Substitute Sheet (Rule 26) RO/AU

```
Staphylococcus aureus              TTTTATGGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAATACATGCA
Staphylococcus epidermidis         TTTTATGGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAATACATGCA
Streptococcus pneumoniae           -----------GTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCA
Streptococcus agalactiae           ----------------------------GACGAACGCTGGCGGCGTGCCTAATACATGCA
Streptococcus pyogenes             -------GAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCA
Enterococcus faecalis              --------AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCA
Enterococcus faecium               --------AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCT-ATACATGCA
Proteus mirabilis                  --AATTGAAGAGTTTGATCATGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCA
Escherichia coli                   -AAATTGAAGAGTTTGATCATGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCA
Serratia marcescens                ----------------------GCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCA
Enterobacter aerogenes             -------------------------------ACGCTGGCGGCAGGCCTAACACATGCA
Enterobacter cloacae               ------------------------------TGAACGCTGGCGGCAGGCCTAACACATGCA
Klebsiella pneumoniae              --------AGAGTTTGATNNTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCA
Pseudomonas aeruginosa             -GAACTGAAGAGTTTGATCATGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCA
Acinetobacter calcoaceticus        -------TAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCA
                                                                ***********  ** * * *******

Staphylococcus aureus              AGTCGAGCGAACGGACGAGAAGCTTG----------CTTCTCTGATGTTAGCGGCGGACG
Staphylococcus epidermidis         AGTCGAGCGAACAGACGAGGAGCTTG----------CTTCTCTGACGTTAGCGGCGGACG
Streptococcus pneumoniae           AGTAGAACGCTGAAGGAGGAGCTT------------GCTTCTCTGGATGAGTTGCGAACG
Streptococcus agalactiae           AGTAGAACGCTGAGGTTTGGTGTTT----------ACACTAGACTGATGAGTTGCGAACG
Streptococcus pyogenes             AGTAGAACGCTGAGAACTGGTGCTT----------GCACCGGTTCAAGGAGTTGCGAACG
Enterococcus faecalis              AGTCGAACGCTTCTTTCCTCCCGAGTGCTTGCACTCAATTGGAAAGAGGAGTGGCGGACG
Enterococcus faecium               AGTCGAACGCTTCTTTTTCCACCGGAGCTTGCTCCACCGGAAAAAGAGGAGTGGCGAACG
Proteus mirabilis                  AGTCGAGCGGTAACAGGAGAAAGCTTGCTTTCTTGC--------TGACGAGCGGCGGACG
Escherichia coli                   AGTCGAACGGTAACAGGAAGAAGCTTGCTTCTTTGC--------TGACGAGTGGCGGACG
Serratia marcescens                AGTCGAGCGGTAGCACAGGGGAGCTTGCTCCCTGGG--------TGACGAGCGGCGGACG
Enterobacter aerogenes             AGTCGAGCGGTAGCACAGAGAGCT--TGCTCTCGGG--------TGACGAGCGGCGGACG
Enterobacter cloacae               AGTCGAACGGTAGCACAGAGAGCT--TGCTCTCGGG--------TGACGAGTGGCGGACG
Klebsiella pneumoniae              AGTCGAGCGGTAGCACAGAGAGCT--TGCTCTCGGG--------TGACGAGCGGCGGACG
Pseudomonas aeruginosa             AGTCGAGCGGATGAAGGGAGCTTGCT------CCTG--------GATTCAGCGGCGGACG
Acinetobacter calcoaceticus        AGTCGAGCGGGGAAAGGTAGCTTGCT------ACTG--------GACCTAGCGGCGGACG
                                   *** ** **                                     **  *** ***
```

Figure 1

```
Staphylococcus aureus          GGTGAGTAACACGTGGATAACCTACCTATAAGACTGGGATAACTTCGGGAAACCGGAGCT
Staphylococcus epidermidis     GGTGAGTAACACGTGGATAACCTACCTATAAGACTGGGATAACTTCGGGAAACCGGAGCT
Streptococcus pneumoniae       GGTGAGTAACGCGTAGGTAACCTGCCTGGTAGCGGGGGATAACTATTGGAAACGATAGCT
Streptococcus agalactiae       GGTGAGTAACGCGTAGGTAACCTGCCTCATAGCGGGGGATAACTATTGGAAACGATAGCT
Streptococcus pyogenes         GGTGAGTAACGCGTAGGTAACCTACCTCATAGCGGGGGATAACTATTGGAAACGATAGCT
Enterococcus faecalis          GGTGAGTAACACGTGGGTAACCTACCCATCAGAGGGGGATAACACTTGGAAACAGGTGCT
Enterococcus faecium           GGTGAGTAACACGTGGGTAACCTGCCCATCAGAAAGGGATAACACTTGGAAACAGGTGCT
Proteus mirabilis              GGTGAGTAATGTATG-GGGATCTGCCCGATAGAGGGGGATAACTACTGGAAACGGTGGCT
Escherichia coli               GGTGAGTAATGTCTG-GGAAACTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAGCT
Serratia marcescens            GGTGAGTAATGTCTG-GGAAACTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAGCT
Enterobacter aerogenes         GGTGAGTAATGTCTG-GGAAACTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAGCT
Enterobacter cloacae
Enterobacter cloacae           GGTGAGTAATGTCTG-GGAAACTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAGCT
Klebsiella pneumoniae          GGTGAGTAATGTCTG-GGAAACTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAGCT
Pseudomonas aeruginosa         GGTGAGTAATGCCTA-GGAATCTGCCTGGTAGTGGGGGATAACGTCCGGAAACGGGCGCT
Acinetobacter calcoaceticus    GGTGAGTAATGCTTA-GGAATCTGCCTATTAGTGGGGGACAACATTCCGAAAGGAATGCT
                               ********** *  * ** **  *  **** ***  ****     ***

Staphylococcus aureus          AATACCGGATAATATTTTGAACCGCATGGTTCAAAAGTGA--AAGACGGTCTTGCTGTCA
Staphylococcus epidermidis     AATACCGGATAATATATTGAACCGCATGGTTCAATAGTGA--AAGACGGTTTTGCTGTCA
Streptococcus pneumoniae       AATACCGCATAAGAGTGGATGTTGCATGACