137   LGW#17
 65 -------------------------------------------------------AAGUGCCACA--GAAAACA-UACCGCC----------------------GCA-----AG-GA-AG---------------------------   97   LGW#18
 65 -------------------------------------------------------CAGUGCAACA--GAAAGCA-AACCGCC-------------------UA-UGU-----CA-CG-GCU--CGU---------------------  103   LGW#23
 65 -------------------------------------------------------AAGUGCCACA--GAAAAUA-CACCGCC-------------------UAAGGG-----GA-GC-UGU--UAGC--------------------  105   LGW#46
 76 -------------------------------------------------------AAGUGCCACA--GAAAGCA-UACCGCC----------------------UGC-----C----------------------------------  103  LGW#113
 65 -------------------------------------------------------AAGUGCAACA--GAAAG-A-UACCGCC-------------------UC-CGC-----GG---------------------------------   94  LGW#116
 79 -------------------------------------------------------AAGUGCCACA--GAAAACA-UACCGCC----------------------UUA-----UG-UG-U----------------------------  110  EM14b-9
 68 -------------------------------------------------------AAGGGCCACA--GAAA-CGAGACCGCC-------------------GAAGC-----------------------------------------   96 EM14b-11
109 -------------------------------------------------------AAGUGCCACA--GAAACCA-UACCGCC----------------------GUC-----GG-GC-UAA--GCGG--------------------  146   PF#101
 65 -------------------------------------------------------AAGUGCCACA--GAAAAUA--ACCGCC-------------------UAAGUA-----C----------------------------------   94   BH#145
 65 -------------------------------------------------------AAGUGCCACA--GAAAAUA--ACCGCC-------------------UAAGCA-----C----------------------------------   94    P#126
 65 -------------------------------------------------------AAGUGCAACA--GAGAGCA-AACCGCC-------------------GA-UGG-----CC-CA-C----------------------------   98    P#131
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    442       452       462       472       482       492       502       512       522       532       542       552       562       572       582       588
    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
158 -----------------------------------UAUAC------------------------------------------------------------------G-GC-C--GGUAAGG-GUGAAAG-GGUG-------------  184 Rhodospi
143 ------------------------------------CUU-------------------------------------------------------------------G-CA-U--GGUAAGG-GUGAAAG-GGUG-------------  167 Agrobact
140 ------------------------------------UUCG---------------------------------------------------------CC-C---G-G-CG-G--GAA--GG-GUGAAA-------------------  162 Alcalige
 98 ------------------------------------GCAA------------------------------------------------GG-------CA-G---A-C-CA-A--CCA--GG-GUGAAA-------------------  122 Pseudomo
131 ------------------------------------GUAA------------------------------------------------------------------G-CG-C--GGUAAGG-GUGAAAA-GGUG-------------  156 Thiobaci
157 ------------------------------------GCAA---------------------------------------------------------GC-G---G-GAUC-A--GGUAAGG-GUGAAAG-GGUG-------------  187 Escheric
155 ------------------------------------GUAA---------------------------------------------------------GU-G---G-GAUC-A--GGUAAGG-GUGAAAG-GGUG-------------  185 Salmonel
163 ------------------------------------GCAA---------------------------------------------------------GC-G---G-GAUC-A--GGUAAGG-GUGAAAG-GGUG-------------  193 Klebsiel
163 ------------------------------------GCAA---------------------------------------------------------GC-G---G-GAUC-A--GGUAAGG-GUGAAAG-GGUG-------------  193 Erwinia-
159 ------------------------------------GCAA---------------------------------------------------------GC-G---G-GAUC-A--GGUAAGG-GUGAAAG-GGUG-------------  189 Serratia
140 ------------------------------------UUCG------------------------------------------------------------------G-UG-CC-GGUAAGG-GUGAAAA-GGUG-------------  166 Pseudomo
137 ------------------------------------CUCG------------------------------------------------------------G---A-C-GG-G-AGGUAAGG-GUGAAAU-GGUG-------------  165 Chromati
130 ------------------------------------CUCG------------------------------------------------------------------G-CC-G--GGUAAGG-GUGAAAC-GGUG-------------  155 Desulfov
 95 ------------------------------------GAAA------------------------------------------------------------G---G-G-GC-G--GGUAAGG-GUGAAAC-GGUG-------------  122 Myxococc
137 ------------------------------------CUCG------------------------------------------------------------G---U-C-CU-C--GGUAAGG-GUGAAAC-GGUG-------------  164 Streptom
208 ------------------------------------GCGA--------------------------------------------------------------------CA-G--AAA--AG-AUGGAA-------------------  225 Bacillus
205 ------------------------------------GAAA--------------------------------------------------------------------UG-G--UGA--GA-GUGGAA-------------------  222 Bacillus
215 ------------------------------------GAAA--------------------------------------------------------------------CC-U--UAG--AG-GUGGAA-------------------  232 Bacillus
209 ------------------------------------GAAA--------------------------------------------------------------------CA-G--CAA--AG-GUGGAA-------------------  226 Bacillus
184 UUUUC------------------------------UAUAUU----------------------------------GAGAA-UU-A--CAAUUUUUUUCU-U---A-A-UA-A--AUA--AG-GUGAAA-------------------  231 Mycoplas
191 UAUUA------------------------------AAAAAA----------------------------------UAG-U-UU-A--GAAUUUUUAAAU-U---A-A-UA-A--AUA--AG-GUGAAA-------------------  237 Mycoplas
149 ------------------------------------CUUG---------------------------------------------------------CA-G---G-CAC--A--GGUAAGG-GUGCAAG-GGUG-------------  178 Anacysti
155 -GGGACUAG---GG---GUUGGGGACUGGGGAAG--AAA--CUUCCCAAUCCCUAAUCC------------CCCAUAC-C-CA-A--UAC-------CC-A---ACU-CU-U--GGUAAGG-GUGCAAA-GGUG-------------  243 Anabaena
156 -CAUUUGUC---AU---UAGUCAUUUG-GA------AAAA-----CACAAAGGACAAAG------------GACAAAG-A-AC-A--AAU-------GA-C---CAA-AU-U--GGUAAGG-GUGCAAA-GGUG-------------  236 Calothri
149 -CAACCAGUAAACA---GUUAACAGGG---------UUU--------UUCUGCUGACUA------------ACUGGUA-A-CU-G--ACC-------AC-U---G-A-AA-A--GGUAAGG-GUGCAAA-GGUG-------------  226 Synechoc
159 ------------------------------------UCCG----------------------------------------------------------------G-C-CG-G--AGUAAGG-GUGAAAA-GGCG-------------  185 Chlorobi
158 ------------------------------------UUAA----------------------------------------------------------------A-C-CG-G--AGUAAGG-GUGAAAA-GGGG-------------  184 Chlorobi
135 ------------------------------------UUCG------------------------------------------------------------G---G-G-AG-A--GGUAAGG-GUGAGAA-GGUG-------------  162 Bacteroi
 98 ------------------------------------UUU-----------------------------------------------------------------G-A-UG-A--GGUAAGG-GUGAAAA-CGUG-------------  123 Flavobac
131 -----------------------------------GUAAAA-------------------------------------------------------------------------GGUAAGG-GUGAAAA-GGUG-------------  154 Borrelia
199 ------------------------------------CCCG------------------------------------------G-C--GCG-------GG-U---GCG-GG-U--GGUCAGG-GUGAAAC-GGUG-------------  234 Deincocc
149 ------------------------------------CUU-------------------------------------------------CC-------CC-G---G-U-GC-G--GGCAAGG-GUGAAAC-GGUG-------------  179 Thermus-
148 ------------------------------------CUUC------------------------------------------------CC-------CC-G---G-U-GC-G--GGCAAGG-GUGAAAC-GGCG-------------  179 Thermus-
131 -----------------------------------GUUGA-----------------------------------------------------------------------G--GGCAAGG-GUGGAAC-GGUG-------------  154 Thermoto
131 -----------------------------------GAUGA-----------------------------------------------------------------------G--GGCAAGG-GUGGAAC-GGUG-------------  154 Thermoto
119 ------------------------------------CUUG-----------------------------------------UU-G--CGA-------AC-UUGCG-U-CG-A--AAC--GG-GUGAAA-------------------  150     Mxa1
102 -GAACAGAAU--AU---UAAGUUUGCU---------GCAAA------GGCAAUCGUAAUCUGGUCUCUGACAUCUGUU-C-UC-U--GUU-------CU-C---U-G-GA-A--CGUAAGG-GUGGAAA-GGUG-------------  191  vHge8-3
108 -CC---------------------------------GCAA-------------------------------------G-G-GUAG--CCG-------GU-G---G-CAC--A--GGCAAGG-GUGAAAA-GGUGGACUCCUUCGGGA  161    ESH7-4
105 ------------------------------------GCAA-----------------------------------------------UCG-------GA-A---U-C-GG-A--GGUAAGG-GUGAAAG-GGUG-------------  137    ESH7-9
108 ------------------------------------GCAA-----------------------------------------GA-U--AUU-------CA-U---G-UCAU-C--GGUAAGG-GUGAAAG-GGUG-------------  144   ESH7-16
 95 ------------------------------------UUCG------------------------------------------------------------------G-UG-CC-GGUAAGG-GUGAAAA-GGUG-------------  121 ESH17b-7
 95 ------------------------------------UUCG------------------------------------------------------------------G-CG-CC-GGUAAGG-GUGAAAA-GGUG-------------  121 ESH20b-4
 90 -----------------------------------UUAAU---------------------------------------------------------------------G-C--GGUAAGG-GUGGAAA-GGUG-------------  114 ESH20b-1
 95 ------------------------------------UUCG------------------------------------------------------------------G-UG-CC-GGUAAGG-GUGAAAA-GGUG-------------  121 ESH21b-4
103 -----------------------------------UUAAGU--------------------------------------------------------------------------UA--CG-GUGAAA-------------------  118   ESH26-4
 95 -----------------------------------UCUUUU---------------------------------------------------------G-G---A-A-CA-A--GGUAAGG-GUGAGAA-GGUG-------------  125   ESH30-3
100 ------------------------------------UUCG---------------------------------------------------------GG-C---A-AAAC-A--GGUAAGG-GUGAAAA-GGUG-------------  130 ESH46a-1
 93 ------------------------------------UAA-----------------------------------------------------------------G-G-CG-A--GAUGAGG-GUGAAAA-UGUG-------------  118   ESH167E
 96 ------------------------------------UUCG---------------------------------------------------------GU-C---A-G-GG-C--GAA--GG-GUGAAA-------------------  118   ESH167F
 92 ------------------------------------CUUG---------------------------------------------------------------------UCC--GGUAAGG-GUGCAAC-GGUG-------------  116   ESH183A
 96 ------------------------------------UUCG---------------------------------------------------------CC-C---G-A-UG-G--GAA--GG-GUGAAA-------------------  118   ESH183D
 94 ------------------------------------GAAA------------------------------------------------------------------U-UU-U--GGUAAGGAGUGAAAC-GGUG-------------  120   ESH210B
 95 ------------------------------------UCC-----------------------------------------------------------------G-U-GA-A--GGUAAGG-GUGAAAA-GGUG-------------  120   ESH212C
 97 ------------------------------------GCAA----------------------------------------------------------------G-C-CAAG--GGUAAGG-GUGAAAG-GGUG-------------  124      PS#1
100 ------------------------------------CUAA------------------------------------------------CG-------CGCU-UUA-A-GC-G--GGUAAGG-GUGAAAC-GGUG-------------  134      PS#2
 93 ------------------------------------CUUG--------------------------------------------------------------------CC-U--GGUAAGG-GUGCAAC-GGUG-------------  117      PS#4
 98 ------------------------------------GAAA----------------------------------------------------------G-G---A-CCAC-A--GGCAAGG-GUGAAAG-GGUG-------------  127      PS#6
 92 ------------------------------------UUCG------------------------------------------------------------------G-UU-U--GGUAAGG-GUGAAAA-GGUG-------------  117      PS#8
 98 ------------------------------------GCAA----------------------------------------------------------G-G---A-GAUC-A--GGCAAGG-GCGAACC-GGUG-------------  127     PS#22
151 ------------------------------------UUUA------------------------------------------C-G--GAU------ACG-U---G-G-CC-A--GGCAAGG-GUGAAAG-GGUG-------------  186     PS#24
100 ------------------------------------UUAA---------------------------------------------------------GG-G---A-CAC--A--GGCAAGG-GUGAAAG-GGUG-------------  129     PS#26
 98 ------------------------------------UUCG----------------------------------------------------------A-C---G-U-CG-A--GGCAAGG-GUGAAAG-GGUG-------------  126     PS#27
110 -----------------------------------CUUGA------------------------------------------------UC-------CG-G---G-A-AC-A--GGCAAGG-GUGAAAG-GGUG-------------  142     PS#31
 94 ------------------------------------GCGA----------------------------------------------------------G-G---G-CUC--A--GGCAAGG-GUGAAAU-GGUA-------------  122     PS#33
104 ------------------------------------UUUA-----------------------------------------------GGA-------GA-G---G-GUUG-A--GGUAGGG-UUGAAAA-CGUG-------------  137     LGA#1
116 ------------------------------------GCAA------------------------------------------------------------------G-GA-CC-GGCAAGG-GUGAAAU-CGUG-------------  142     LGA#2
103 ------------------------------------CCCC-----------------------------------------GU-C--CAA-------GU-C---C-A-UG-C--GGUAAGG-GUGAAAC-GGUG-------------  138     LGA#6
 96 -----------------------------------CCCGU---------------------------------------------------------CU-C---G-C-GG-C--GGUAAGG-GUGAAAU-GGUG-------------  126     LGA#8
 99 -----------------------------------CUUGU------------------------------------------------------------------G-CG-C--GGGAGAG-CUGAAAC-GGUG-------------  125     LGB#5
 98 ------------------------------------UUCG----------------------------------------------------------------G-U-AC-U--GGUAAGG-GUGAAAA-GGUG-------------  124    LGA#10
119 ------------------------------------GAAA-------------------------------------------------G-------UU-U---C-U-GC-C--GGUAAGG-GUGAAAU-GGUG-------------  149    LGB#21
 94 ------------------------------------GCU-------------------------------------------------------------------U-CG-G--GGUGAUG-GUGAAAC-GGUG-------------  118    LGB#23
102 ------------------------------------CGAG---------------------------------------------------------UC-G---G-G-GU-A--GGAAAAG-GUGAAAA-GGUG-------------  131    LGB#27
 98 ------------------------------------UUCG----------------------------------------------------------------G-U-AC-U--GGUAAGG-GUGAAAU-GGUG-------------  124    LGB#32
103 ------------------------------------UUUG------------------------------------------------------------------G-GC-G--GGUAAGG-GCGAAAG-GGUG-------------  128    LGB#41
138 AGUCCCUUU-AGCA---GAGCGAUGAU-CGU-----UUCG----ACGGCCAGCGUUUUG------------CGGGGGG-C-GA-G--GCC-------CA-A---A-GAUC-A--GGUAAGG-GUGAAAC-GGCG-------------  223    LGW#17
 98 ------------------------------------GCGA-------------------------------------------------C-------UU-C---G-U-UG-C--GGUAAGG-GUGAAAA-GGUG-------------  128    LGW#18
104 ------------------------------------GCAA------------------------------------------A-C--GGG-------UC-G---C-G-GC-A--GGUAAGG-GUGAAAG-GGUG-------------  138    LGW#23
106 -GUUUGGCC---UU---UAGCUCUUAG-CCAGAC--AAUC-GUCUGGCUAAUGGCUGAC------------CGCUAAU-A-GC-U--AAC-------AG-C---U-UGCC-C--GGUAAGG-GUGAAAA-GGUG-------------  194    LGW#46
104 ------------------------------------UUUG------------------------------------------------------------------G-GC-G--GGUAAGG-GCGAAAG-GGUG-------------  129   LGW#113
 95 -----------------------------------CUCGU----------------------------------------------------------------C-C-GC-GC-GGUAAGG-GUGAAAU-GGUG-------------  123   LGW#116
111 ------------------------------------CUUC---------------------------------------------------------AC-A---C-A-UA-A--GGUAAGG-GUGAAAA-GGUG-------------  140   EM14b-9
 97 -----------------------------------GGUAA---------------------------------------------------------------------G-CCAGGCAAGG-GUGAAAG-GGUG-------------  123 EM14b-11
147 -CACUGUGG---CUUCCGCU----------------GCC---------------AGCCG------------CUGCAGU-GUUC-G--CGU-------UU-C---C-C-GG-C--GGUAAGG-GUGAAAU-GGUG-------------  211    PF#101
 95 ------------------------------------UUCG------------------------------------------------------------------G-UA-CC-GGUAAGG-GUGAAAA-GGUG-------------  121    BH#145
 95 ------------------------------------UUCG------------------------------------------------------------------G-UG-CC-GGUAAGG-GUGAAAA-GGUG-------------  121    P#126
 99 ------------------------------------GCAA---------------------------------------------------------GU-G---G-GAUC-A--GGUAAGG-GUGAAAG-GGUG-------------  129    P#131
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    589       599       609       619       629       639       649       659       669       679       689       699       709       719       729     735
     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |     |
185 ---------------------CGGUAAGAGCG-CACC-G---CCU---GCCCGGC----------------------------AACGG-GGAGG---------------------------------------GCAUGG-UAA-ACC  232 Rhodospi
168 ---------------------GGGUAAGAGCC-CACC-G---CGC---CGCUGGU----------------------------GACAG-UGGUG---------------------------------------GCAAGG-UAA-ACC  215 Agrobact
163 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-CCU  173 Alcalige
123 --------------------------------------------------------------------------------------------------------------------------------------CG-GG-CAA-UCU  132 Pseudomo
157 ---------------------CGGUAAGAGCG-CACC-G---CAU---UUCCGGU----------------------------AACGG-AAAUG---------------------------------------GCAGGG-AAA-ACC  204 Thiobaci
188 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCUGGU----------------------------AACAGUCCGUG---------------------------------------GCACGG-UAA-ACU  236 Escheric
186 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCUGGU----------------------------AACAGUCCGUG---------------------------------------GCACGG-UAA-ACU  234 Salmonel
194 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCUGGU----------------------------AACAGUCCGUG---------------------------------------GCACGG-UAA-ACU  242 Klebsiel
194 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCUGGU----------------------------AACAGUCCGCG---------------------------------------GCACGG-UAA-ACU  242 Erwinia-
190 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCUGGC----------------------------AACAGUUCGUG---------------------------------------GCACGG-UAA-ACU  238 Serratia
167 ---------------------CGGUAAGAGCG-CACC-G---CAC---GACUGGC----------------------------AACAGUUCGUG---------------------------------------GCUAGG-UAA-ACC  215 Pseudomo
166 ---------------------CGGUAAGAGCG-CACC-G---CGC---UGGUGGC----------------------------AACAU-CAGUG---------------------------------------GCAGGG-UAA-ACC  213 Chromati
156 ---------------------GUGUAAGAGAC-CACCAG---AUG---CCGUGGU----------------------------GACAC-GGCAU---------------------------------------GCUCGG-CAU-ACC  204 Desulfov
123 ---------------------CGGUAAGAGCG-CACC-G---CGU---CCGGGGU----------------------------GACUC-GGACG---------------------------------------GCUCGG-UAA-ACC  170 Myxococc
165 ---------------------GUGUAAGAGAC-CACCAG---CGC---CUGAGGC----------------------------GACUC-AGGCG---------------------------------------GCUAGG-UAA-ACC  213 Streptom
226 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-ACC  236 Bacillus
223 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-ACC  233 Bacillus
233 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-ACC  243 Bacillus
227 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-ACC  237 Bacillus
232 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-ACU  242 Mycoplas
238 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-ACU  248 Mycoplas
179 ---------------------CGGUAAGAGCG-CACCAG---CAA---CAUC-GA----------------------------GA-GG-UGUUG---------------------------------------GCUCGG-UAA-ACC  225 Anacysti
244 ---------------------CGGUAAGAGCG-CACCAG---CAG---UAUC-GA----------------------------GA-GG-UACUG---------------------------------------GCUCGG-UAA-ACC  290 Anabaena
237 ---------------------CGGUAAGAGCG-CACCAG---CAA---CGUC-GA----------------------------GA-GG-CGUUG---------------------------------------GCUCGG-UAA-ACC  283 Calothri
227 ---------------------CGGUAAGAGCG-CACCAG---CAG---UAUC-GA----------------------------GA-GG-UACUG---------------------------------------GCUCGG-UAA-ACC  273 Synechoc
186 ---------------------GUGUAAGAGAC-CACCAG---GUG---CGUCAGC----------------------------AAUGC-CGUAC---------------------------------------GCGUAU-GAAAACC  235 Chlorobi
185 ---------------------GUGUAAGAGAC-CACCAG---GCA---GGUCAGC----------------------------AAUGC-CCUGC---------------------------------------GCU-AU-GAAAACC  233 Chlorobi
163 ---------------------GGGUAAGAGCC-UACCAGCA-GCA------UGGU----------------------------GACA----UGU---------------------------------------GGGCUG-UAC-GUC  207 Bacteroi
124 ---------------------AGGUAAGAGCU-CACG-GU--AUUG--CA-UGGC----------------------------GACA--UGGAU----------------------------------------UACGG-UAA-ACC  170 Flavobac
155 ---------------------AGGUAAGAGCU-CACC-G---CUU---AUUUAGC----------------------------AAUAA-AUACA---------------------------------------GGCAAGAUAA-ACC  203 Borrelia
235 ---------------------CGGUAAGAGCG-CACCAG---GUU---CCCGGGA----------------------------GACCG-GGAGC---------------------------------------GUCUGG-UCA-ACC  283 Deincocc
180 ---------------------GGGUAAGAGCC-CACC-G--CCUG---GCCUGGC----------------------------AACAG-GCUGGG--------------------------------------GCACGG-CAA-ACC  229 Thermus-
180 ---------------------GGGUAAGAGCC-CACC-G--CCUG---GCCUGGC----------------------------AACAG-GCCGGG--------------------------------------GCACGG-CAA-ACC  229 Thermus-
155 ---------------------GGGUAAGAGCC-CACCAG---CGU---CGGG-GC----------------------------AA-CC-CGGCG---------------------------------------GCUUGG-CAA-CCC  201 Thermoto
155 ---------------------GGGUAAGAGCC-CACCAG---CGU---CGGG-GC----------------------------AA-CC-CGGCG---------------------------------------GCUUGG-CAA-CCC  201 Thermoto
151 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-CCU  161     Mxa1
192 ---------------------AGGUAAGAGCU-CACCAG---CGG---CAUG-GC----------------------------GA-CU-UGCCG-G-------------------------------------UCUAUG-UAA-ACC  239  vHge8-3
162 GCCGCCGGGGGAACCCCGGCGCGGUAAGAGCG-CACC-G---CGG---ACGCAGU----------------------------GAUGU-GGACG---------------------------------------GCAGGC-UAA-ACC  231    ESH7-4
138 ---------------------CGGUAAGAGCG-CACC-G---CAU---GACUGGU----------------------------AACAGUUCAUG---------------------------------------GCAUGG-UAA-ACC  186    ESH7-9
145 ---------------------CGGUAAGAGCG-CACC-G---CGU---GGCUGGC----------------------------AACAGUUCACG---------------------------------------GCAUGG-UAA-ACU  193   ESH7-16
122 ---------------------CGGUAAGAGCG-CACC-G---CAC---GUCUGGU----------------------------AGCAGUUCGUG---------------------------------------GCUAGG-UAA-ACC  170 ESH17b-7
122 ---------------------CGGUAAGAGCG-CACC-G---CAC---GACUGGC----------------------------AACAGUUCGUG---------------------------------------GCUAGG-UAA-ACC  170 ESH20b-4
115 ---------------------GUGUAAGAGAC-CACC-G---CCC---UUCUGGU----------------------------AACAG-AAGGG-G-------------------------------------UCCAUG-UAA-ACC  163 ESH20b-1
122 ---------------------CGGUAAGAGCG-CACC-G---CAC---GACUGGC----------------------------AACAGUUCGUG---------------------------------------GCUAGG-UAA-ACC  170 ESH21b-4
119 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-CCU  129   ESH26-4
126 ---------------------GAGUAAGAGCC-CACC-----AGU---UGCGUGG----------------------------UGACA-CGGUU---------------------------------------AAGCUG-UAC-GUC  172   ESH30-3
131 ---------------------CGGUAAGAGCG-CACC-G---UGC---AUUUGGU----------------------------AACAA-AGGCG-C-------------------------------------AGCAGGCUAA-ACC  180 ESH46a-1
119 ---------------------AGGUAAGAGCU-CACG-GU--UGU---UAUCGGU----------------------------AACGG-UAGCA----------------------------------------ACGGG-UAA-ACC  166   ESH167E
119 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-CCG  129   ESH167F
117 ---------------------CGGUAAAAGCGUCACCAG---CGG---AGUC-GA----------------------------GA-GG-CUCCG---------------------------------------GCUAGG-UAA-ACC  164   ESH183A
119 --------------------------------------------------------------------------------------------------------------------------------------CGCGG-UAA-CCU  129   ESH183D
121 ---------------------GUGUAAGAGAC-CACCAG---CAU---UGCAAGU----------------------------GAUUG-CAGUG---------------------------------------GCUAUG-CAA-ACC  169   ESH210B
121 ---------------------CGGUAAGAGCG-CACC-G---CGU---UUCUAGC----------------------------AAUAG-AGACG---------------------------------------GCAUGG-CAA-ACC  168   ESH212C
125 ---------------------CGGCAAGAGCG-CACC-G---CGC---GGCUGGU----------------------------AACAG-GCGCG---------------------------------------GCACGG-CAA-ACC  172      PS#1
135 ---------------------CGGUAAGAGCG-CACC-G---CGU---UCUCGGC----------------------------AACGA-GAGCG---------------------------------------GCACGG-CAA-GCC  182      PS#2
118 ---------------------CGGUAAGAGCGUCACCAG---CAA---GGUC-GG----------------------------GA-GG-CCUUG---------------------------------------GCUAGG-UAA-ACC  165      PS#4
128 ---------------------CGGCAAGAGCG-CACC-G---CGC---AGCGGGC----------------------------AACCG-AAGCG---------------------------------------GCACGG-CAA-ACC  175      PS#6
118 ---------------------GGGUAAGAGCC-UACC-G---UAG---CGGCCGU----------------------------AAUUC-CGCUA---------------------------------------GCC--G-UAC-GCC  163      PS#8
128 ---------------------GAGUAAGAGCC-CACC-G---CGG---ACGUGGC----------------------------AACAC-GGACG---------------------------------------GCACGG-CAA-ACC  175     PS#22
187 ---------------------CGGCAAGAGCG-CACC-G---CGC---GAUGGGU----------------------------AACCG-GAGCG---------------------------------------GCAUGG-CAA-ACC  234     PS#24
130 ---------------------CGGUAAGAGCG-CACC-G---CGC---GACCGGU----------------------------AACGG-AAGCG---------------------------------------GCAAGG-CAA-ACC  177     PS#26
127 ---------------------CGGCAAGAGCG-CACC-G---CGC---GACGGGU----------------------------AACCG-AAGCG---------------------------------------GCAUGG-CAA-ACC  174     PS#27
143 ---------------------CGGUAAGGGCG-CACC-G---GGG---GGCUGGC----------------------------AACAG-CCACC---------------------------------------GCAUGG-CAA-ACC  190     PS#31
123 ---------------------CGGUAAGAGCG-CACC-G---CUC---CAGCGGC----------------------------AACGUCUGGAG---------------------------------------U--CGG-CAA-ACC  169     PS#33
138 ---------------------AGGUAAGAGCU-CACG-UC--CCG---AUAUGGU----------------------------GACAU-AUCGG---------------------------------------G-AGGG-UAA-ACC  185     LGA#1
143 ---------------------CGGUAAGAGCG-CACG-G---CCG---UCCUGGU----------------------------AACAGUGGCGG----------------------------------------C-GGG-C-A-ACC  188     LGA#2
139 ---------------------CGGUAAGAGCG-CACCAG---CAG---CCAAGGU----------------------------GACUU-GACUG---------------------------------------GCUAGG-CAA-CCC  187     LGA#6
127 ---------------------CGGUAAGAGCG-CACC-A---GCG---GCGGGGU----------------------------GACUC-GCCGG----------------------------------------CUCGG-CAA-ACC  173     LGA#8
126 ---------------------GUGUAAGAGAC-CACCAG---CUU---CGUC-GU----------------------------GA-GG-CGAAG---------------------------------------GCUUGG-UAA-ACC  172     LGB#5
125 ---------------------GGGUAAGAGCC-CACC-G---CGU---CACCGGU----------------------------AACGG-UGGCG---------------------------------------GCACGG-UAA-ACC  172    LGA#10
150 ---------------------AGGUAAGAGCU-CACCAG---UCC---CGUG-GU----------------------------GA-CA-CGGGA---------------------------------------GCUUGG-CAA-ACC  196    LGB#21
119 ---------------------GGGUAAGAGCC-CACC-G---CGG---ACCGGGC----------------------------AACCG-GGACG---------------------------------------GCACGG-CAA-GCC  166    LGB#23
132 ---------------------AGGUAAGAGCU-CACC-G---GCC---UGGUGGU----------------------------GACAU-CAGGC---------------------------------------GC-UGG-CAA-ACC  178    LGB#27
125 ---------------------GGGUAAGAGCC-CACC-G---CGU---CACCGGU----------------------------AACGG-UGGCG---------------------------------------GCACGG-UAA-ACC  172    LGB#32
129 ---------------------CGGCAAGAGCG-CACC-G---CGC---GGCCGGU----------------------------AACGG-UCGCG---------------------------------------GCACGG-UAA-ACC  176    LGB#41
224 ---------------------AGGUAAGAGCU-CACC-G---CGC---UGGCGGU----------------------------AACGUUCAGCG---------------------------------------GCACGG-UGA-ACC  272    LGW#17
129 ---------------------CGGUAAGAGCG-CACC-G---CUU---CUCUGGU----------------------------GACAG-GGAAG---------------------------------------GCAGGG-UAA-ACC  176    LGW#18
139 ---------------------CGGUAAGAGCG-CACC-G---CGC---CGGUGGC----------------------------AACAUUCGGCG---------------------------------------GCACGG-CAA-ACC  187    LGW#23
195 ---------------------CGGUAAGAGCG-CACCAG---CAG---GCGAGGU----------------------------GACUC-GCCUG---------------------------------------GCUCGG-UAA-ACC  243    LGW#46
130 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCCGGU----------------------------AACGG-UCGCG---------------------------------------GCACGG-UAA-ACC  177   LGW#113
124 ---------------------CGGUAAGAGCG-CACCAG---CCG---GCGGGGU----------------------------GACCC-GUCGG----------------------------------------CUCGG-CAA-ACC  171   LGW#116
141 ---------------------CGGUAAGAGCG-CACCCA---GGA---AAGGAGAAGGUUUAAGGGAAAAAACGCCCUUGCCGAAUCC-UUUCC----------------------------------------UGCGG-UAA-ACC  216    EM14b-9
124 ---------------------GGGUAAGGGCC-CACC-G---GCU---CCGCGGU----------------------------AACGC-GGGGU--GAGGGGGUAAAAAUCCCCCGGCGGGUUUCCCGCUC---UGG-UAACCUC  205 EM14b-11
212 ---------------------GGGUAAGAGCC-CACCAG---CAC---GACC-GC----------------------------GA-GG-UCGUG---------------------------------------GCUGGG-CAA-ACC  258    PF#101
122 ---------------------CGGUAAGAGCG-CACC-G---CAC---GACUGGC----------------------------AACAGUUCGUG---------------------------------------GCUAGG-UAA-ACC  170    BH#145
122 ---------------------CGGUAAGAGCG-CACC-G---CAC---GACUGGC----------------------------AACAGUUCGUG---------------------------------------GCUAGG-UAA-ACC  170     P#126
130 ---------------------CGGUAAGAGCG-CACC-G---CGC---GGCUGGC----------------------------AACAGUUCGUG---------------------------------------GCAUGG-UAA-ACU  178     P#131
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    736       746       756       766       776       786       796       806       816       826       836       846       856       866       876     882
    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
233 CCACCG---G-GAGCAAGAUCGAAU--------------------AG-GGACGGCAC--GCCCC--GG------UUUU------CC--------GGGGC-AA---G-CGGC------------------------------------ 289 Rhodospi
216 CCACCG---G-GAGCAAGACCGAAU--------------------AG-GGAUGACACG-GGGCG--GGC------GAAA------GCC------UGUUC-AC---A-GCCG------------------------------------ 275 Agrobact
174 CCACCU---G-GAGCAAUCCCAAAU--------------------AG-GCAGGCGAU--------------------------------------------G---A-AGCG------------------------------------ 211 Alcalige
133 CUACGC---G-CAGCAAUACCAAGU--------------------AG-GCACACGUU--------------------------------------------G---A-CGGG------------------------------------ 170 Pseudomo
205 CCGCCU---G-GAGCAAGACCAAAU--------------------AG-GCGUGC-GA--------------------------------------------U--AC-CGUG------------------------------------ 242 Thiobaci
237 CCACCC---G-GAGCAAGGCCAAAU--------------------AG-GGGUUC-AU-------------------------------------------AA--GG-UACG------------------------------------ 275 Escheric
235 CCACCC---G-GAGCAAGGCCAAAU--------------------AG-GGGUUC-AU-------------------------------------------AA--GG-UACG------------------------------------ 273 Salmonel
243 CCACCC---G-GAGCAAGGCCAAAU--------------------AG-GGGUUC-AU-------------------------------------------AA--GG-UACG------------------------------------ 281 Klebsiel
243 CCACCC---G-GAGCAAGGCCAAAU--------------------AG-GGGUUC-AU-------------------------------------------AA--GG-UACG------------------------------------ 281 Erwinia-
239 CCACCC---G-GAGCAAGGCCAAAU--------------------AG-GGGUUC-AC-------------------------------------------AU--GG-UACG------------------------------------ 277 Serratia
216 CCACUU---G-GAGCAAGACCAAAU--------------------AG-GGUUCC-A---------------------------------------------A--GG-CGUG------------------------------------ 252 Pseudomo
214 CCACCC---G-GAGCAAGACCAAAU--------------------AG-GGAAC-UC--GCGGC----------UUCG-----------------ACCGC--A-GCG-CGCG------------------------------------ 266 Chromati
205 CCGUUC---G-GAGCAAGACCAAAU--------------------AG-GGAAGG--------------------------------------------------CG-GCCG------------------------------------ 239 Desulfov
171 CCGCCU---G-GAGCAAGAGCCAAU--------------------AG-GAGCGC-----GUCCUCGCC-------GUAC-------GG------AGGAC--A--GG-GAUG------------------------------------ 226 Myxococc
214 CCACUC---G-GAGCAAGGUCAAGAGGGGACACCCCGGUGUCCCUGC-GCGGAU-GUU-----------------------------------------CGA---G-GGCU------------------------------------ 273 Streptom
237 CUGCGA---GCGAGAAACCC-AAAU--------------------U----------------------------------------------------------------------------------------------------- 258 Bacillus
234 CCUCGA---GCGAGAAACCC-AAAU--------------------UU---------------------------------------------------------------------------------------------------- 256 Bacillus
244 CCACGA---GCGAGAAACCC-AAAU--------------------GA---------------------------------------------------------------------------------------------------- 266 Bacillus
238 CCACGA---GCGAGAAACCC-AAAC--------------------AA---------------------------------------------------------------------------------------------------- 260 Bacillus
243 CCAUGA---GCUAGAAACCU-AAAU--------------------UU---------------------------------------------------------------------------------------------------- 265 Mycoplas
249 CCAUGA---GCUAGAAACCU-AAAU--------------------UU---------------------------------------------------------------------------------------------------- 271 Mycoplas
226 CCGGUU---GGGAGCAAGGU-GG----------------------AG-GGACA--AC--------------------------------------------------GGUU------------------------------------ 257 Anacysti
291 CCGGUU---GGGAGCAAGGC-CG----------------------AA-GAACU--AU--------------------------------------------------GGUU------------------------------------ 322 Anabaena
284 CCGGUU---GGGAGCAAGGC-GA----------------------AAGGAACU--AU--------------------------------------------------GGUU------------------------------------ 316 Calothri
274 CCGGUU---GGAAGCAAGGU-CG----------------------GAGGGGCA--AA--------------------------------------------------GGUU------------------------------------ 306 Synechoc
236 UC-CCC---G-AAGCAAGGCCAAAU--------------------AU-GGAAGC-----UUUUU--CC------GCAA------GG--------AAAGA--A---G-GGUU------------------------------------ 287 Chlorobi
234 UC-CCC---G-AAGCAAGGCCAAAU--------------------AA-GGAAGCA----UUUCC--U-------GCAA-------G--------GGAAG-AA---G-GGUU------------------------------------ 285 Chlorobi
208 UUAGGA---G-UUGUAAGGUCAUGU--------------------AAACCGGCGUUA-------------------------------------------UG--AG-AGUU------------------------------------ 248 Bacteroi
171 UUGAGU---G-UUGAAAGACCAAAU--------------------AG-GUUACGAAA------------------------------------------CUC-GAA-GGCU------------------------------------ 212 Flavobac
204 UCAUUA---G-GAGCAAGAUCAAGU--------------------AU-GAAAGC-AC-----------------------------------------------CC-UUUG------------------------------------ 240 Borrelia
284 CCAUCC---G-GUGCAAGACCCGAC--------------------CGUGCGGC--GA------------------------------------------------G-GGCG------------------------------------ 319 Deincocc
230 CCACCC---G-GUGCAAGGCCCGAU--------------------AG-GCAGG--AA-----------------------------------------------GG-GCUU------------------------------------ 265 Thermus-
230 CCACCC---G-GUGCAAGGCCCGGU--------------------AG-GCAGG--GA-----------------------------------------------GG-GCUU------------------------------------ 265 Thermus-
202 CCACCU---G-GAGCAAGGCCAAGC--------------------A--GGGGG--U------------------------------------------------UG-GGUC------------------------------------ 235 Thermoto
202 CCACCU---G-GAGCAAGGCCAAGC--------------------A--GGGGG--U------------------------------------------------UG-GGUU------------------------------------ 235 Thermoto
162 CCAUCU---G-CAGCAAUAUCAAAU--------------------AG-GCUGGCAU---UUAC-----------GCAA-----------------GUAAUAA--GG-CGUG------------------------------------ 213 Mxa1
240 CCACUC---G-GAGCAACACCAUGG--------------------A--GGGAC--AUAU----------------------------------------------G-GGCU------------------------------------ 275 vHge8-3
232 CCAUCC---G-GAGCAAGACCAAAU--------------------AG-GGGUAC-AU--------------------------------------------U--GG-CGUG------------------------------------ 269 ESH7-4
187 CCACCG---G-AAGCAAGACCAAAU--------------------AG-GGAUCC-UU-------------------------------------------UA--GG-CAUG------------------------------------ 225 ESH7-9
194 CCACGC---G-UAGCAAGACCAAAU--------------------AG-GCAUCG-GC-------------------------------------------AU--GG-CGCG------------------------------------ 232 ESH7-16
171 CCACUC---G-GAGCAAGACCAAAU--------------------AG-GGUUCC-A---------------------------------------------A--GG-CGUG------------------------------------ 207 ESH17b-7
171 CCACUU---G-GAGCAAGACCAAAU--------------------AG-GGUCCC-A---------------------------------------------A--GG-CGUG------------------------------------ 207 ESH20b-4
164 CCAUCC---G-AAGCAAGACCGAAC--------------------A--GGGAGC-AU--------------------------------------------A---A-GGCG------------------------------------ 199 ESH20b-1
171 CCACUU---G-GAGCAAGACCAAAU--------------------AG-GGUCCC-A---------------------------------------------A--GG-CGUG------------------------------------ 207 ESH21b-4
130 CCAUCA---G-CAGCAAUAUCAAAU--------------------AG-GCUGGCAUU--UGUC-----------GCAA-----------------GACAUAA--GG-CGUG------------------------------------ 182 ESH26-4
173 UUAGGA---G-UUGUAAGGUCGAUG--------------------UAUACCGGC-AUU-----------------------------------------AUGA--G-GGCU------------------------------------ 214 ESH30-3
181 CCAUUC---G-GAGCAAGACCAAAC--------------------A--GAACGC-GA-------------------------------------------UG---A-CGCU------------------------------------ 217 ESH46a-1
167 UUGGGU---G-CUGCAAUGCCACAU--------------------AU-AGAGCC-GUU-----------------------------------------UUGA--G-AGCU------------------------------------ 207 ESH167E
130 CCACCC---G-GAGCAAUCCCAAAU--------------------AG-GCAGAC-G--------------------------------------------AU--GA-AGCG------------------------------------ 167 ESH167F
165 CC-ACUAAAG-GUGCAAGGCGAAGG--------------------UAUAUCACGAGAA------------------------------------------AA---C-GGUG------------------------------------ 207 ESH183A
130 CCACCU---G-GAGCAAUCCCAAAU--------------------AG-GCAGGCAUU--------------------------------------------G---A-GGCG------------------------------------ 167 ESH183D
170 CCACUUU--U-GAGCAAGAUCAAGAAGUUGCAAGCAAUUGCAAUGGA-GUGAAU-GUU-------------------------------------------UGA---G-AACU------------------------------------ 230 ESH210B
169 CCACCG---G-GAGCAAAACCGAAU--------------------AG-GGACGG-CACAGUGGAAAGUUCG----CUCU----CGGGCGAUAACUCCGC---G-GG-GCGA------------------------------------ 240 ESH212C
173 CCACCG---G-GAGCAAGACCGAAU--------------------AG-GGCGGCG---UGAGG--U--------UUCG--------G------CCUCA------GG-GCAC------------------------------------ 225 PS#1
183 CCGCCA---G-GAGCAAGACCAAAU--------------------AG-GGACGGCGCU------------------------------------------AU--GG-GCUG------------------------------------ 223 PS#2
166 CC-GCUGAAG-GUGCAAGGCUAAGG--------------------UAUAACUCGAGAU------------------------------------------AA---C-GGCG------------------------------------ 208 PS#4
176 CCACCG---G-GAGCAAGACCGAAU--------------------AG-GCACGCG-AU-GGGC-----------UUAG---------------GCCC------GGG-GCAG------------------------------------ 226 PS#6
164 UUAUGG---G-UUGUAAGAUCAUGU--------------------ACACCGACG-CAU------------------------------------------GUA--G-AGUG------------------------------------ 204 PS#8
176 UCAUCC---G-GGGCAAGGCCAAAU--------------------AG-GGGAGC-AU--------------------------------------------U--GA-CGUG------------------------------------ 213 PS#22
235 CCACCG---G-GAGCAAGACCGAAU--------------------AG-GGACGGCGC--GGACU--C--------GCAA--------G------GGUUC---A-GGG-CGUG------------------------------------ 290 PS#24
178 CCACCC---G-GAGCAAGACCGAAU--------------------AG-GGACUGC-GC-GCCC-----------GCAA---------------GGGC---A---GG-CCUG------------------------------------ 228 PS#26
175 CCACCG---G-GAGCAAGACCGAAU--------------------AG-GGGCGGC-AC-GAGCC--UCGUGC---GCAA---GCAUGG------AGUUC-C---GG-GCAG------------------------------------ 239 PS#27
191 CCACCC---G-GAGCAAGGCCGAAU--------------------AG-GGGCCGCG---UGCCC--AUCA-----GCAA-----UGGU------GGGUA------G-GGGA------------------------------------ 248 PS#31
170 CCAUCC---G-GUGCAAGACCAAAU--------------------AG-GGGAGC-GU--------------------------------------------U--GG-CGUG------------------------------------ 207 PS#33
186 UUGCAU---G-CUGAAAUGCCACAU--------------------AG-GUCAGCGCCU------------------------------------------GA---G-AACU------------------------------------ 225 LGA#1
189 UCAUCC---G-GGGCAAGGCCAAAU--------------------AG-GGGAGC-AU--------------------------------------------U--GG-CGUG------------------------------------ 226 LGA#2
188 CCACUC---G-GAGCAAGACCAAAC--------------------A--GGGAGC-A---GACGC--GUUU-----UUCG-----AAAC------GCGUC--G-UGG-GCUC------------------------------------ 246 LGA#6
174 CCACUC---G-GAGCAAGACCAAGC--------------------A--GAGAG--GA--GCUGCC-UGCC-----ACAA-----GGCG------GCGGC----ACGG-UUCG------------------------------------ 233 LGA#8
173 CCAUCU---G-GAGCAAGGCCGAAU--------------------AG-GGGAGG-GAU------------------------------------------AAA-----GCU------------------------------------ 210 LGB#5
173 CCAGUU---G-GAGCAAGGCCAAAU--------------------AG-GCGGCG-A------------------------------------------------GA-GACA------------------------------------ 208 LGA#10
197 CCAUCC---G-AUGCAAGGCCAAAA--------------------AG-GGG--------GCUGC--CG-------GAAA-------UG------GCAGC-GA---G-GAUU------------------------------------ 247 LGB#21
167 CCACCC---G-GAGCAAUGCCGAAU--------------------AG-GGGCCCGC---------------------------------------------GCGGG-CUG-GUCCCGGACUACGGUCCGCGAUACCGCCGCAGGGAU 242 LGB#23
179 UUACGC---G-UUGAAAGUCAAAU---------------------AG-GCCCCGAUCA----------------------------------------------UG-AAUG------------------------------------ 217 LGB#27
173 CCAGUU---G-GAGCAAGGCCAAAU--------------------AG-GCGGCG-A------------------------------------------------GA-GACA------------------------------------ 208 LGB#32
177 CCACCG---G-GUGCAAGACCGAAU--------------------AG-GGGCGGCAU--------------------------------------------AU-GG-GCCU------------------------------------ 216 LGB#41
273 CCAUCC---G-GAGCAAGACCAAAU--------------------AG-GGAAGC-AU-------------------------------------------UA--GG-CGUG------------------------------------ 311 LGW#17
177 CCACAC---G-GAGCAAGAUCAAAU--------------------AA-GGAGGCCCC--------------------------------------------A---A-AGCG------------------------------------ 214 LGW#18
188 CCACCU---G-GAGCAAGACCAAAU--------------------AG-GGAAGC-GC--GCGGA--CC-------UUCG-------GG------UCCGU--U--CC-UGCU------------------------------------ 243 LGW#23
244 CCGCCC---G-GUGCAAGACCAAGC--------------------G--GAGAG--CA----------------------------------------------UGA-GCCG------------------------------------ 279 LGW#46
178 CCACCG---G-GUGCAAGACCGAAU--------------------AG-GGGCGGCAU-------------------------------------------AU--GG-GCCU------------------------------------ 217 LGW#113
172 CCACCC---G-GAGCAAGGCCAAAC--------------------A--GAGAG--GA--GCCGC--GCAGC----GCAA----GCUGC------GCGGC----GCGG-ACCG------------------------------------ 232 LGW#116
217 CAUACG---C-GAGCAAGGCCAAGC--------------------A--GAGGG--GAAUUGCGG--GAGUU-UUCCAAAUCU-GACUC------CCGCA----UGCG-GGUU------------------------------------ 285 EM14b-9
206 CCGCCC---G-GAGCAAGGCCAAGU--------------------A--GCGCCGCA---CCCC-----------GAAA---------------GGGG----AU--AA-GGUG------------------------------------ 255 EM14b-11
259 CCGCCC---G-GAGCAAGACCAAAU--------------------A--GGGGGCGCU--------------------------------------------A--UCAGGUU------------------------------------ 297 PF#101
171 CCACUU---G-GAGCAAGACCAAAU--------------------AG-GGUCCC-A---------------------------------------------A--GG-CGUG------------------------------------ 207 BH#145
171 CCACUU---G-GAGCAAGACCAAAU--------------------AG-GGUCCC-A---------------------------------------------A--GG-CGUG------------------------------------ 207 P#126
179 CCACCC---G-GAGCAAGGCCAAAU--------------------AG-GGGUUC-AC-------------------------------------------AU--GG-UACG------------------------------------ 217 P#131
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    883       893       903       913       923       933       943       953       963       973       983       993       1003      1013      1023        1029
    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |     |
290 GUUU------CC-G-C--G------------------------------CC-GC-CGUCCGGG--------------------------------------------------UA------GUAUCGCG------------------   320 Rhodospi
276 GUUUCCG---GG-C-C----------------------------------C-GU-CAUCCGGG--------------------------------------------------UG------G-GUUGCG------------------   306 Agrobact
212 GCCC------GC-U-GA------------------------------------G-UCUGCGGG--------------------------------------------------UA------G-GGAGCU------------------   238 Alcalige
171 GCCC------CC-G-GA------------------------------------G-UGUGCGGG--------------------------------------------------UA------G-GUAGCA------------------   197 Pseudomo
243 GCCC------GC-G-GU------------------------------------G-CACGCGGG--------------------------------------------------UA------G-GUUGCU------------------   269 Thiobaci
276 GCCC------GU-A-CU------------------------------------G-AACCCGGG--------------------------------------------------UA------G-GCUGCU------------------   302 Escheric
274 GCCC------GU-A-CU------------------------------------G-AACCCGGG--------------------------------------------------UA------G-GCUGCU------------------   300 Salmonel
282 GCCC------GU-A-CU------------------------------------G-AACCCGGG--------------------------------------------------UA------G-GCUGCU------------------   308 Klebsiel
282 GCCC------GU-A-CU------------------------------------G-AACCCGGG--------------------------------------------------UA------G-GCUGCU------------------   308 Erwinia-
278 GCCC------GU-A-CU------------------------------------G-AACCCGGG--------------------------------------------------UA------G-GCUGCU------------------   304 Serratia
253 GCCC------GC-G-CU------------------------------------G-GAACCGGG--------------------------------------------------UA------G-GUUGCU------------------   279 Pseudomo
267 GCCC------GC-G-CGU-----------------------------------G-UUCCCGGG--------------------------------------------------UA------G-GUCGCU------------------   294 Chromati
240 GCCC------GG-C-CG-A------------------------------AG--C-CUUCCGGG--------------------------------------------------UA------G-GUUGCU------------------   269 Desulfov
227 GCCC------GU-C-CC-A------------------------------U---G-CGUUCGGG--------------------------------------------------UU------G-CUCGCU------------------   255 Myxococc
274 GCUC------GC-C-C--G------------------------------A---G-UCCGCGGG--------------------------------------------------UA------G-ACCGCA------------------   301 Streptom
259 ------------------------------------------------------------UGG--------------------------------------------------UA--------GGGGAACCGUCCU-GAAGGAAUCA   286 Bacillus
257 ------------------------------------------------------------UGG--------------------------------------------------UA--------GGGGAACCUUCUU-AACGGAAUUC   284 Bacillus
267 ------------------------------------------------------------UGG--------------------------------------------------UA--------GGGGCACCUUCCC-GAAGGAAAUG   294 Bacillus
261 ------------------------------------------------------------UGG--------------------------------------------------UA--------GGGGAACUGUCUC-AAAGGAAUCU   288 Bacillus
266 ------------------------------------------------------------UGG--------------------------------------------------UA--------AGGGAGCCCAAUU-UGAAGAAAAA   293 Mycoplas
272 ------------------------------------------------------------UGG--------------------------------------------------UA--------AGGGAGCCCAAUU-UCGGGAAACA   299 Mycoplas
258 GGUCUUUU--AC-C-----------------------------------------UGUUCCGUUU------------------------------------------------AU----GG--ACCGCU------------------   288 Anacysti
323 GGUCUUUU--AC-C-----------------------------------------AGUUCCGC-U------------------------------------------------AUCAGAGA--GCCGCU------------------   356 Anabaena
317 GGUCUUUU--AC-C-----------------------------------------AGUUCCGC-U------------------------------------------------AAAACAGA--GCCGCU------------------   350 Calothri
307 GGUCUUUU--UC-C-----------------------------------------UGCCCCAUGA------------------------------------------------UUGGUGGA--ACCGCU------------------   341 Synechoc
288 GCCC------GC-C-C--A----------------------------AC----G-UUUCCGGG--------------------------------------------------UA------G-GCCGCA------------------   316 Chlorobi
286 GCCC------GC-C-C--A----------------------------A----UG-UUUCCGGG--------------------------------------------------UA------G-GCCGCA------------------   314 Chlorobi
249 GCUC------GC-U-CC-----------------------------------AU-GUCGGAGGG-------------------------------------------------UA------G-ACCGCU------------------   277 Bacteroi
213 GCUC------GU-C-UUC---UUUUAC----UUCG-----GUAAGA----U-UC-GUAAUGGG--------------------------------------------------UA------G-GUUGAU------------------   258 Flavobac
241 UUCUU-----GA-G-GA-----------------------------CAU----G-CUUACGGG--------------------------------------------------UA------G-AUCGCU------------------   271 Borrelia
320 GCCC------GC-C-C--G---------------------------UUUGA----GCCGCCAGG-------------------------------------------------AU------G-GUCGCU------------------   351 Deincocc
266 GCCC------GG-C-CC-G---------------------------UUAGAA---CCUGCGGG--------------------------------------------------AU-----GG-GCCGCU------------------   299 Thermus-
266 GCCC------GG-C-CC-G---------------------------AGAGAA---CCUGCGGG--------------------------------------------------AU-----GG-GCCGCU------------------   299 Thermus-
236 GCUCC-----CC-C-UA------------------------------UU------CCCCCGGG--------------------------------------------------UU------G-GCCGCU------------------   264 Thermoto
236 GCUCC-----CC-C-UA------------------------------UU------CCCCCGGG--------------------------------------------------UU------G-GCCGCU------------------   264 Thermoto
214 GCUC------GC-G-CC-----------------------------------UG-CCAGCGGG--------------------------------------------------UA------G-AUAGCU------------------   241      Mxa1
276 GCCC------GC-C-C---------------------------------------GUCCCAUG--------------------------------------------------GA------G-GUGGCU------------------   300   vHge8-3
270 GCCC------GC-G-CU------------------------------------G-UACCCGGG--------------------------------------------------UA------G-GUUGCU------------------   296     ESH7-4
226 GCCC------AU-G-CU------------------------------------G-GAUCCGGG--------------------------------------------------UA------G-GUCGCU------------------   252     ESH7-9
233 GCCC------GC-G-UU------------------------------------C-GAUGCGGG--------------------------------------------------UA------G-GUUGCU------------------   259    ESH7-16
208 GCCC------GC-G-CU------------------------------------G-GAACCGGG--------------------------------------------------UA------G-GUUGCU------------------   234 ESH17b-7
208 GCCC------GC-G-CU------------------------------------G-GGACCGGG--------------------------------------------------UA------G-GUUGCU------------------   234 ESH20b-4
200 GCCC------GU-C-UG--------------------------------------CUCCCGGG--------------------------------------------------UA------G-GUCGCU------------------   225 ESH20b-1
208 GCCC------GC-G-CU------------------------------------G-GGACCGGG--------------------------------------------------UA------G-GUUGCU------------------   234 ESH21b-4
183 GCUC------GC-G-CC------------------------------------UGCCAGCGGG--------------------------------------------------UA------G-AUAGCU------------------   210    ESH26-4
215 GCUC------GC-C-C------------------------------CAC----G-UCGGAGGG--------------------------------------------------UA------G-ACCGCU------------------   243    ESH30-3
218 GCUC------GC-C-G-------------------------------A-----G-CGUUCGGG--------------------------------------------------UA------G-GUUGCU------------------   244 ESH46a-1
208 GCUC------GU-U-C--A------------------------------A---G-GCUCAGGG--------------------------------------------------UA------G-GCAGCA------------------   235    ESH167E
168 GCCC------GC-C-GA------------------------------------G-UCUGCGGG--------------------------------------------------UA------G-GGAGCU------------------   194    ESH167F
208 GCCC------GC-C-G-------------------------------CC---UC-GAGAUGCCG---------------------------------------------------------AUGCUGCU------------------   236    ESH183A
168 GCCC------GC-U-GA------------------------------------G-CCUGCGGG--------------------------------------------------UA------G-GGAGCU------------------   194    ESH183D
231 GCUC------GU-U-C--G------------------------------A---G-UUCACAGG--------------------------------------------------UA------G-AUCGCA------------------   258    ESH210B
241 UGUCA-----GG-C-CC--------------------------------G---C-UGUCCGGG--------------------------------------------------UA------G-GUUGCU------------------   269    ESH212C
226 GUUUC-----GG-C-CC-----------------------------------GU-CGCCCGGG--------------------------------------------------UU------G-GUUGCU------------------   254       PS#1
224 CUUC------AG-G-CU-------------------------------C---GC-CGUCCGGG--------------------------------------------------UA------G-GUCGCG------------------   252       PS#2
209 GCCC------GU-C-G-------------------------------CC---UU-GAGUUGCCG---------------------------------------------------------AUGCUGCU------------------   237       PS#4
227 GAACC-----GG-C-CCU-----------------------------UUU--CG-CGUGCGGG--------------------------------------------------UU------G-GUUGGU------------------   259       PS#6
205 ACUC------GC-U-C---------------------------------GA--U-GUCGGGGGG-------------------------------------------------UA------G-AUCGCU------------------   233       PS#8
214 GCUC------GC-G-UC------------------------------------G-CUCCCGGG--------------------------------------------------UA------G-GCUGCU------------------   240      PS#22
291 GUUG------UC-G-CCCA---------------------------------GU-CGUCCGGG--------------------------------------------------UU------G-GUUGCU------------------   320      PS#24
229 UUUC------GG-G-CC--------------------------------G--GC-AGUCCGGG--------------------------------------------------UU------G-GUCGCU------------------   257      PS#26
240 GAACCG----GC-C-CAG-----------------------------------C-CGCCCGGG--------------------------------------------------UU------G-GUUGCU------------------   269      PS#27
249 GUUUCG----CC-C-C--GA--------------------------------GC-GGCCCGGG--------------------------------------------------UU------G-GCUGCU------------------   279      PS#31
208 GCCC------GC-G-UC------------------------------------G-CUCCCGGG--------------------------------------------------AU------G-GUUGCU------------------   234      PS#33
226 GCUC------GU-U-C-------------------------------AA---UG-CUGAUGGG--------------------------------------------------UA------G-GCAGAU------------------   254      LGA#1
227 GCUC------GC-G-UC------------------------------------G-CUCCCGGG--------------------------------------------------UA------G-GCUGCU------------------   253      LGA#2
247 GUCC------GG-C-CCGC----------------------------UAUC--GACUCCCGGG--------------------------------------------------UA------G-GUCGCU------------------   280      LGA#6
234 GUCC------GG-A-CCGUCG--------------------------UUA-----CUCUCGGG--------------------------------------------------UA------G-GUCGCU------------------   266      LGA#8
211 GCCC------GC------CUA--------------------------------C-CUCCCGGG--------------------------------------------------UGU-----C-GCCGCU------------------   238      LGB#5
209 GUCC------UU-C-UC-GAU-------------------------CAAGA--C-GCCGCGGG--------------------------------------------------UU------G-GCUGCU------------------   243     LGA#10
248 GCCC------AU-C-C------------------------------UUUAA------CCCGGG--------------------------------------------------UA------G-GCCGCA------------------   275     LGB#21
243 GCUU------CA-G-CCC------------------------------A---GG-GGCCCGGG--------------------------------------------------UU------G-GCAGCU------------------   272     LGB#23
218 GCUC------GU-U-CA-AC-UUCCACCCGACUUGUCGGGACGGAA--UA--UC-GGGGUGGG--------------------------------------------------UA------G-ACCGAU------------------   274     LGB#27
209 GUCC------UU-C-UC-GAU-------------------------CAAGA--C-GUCGCGGG--------------------------------------------------UU------G-GCUGCA------------------   243     LGB#32
217 GUUCC-----GG-C-UC-----------------------------------GU-CGCCCGGG--------------------------------------------------UU------G-GUCGCU------------------   245     LGB#41
312 GCCC------GC-G-CU------------------------------------G-CUUCCGGG--------------------------------------------------UA------G-GUUGCU------------------   338     LGW#17
215 GCCC------GC-U-U---UGCUUCCG----GAAA-----CGGAAGCG----GG-CUUCCGGG--------------------------------------------------UA------G-AUCGCC------------------   261     LGW#18
244 GCCC------GC-A-GG--------------------------------G---G-CUUCCGGG--------------------------------------------------UA------G-GUCGCU------------------   271     LGW#23
280 GUCC------GG-C-UCGCUA--------------------------CGA-----CUCUCGGG--------------------------------------------------UA------G-GUCGCU------------------   312     LGW#46
218 GUUCC-----GG-C-UC-----------------------------------GU-CGCCCGGG--------------------------------------------------UU------G-GUCGCU------------------   246    LGW#113
233 GUCC------GG-C-CCGCCA--------------------------UUA-----CUCUCGGG--------------------------------------------------UA------G-GUUGCU------------------   265    LGW#116
286 GCACCCU---UC-C-CGC----------------------------UAACA----CCCUCGGG--------------------------------------------------UA------G-GCCGCU------------------   320    EM14b-9
256 GCCC------GC-C-GA------------------------------AAU--GC-GGUGCGGG--------------------------------------------------UA------G-GCCGCA------------------   286  EM14b-11
298 GCCC------GC-C-GA-----------------------------------UG-CCCCCGGG--------------------------------------------------UC------G-GUCGCU------------------   325     PF#101
208 GCCC------GC-G-CU------------------------------------G-GGACCGGG--------------------------------------------------UA------G-GUUGCU------------------   234     BH#145
208 GCCC------GC-G-CU------------------------------------G-GGACCGGG--------------------------------------------------UA------G-GUUGCU------------------   234      P#126
218 GCCC------GU-A-CU------------------------------------G-AACCCGGG--------------------------------------------------UA------G-GCUGCU------------------   244      P#131
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    1030      1040      1050      1060      1070      1080      1090      1100      1110      1120      1130      1140      1150      1160      1170     1176
    |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
321 -----------------CGAGGC-GU-CCG------GUAA--------CGG-GCG-UCCC-AGAUGAAUGGCCAUC------CCC-GUC--G--UCGCGUCCC--UUGC---GGGAU--AC-----GGCCGGC--GUGG---ACAGA   403 Rhodospi
307 -----------------AGAGGC-GG-CAU------GCAA--------AUG-CCG-UCCC-AGAUGAAUGGCUGCCAC----GUU-CCG--G-----------GUCAAA-------------------CCGG--G-GCCAUACAGA   376 Agrobact
239 -----------------CGAGCC-GG-CUG------GUAA--------CAG-CCG-GCCU-AGAGGAAUGGUUGUCA-----CGC-ACC--G--UUUGCC-----GCAA------GG--CG-----GG-CGGG--G-CG--CACAGA   315 Alcalige
198 ----------------CCGAGCC-AU-CAG------GCGA--------CUG-AUG-GCCA-AGAUUAAUGGCGGUCA-----CAU-GGC--G--G----------GCAA------------------C-CGUU--G-UG--Cacaga   265 Pseudomo
270 -----------------GGAGCC-UG-UGC------GUAA--------GUG-CAG-GCCU-AGAGGAAUGGUCGUCCA------------------------------------------------------------------CGACAGA   318 Thiobaci
303 -----------------UGAGCC-AG-UGA------GCGA--------UUG-CUG-GCCU-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGACAGA   351 Escheric
301 -----------------UGAGCC-AG-UGA------GCGA--------UUG-CUG-GCCU-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGACAGA   349 Salmonel
309 -----------------UGAGCC-AG-UGA------GCGA--------UUG-CUG-GCCU-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGACAGA   357 Klebsiel
309 -----------------UGAGCC-AG-UGA------GCGA--------UUG-CUG-GCCU-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGACAGA   357 Erwinia-
305 -----------------UGAGCC-AG-UGA------GCGA--------UUG-CUG-GCCU-AGAGGAAUGACUGUCCA------------------------------------------------------------------CGACAGA   353 Serratia
280 -----------------AAAGAU-GU-CCA------GUGA--------UGG-CCA-UCGU-AGACGAAUGACUGUUCA------------------------------------------------------------------AGACAGA   328 Pseudomo
295 -----------------AGAGGC-GU-GCG------GCGA--------CGC-ACG-UCCC-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGACAGA   343 Chromati
270 -----------------UGAGGG-UG-UGG------GCAA--------CCG-CAC-UCCU-AGAGGAAUGGCGGUCA-----CAC-GCG--G-------------GCAA--------------------CCGU--G-UG--GACAGA   334 Desulfov
256 ---------------GAUGAGGC-CC-CUGG-----GCAA----C---CAG-GGC-CCUU-AGAUGAAUGUUCACCG-----CCC-AUC--C--C----------GAAA------------------G-GGGU--G-GG--Aacaga   326 Myxococc
302 -----------------CGAGGC-CG-GCG------GCAA--------CGC-CGG-CCCU-AGAUGGAUGGCCGUCG-----CCC-CGAC-G--ACC--------GCGA----------G-----GU-CCCG--G-GG---ACAGA   372 Streptom
287 AACGGAA-GGGACGG---AUGGU-AU-C--------UUCG----------G-AUG-CCAU-AGAUAGAUGGCUACCG-----CUC-UUGG-U--GCGAGGGA---UACG----UCCC--GCUUGCAGC-ACGG--G-AG-AGACAGA   383 Bacillus
285 AACGGA--GAGAAGG---ACAGA-A------------UGCU-------------UU-CUGU-AGAUAGAUGAUUGCCG-----CCU-GAG--U--ACGAGGU---GAUGA-----GCC--GUUUGCAGU-ACGA--U-GG--AACAAA   373 Bacillus
295 AACGGA--GGGAAGG---ACAGG-CG-GC-------GCAU----------GC-AGC-CUGU-AGAUAGAUGAUUACCG-----CCG-GAG--U--ACGAGGC---GCAAA-----GCC--GCUUGCAGU-ACGA--A-GG--UACAGA   389 Bacillus
289 AACGGA--GAGACGG---ACGGU-UA-C--------AUGC----------G-UAA-UCGU-AGAUAGAUGAUUACCG-----CCU-GAG--U--ACGAGAU----UAAA-----AUC--GUUUGCAGU-ACAA--A-GG--UACAAA   380 Bacillus
294 AAACUUC-GAUUGGG---AAGUU-UU-UUUGAUAAGGUUAUUAUUAAAAGA-AAA-ACUU-AGAUAAAUGAUUGACUG-------------------------------------------------------------AUACAGA   369 Mycoplas
300 AACUUU--AAUUGGG---AAGUU-CUAUUAUAA--UAUUU--UUA---UAA-AGA-ACUU-AGAUAAAUGAUUGAUUA-------------------------------------------------------------AUACAGA   368 Mycoplas
289 -----------------AGAGGU-GG-CUA------GUAA--------UAG-CCA-UCCC-AGAGAGAUAACAGCC------CUC-UGU--C-------------UUC---------------------GACA--G-AG--AACAGA   351 Anacysti
357 -----------------AGAGGC-GU-UUG------GUAA--------CAA-ACG-UCCC-AGAUAGAUAAUCGCC------CUC-GUG--U--AAA--------GCAA----------U-----UU-ACACA-G-AG--AACAGA   427 Anabaena
351 -----------------AGAGGC-GU-UUG------GUAA--------CAA-ACG-UCCC-AGAUAGAUAACCGCC------CUC-AUG--U--AGAGAAGUUA-CUUG--UAACAU--UU-----CU-ACAUUCG-AG--AACAGA   436 Calothri
342 -----------------AGAGGA-AU-UUG------GUAA--------CAA-AUU-UCCC-AGAUAGAUAACCGCC------CAA-GGG--U--GC---------CUC-----------------GC-AUCC--U-GG--AACAGA   408 Synechoc
317 ----------------UC------------------------------------------AGAUAAAUGACUGCAGCU---UCA-UCA--------------CUCGA-------------------UGA--U-GAUUCACAGA   361 Chlorobi
315 ----------------UC------------------------------------------AGAUAAAUGGCUGCAA-----CAU-CAC--U--A---------CUUGA------------------U-GGUG--A-UG--GACAGA   359 Chlorobi
278 -----------------AAAGUG-UC-GUG------GUGA--------CAC-GCC-ACUC-AGAUAAAUGACAGGC------ACC-UUA--U-------------UAU--------------------AUAA--G-GU---ACAGA   339 Bacteroi
259 -----------------GGAGUC-UG-UCA------GCAA--------UGG-CAG-AUCU-AGAUAAAUGAUAGAAA-----ACC-GA-----------------UUUU----------------------UC--G-GU-GUacaga   320 Flavobac
272 -----------------CGAUUU-UU-UUA------GCGA--------UAA-AAA-AAUA-AGAGGAUGAUGGCAUA---------------------------------------------------------------GUACAGA   320 Borrelia
352 -----------------CGAGGC-GUCCUG------GCAA--------CAG-GCG-UCCC-AGACAGAUGAUCAGG------CUG-CCC--U--GGGG-------GAGA----------CC-----CC-GGAG--C-AG---ACAGA   423 Deincocc
300 -----------------UGAGGC-CG-GUG------GCGA--------CAC-CGG-UCCC-AGAGAGAUGACCGCGUA------------------------------------------------------------------AAACAGA   348 Thermus-
300 -----------------UGAGGC-CG-GUG------GCGA--------CAC-CGG-UCCC-AGAGAGAUGACCGCGGA------------------------------------------------------------------AAACAGA   348 Thermus-
265 -----------------UGAGGU-GU-GCG------GUAA--------CGC-ACA-CCCC-AGAUUGAUGACCGCCCA------------------------------------------------------------------CGACAGA   313 Thermoto
265 -----------------UGAGGU-GU-GCG------GUAA--------CGC-ACA-CCCC-AGAUUGAUGACCACCCA------------------------------------------------------------------CGACAGA   313 Thermoto
242 -----------------UGAGCG-UG-UGA------GUAA--------UUG-CAC-GCCU-AGAGGAAUGACUGGUCG----CCA-C------------------GCGA-----------------------G--U-GG-AUacaga   302      Mxa1
301 -----------------UGAGCU-GU-ACA------GAAA--------UGU-AUG-GCCU-AGAUAGAUGAUCGUCAA------------------------------------------------------------------AUacaga   349  vHge8-3
297 -----------------UGAGCU-UG-UCG------GUAA--------CGG-CAA-GACU-AGAGGAAUGGCUGUCCA----------------------------------------------------------------ACGacaga   346    ESH7-4
253 -----------------GGAGCG-UA-UGA------GUGA--------UUG-UAC-GCCU-AGAGGAAUGAUCGUUCG------------------------------------------------------------------CGacaga   301    ESH7-9
260 -----------------UGAGCG-UA-CGA------GCGA--------UUG-UGC-GCCU-AGAGGAAUGAUUGUCCA------------------------------------------------------------------CGacaga   308   ESH7-16
235 -----------------AAAGAU-GU-CCA------GUGA--------UGG-CCA-UCGU-AGACGAAUGACUGUCCU------------------------------------------------------------------CGacaga   283  ESH17b-7
235 -----------------AAAGAU-GU-CCA------GUGA--------UGG-CCA-UCGU-AGACGAAUGACUGUUCA------------------------------------------------------------------AGacaga   283  ESH20b-4
226 -----------------UGAGCC-UG-CCG------GCGA--------CGG-CAG-GCGU-AGAUAGAUGGCCAUUCA----------------------------------------------------------------AUGacaga   275  ESH20b-1
235 -----------------AAAGAU-GU-CCA------GUGA--------UGG-CCA-UCGU-AGACGAAUGACUGUUCA------------------------------------------------------------------AGacaga   283  ESH21b-4
211 -----------------UGAGCG-UG-UGA------GUAA--------UUG-CAC-GCCU-AGAGGAAUGACUGUCAG----CUA-C------------------GCAA-----------------------G--U-AG-UUacaga   271   ESH26-4
244 -----------------AAAGUA-AU-GUG------GCAA--------CAC-AUU-ACUC-AGAUAAAUGACAAACA-----CCU-UAA--U------------UUAUU------------------AUUA--A-GG---acaga   308   ESH30-3
245 -----------------UGAGCA-CA-CCA------GCAA--------UGA-UGU-GCCU-AGAGGAAUGACUGUCCG------------------------------------------------------------------CGacaga   293  ESH46a-1
236 -----------------ACAGGU-AA-ACA------GUAA--------UGU-UUA-UCGC-AGAUAAAUGAUAGUGUAG-----------------------------------------------------------------AAacaga   285   ESH167E
195 -----------------GGAGCC-GG-CCG------GUAA--------CGG-UCG-GCCU-AGAGGAAUGGUUGUCA-----CGU-UCC--G--GGC-------GCGGCAA---------G-----CU-GCGG--G-CG-CNacaga   269   ESH167F
237 -----------------AGAGGG-UU-UGG------GUAA--------CCA-AAU-UCCA-AGAUAGAUGACGAUUUA-------------------------------------------------------------------Aacaga   284   ESH183A
195 -----------------UGAGCC-GG-UCG------GUAA--------CGA-CCG-GCCU-AGAGGAAUGAUUGUCA-----CGU-GCC--G--GCAACC-----GCAA------GG--AA-----GC-CGGC--G-CG--Cacaga   271   ESH183D
259 -----------------UGACAU-GU-AUA------GCAA--------UGC-AUA-UGCA-AGAUGGAUGAUUGUC------CCU-CA------------------GCAA---------------------UG--A-GG---acaga   317   ESH210B
270 -----------------UGAGGC-GC-AAG------GUAA--------CUU-GCG-GCCU-AGAGGAAUGGCCGUCAC----GUC-UGC--G--UGGU-------GCGA----------AC-----CA-UUCA--G-GCCCUacaga   345   ESH212C
255 -----------------UGAGCC-GU-UCC------GCAA--------GGA-UCG-GCCU-AGAGGAAUGGUCGCCUAU---CCC-C------------------GCUU------------------------G--G-GGUGGacaga   317      PS#1
253 -----------------CGAGGC-GU-CCG------GCGA--------CGG-ACG-UCCC-AGAGGAAUGGUCAUCCA----GUC-C------------------GCAA------------------------G--G-AU-GGacaga   313      PS#2
238 -----------------AGAGGG-UU-CAG------GAGA--------CUG-GGC-UCGA-AGAGAGAUGACGAUCGU--------------------------------------------------------------AAUacaga   287      PS#4
260 -----------------UGAGGC-CG-UCG------GCAA--------CGC-CGG-UGGU-AGAGGAAUGAUCGUCCA----CUG-UCC-----------------UUCG--------------------GGG--C-AG--Aacaga   322      PS#6
234 -----------------AGAGUU-GC-GUA------GUGA--------UAC-GUA-AUCG-AGAUAAAUGGCAGAC------GUU-GUG-----------------CUUG--------------------CAC--A-AU---acaga   294      PS#8
241 -----------------AGAGGC-CG-UCG------GCAA--------CGG-CGG-UCCC-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGacaga   289     PS#22
321 -----------------AGAGCC-GG-UCA------GCAA--------UGG-CCG-GCGU-AGAGGAAUGGUCGCC------CAUCUGC--U--------------GAAA--------------------GGCA--G-UG--Gacaga   385     PS#24
258 -----------------UGAGCGCGC-CCG------GCAA--------CGG-GCC-GCCU-AGAGGAAUGGCUGCC------GGU-GCG--GAUACGGUCGA--CUUGU----GCGAUACC-----GU-CCGC--G-CC---acaga   342     PS#26
270 -----------------UGAGGC-GU-CCG------GUGA--------CGG-CGG-UCCU-AGAGGAAUGAUCGUCG-----CCG-GCU-----------------UUCG--------------------GGC--C-GG--Gacaga   332     PS#27
280 -----------------AAAGCG-CC-GGA------GCAA--------UCC-GGC-GACC-AGAUGAAUGGCUGCCA-----CCG-CAG--G--CCCGUCCC---GCAA----GGGA--UA----CCG-CCUG--A-GG-AGacaga   362     PS#31
235 -----------------AGAGGC-UG-CGG------GCAA--------CCG-CGG-UCCC-AGAGGAAUGGCUGUCAC----GGC-GU-----------------GAAA-----------------------GC--G-CC--Gacaga   296     PS#33
255 -----------------UGAUCCGG-UUG------GUAA--------CUU-CCG-GGAC-AGAUAAAUGAUAGCCACUAAUCCA-CCU--U--GC---------UAAG-------------------GCUACGG--U-GG---acaga   329      LGA#1
254 -----------------AGAGGC-CG-UCG------GCAA--------CGA-CGG-UCCC-AGAGGAAUGGUUGCCCA------------------------------------------------------------------CGacaga   302      LGA#2
281 -----------------CGAACC-GC-CGA------GCAA--------UCG-UCG-GUCU-AGAUGAAUGGCCGUCACCUGA-----------------------------------------------------------UUCacaga   334      LGA#6
267 -----------------GGAGGC-GG-CGA------GCAA--------UCG-CCG-UCCU-AGAGAAAUGACCAUC------GCC-GCC--C-------------CAG------------------GGGC--UGGC---acaga   329      LGA#8
239 -----------------AAAGCC-CC-ACG------GCAA--------CGU-GGGCGCGU-AGAUAGAUGAUCACUCU------------------------------------------------------------------CGacaga   288      LGB#5
244 -----------------GGAGCG-UG-AUG------GUGA--------CAU-CAU-GCCG-AGAGGAAUCAUCAUC------CGG-AU-----------------CUUUA-----------------------AU--C-CG---acaga   303     LGA#10
276 -----------------AGAGGU-CC-AGG------GCAA--------CCG-GGA-CCCAAAGAGAAAUGGUCACCG-----UCC-CGC--C-------------ACA-------------------GGCG--G-GA--Aacaga   340     LGB#21
273 -----------------UGAGGC-CG-UCG------GUAA--------CGG-CGG-GCCU-AGAGGAAUGGUCAUCCA----GGG-GGC-----------------GCAA----------------------GCC--C-CC-GGacaga   337     LGB#23
275 -----------------UGAUCU-CA-UCA------GCAA--------UGA-UGU-GACC-AGAUAAAUGAUAAAG------GCC-CCG--A-------------CUUG-------------------UCGG--G-GU---acaga   337     LGB#27
244 -----------------GGAGCG-UG-AUG------GUGA--------CAU-CAC-GCCG-AGAGGAAUGAUCAUC------CGG-AUC-----------------UUU----------------------GAU--C-CG---acaga   303     LGB#32
246 -----------------UGAGGC-GA-AGG------GCAA--------CCU-UCG-UCCU-AGAGGAAUGGUCGCCGAU---CCC-CU-----------------UUA-----------------------AG--G-GGUGAacaga   309     LGB#41
339 -----------------UGAGCC-UG-UCG------GUGA--------CGG-CAG-GCCU-AGAGGAAUGAUUGCCGAA---CCC-C------------------GCAA------------------------G--G-GGGGAacaga   401     LGW#17
262 -----------------AGAGGA-GC-CUG------GCGA--------CAG-GCU-UCCC-AGAGGAAUGGCCAUC------CGU-UCG--U--UAGCAACC---UUAC----GGCU--AC-----UA-AUGG--A-UG--Uacaga   341     LGW#18
272 -----------------CGAGGC-GC-ACGG-----CUG-----U---CGU-GCG-UCCC-AGAUGGAUGGUUGUCCU-----------------------------------------------------------------CGacaga   321     LGW#23
313 -----------------AGAGGC-CG-CGG------GCAA--------CCG-UGG-UCGU-AGAGGAAUGAUCGCCAAA---UCG-C------------------UUCG------------------------G--C-GG-AUacaga   374     LGW#46
247 -----------------UGAGGC-GA-AGG------GCAA--------CCU-UCG-UCCU-AGAGGAAUGGUCGCCGAU---CCC-CU-----------------UUUA----------------------AG--G-GGUGAacaga   311    LGW#113
266 -----------------GGAGGC-GG-CGA------GCAA--------UCG-UCG-UCCU-AGAGAAAUGACCAUC------GCC-GGC--C--C----------CAG-----------------G-GGCCC-G-GC---acaga   330    LGW#116
321 -----------------U------------------------------------------AGAGUAAUGACCCUUA------------------------------------------------------------------ACacaga   345    EM14b-9
287 ---------------AUGGAAGU-CG-GGGG-----GCAA----C---UCC-CGA-CUCA-AGAUAGAUGACCACCUA-----------------------------------------------------------------GUacaga   339   EM14b-11
326 -----------------U------------------------------------------AGAGAAAUGGUCGCCA-----GCG-UCA--G--G---------GCUAAAA---------------C-CUGA--C-GC--Cacaga   371     PF#101
235 -----------------AAAGAU-GU-CCA------GUGA--------UGG-CCA-UCGU-AGACGAAUGACUGUUCA------------------------------------------------------------------AGacaga   283     BH#145
235 -----------------AAAGGU-GU-CCA------GUGA--------UGG-CCA-UCGU-AGACGAAUGACUGUUCA------------------------------------------------------------------AGacaga   283      P#126
245 -----------------UGAGCC-AG-UGA------GCGA--------UUG-CUG-GCCU-AGAUGAAUGACUGUCCA------------------------------------------------------------------CGacaga   293      P#131
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    1177      1187      1197      1207      1217      1227      1237      1247
    |         |         |         |         |         |         |         |
404 ACCCGGCUUAC-AG-GCCG----UCUGGCGGU------------------------------------------ 429 Rhodospi
377 ACCCGGCUUAC-AG-GCCA----ACUGGCGAA------------------------------------------ 402 Agrobact
316 AUCCGGCUUAU-CG-GCCU----GCUUUGCUU------------------------------------------ 341 Alcalige
266 auccggcuua---------------------------------------------------------------- 275 Pseudomo
319 ACCCGGCUUAU-CG-GCCC----ACUCCAAUU------------------------------------------ 344 Thiobaci
352 ACCCGGCUUAU-CG-GUCA----GUUUCACCU------------------------------------------ 377 Escheric
350 ACCCGGCUUAU-CG-GUCA----GUUUCACCU------------------------------------------ 375 Salmonel
358 ACCCGGCUUAU-CG-GUCA----GUUUCACCU------------------------------------------ 383 Klebsiel
358 ACCCGGCUUAU-CG-GUCA----GUUUCACCU------------------------------------------ 383 Erwinia-
354 ACCCGGCUUAC-CG-GUCA----ACUCCCUC------------------------------------------- 378 Serratia
329 ACCCGGCUUAU-AG-AUCG----ACUCUCCAC------------------------------------------ 354 Pseudomo
344 ACCCGGCUUAU-CG-GCCG----ACUCCCUUC------------------------------------------ 369 Chromati
335 ACCCGGCUUAC-AG-UCCG----ACUCCCGCA------------------------------------------ 360 Desulfov
327 auccggcuua---------------------------------------------------------------- 336 Myxococc
373 ACCCGGCGUAC-AG-CCCG----ACUCGUCUG------------------------------------------ 398 Streptom
384 ACCUGGCUUAU-AG-CAUU----UCCUGCUGGAU---------------------------------------- 411 Bacillus
374 ACAUGGCUUAC-AG-AACG----UUAGACCACUU---------------------------------------- 401 Bacillus
390 ACAUGGCUUAU-AG-AGCA----UGAUUAACGUG---------------------------------------- 417 Bacillus
381 ACAUGGCUUUA-CG-AACG----UUGUUGAAACA---------------------------------------- 408 Bacillus
370 ACGCGGCUUAU-UA-GUGC---------------------AAAAACAGC-GU----AAAA--AC-GCUGUUUUU 412 Mycoplas
369 ACGCGGCUUAU-UA-GUGC----A---------------AAAAAAACAG-CG-AAUCUGAA-CG-CUGUUUUUU 417 Mycoplas
352 ACCCGGCUUAU-GU-CCUG----CUUUCCCUACUUUAUUU---------------------------------- 385 Anacysti
428 ACCCGGCUUACCAC-CAAC----UCUCUCCUCUUU--------------------------------------- 457 Anabaena
437 ACCCGGCUUAC-UA-CCAA----CUCUUUCCCUUUUU------------------------------------- 467 Calothri
409 ACCCGGCUUAC-GA-CUAA----CUCUCUUUUUUU--------------------------------------- 437 Synechoc
362 AUUCGGCUUAC-AG-CUUC----GGUUUCAGC------------------------------------------ 387 Chlorobi
360 AUUCGGcuuac-ag-cuuc----gguuu---------------------------------------------- 381 Chlorobi
340 ACUCGGCUUAU-AG-GCUGACUGCUUUUUUUC------------------------------------------ 369 Bacteroi
321 acccggcuua---------------------------------------------------------------- 330 Flavobac
321 ACUCGGCUUAU-GG-GUGU----CAGCUUAAU------------------------------------------ 346 Borrelia
424 ACCCGGCUUAC-CG-UUUC----CCCGUGCCAGCCACU--GCCGCCCCCCGCG--CCCGC-CGCUGGGGGCGGU 486 Deincocc
349 ACCCGGCUUAC-GC-CCUA----UCCUGGGA---------CCCCGAGC--------GCAG------GCUCGGGG 394 Thermus-
349 ACCCGGCUUAC-GC-CUCG----UCCCGGAGG--------CGCCCGA---------GCGU-------UCGGGCG 392 Thermus-
314 AUCCGGCUUA--UG-CUCC----UCUCCCGUG------------------------------------------ 338 Thermoto
314 AUCCGGCUUA--UA-CCCC----UCUCCCGUG------------------------------------------ 338 Thermoto
303 acccggcuua---------------------------------------------------------------- 312     Mxa1
350 auccggcuua---------------------------------------------------------------- 359  vHge8-3
347 auccggcuua---------------------------------------------------------------- 356    ESH7-4
302 acccggcuua---------------------------------------------------------------- 311    ESH7-9
309 auccggcuua---------------------------------------------------------------- 318   ESH7-16
284 auccggcuua---------------------------------------------------------------- 293 ESH17b-7
284 acccggcuua---------------------------------------------------------------- 293 ESH20b-4
276 auccggcuua---------------------------------------------------------------- 285 ESH20b-1
284 auccggcuua---------------------------------------------------------------- 293 ESH21b-4
272 acccggcuua---------------------------------------------------------------- 281   ESH26-4
309 acccggcuua---------------------------------------------------------------- 318   ESH30-3
294 acccggcuua---------------------------------------------------------------- 303 ESH46a-1
286 acccggcuua---------------------------------------------------------------- 295   ESH167E
270 acccggcuua---------------------------------------------------------------- 279   ESH167F
285 acccggcuua---------------------------------------------------------------- 294   ESH183A
272 acccggcuua---------------------------------------------------------------- 281   ESH183D
318 acccggcuua---------------------------------------------------------------- 327   ESH210B
346 acccggcuua---------------------------------------------------------------- 355   ESH212C
318 auccggcuua---------------------------------------------------------------- 327      PS#1
314 auccggcuua---------------------------------------------------------------- 323      PS#2
288 auccggcuua---------------------------------------------------------------- 297      PS#4
323 auccggcuua---------------------------------------------------------------- 332      PS#6
295 auccggcuua---------------------------------------------------------------- 304      PS#8
290 auccggcuua---------------------------------------------------------------- 299     PS#22
386 acccggcuua---------------------------------------------------------------- 395     PS#24
343 acccggcuua---------------------------------------------------------------- 352     PS#26
333 acccggcuua---------------------------------------------------------------- 342     PS#27
363 acccggcuua---------------------------------------------------------------- 372     PS#31
297 acccggcuua---------------------------------------------------------------- 306     PS#33
330 acccggcuua---------------------------------------------------------------- 339     LGA#1
303 acccggcuua---------------------------------------------------------------- 312     LGA#2
335 acccggcuua---------------------------------------------------------------- 344     LGA#6
330 acccggcuua---------------------------------------------------------------- 339     LGA#8
289 acccggcuua---------------------------------------------------------------- 298     LGB#5
304 auccggcuua---------------------------------------------------------------- 313    LGA#10
341 acccggcuua---------------------------------------------------------------- 350    LGB#21
338 auccggcuua---------------------------------------------------------------- 347    LGB#23
338 acccggcuua---------------------------------------------------------------- 347    LGB#27
304 acccggcuua---------------------------------------------------------------- 313    LGB#32
310 acccggcuua---------------------------------------------------------------- 319    LGB#41
402 acccggcuua---------------------------------------------------------------- 411    LGW#17
342 acccggcuua---------------------------------------------------------------- 351    LGW#18
322 acccggcuua---------------------------------------------------------------- 331    LGW#23
375 auccggcuua---------------------------------------------------------------- 384    LGW#46
312 acccggcuua---------------------------------------------------------------- 321   LGW#113
331 acccggcuua---------------------------------------------------------------- 340   LGW#116
346 acccggcuua---------------------------------------------------------------- 355   EM14b-9
340 acccggcuua---------------------------------------------------------------- 349 EM14b-11
372 acccggcuua---------------------------------------------------------------- 381    PF#101
284 auccggcuua---------------------------------------------------------------- 293    BH#145
284 acccggcuua---------------------------------------------------------------- 293     P#126
294 acccggcuua---------------------------------------------------------------- 303     P#131
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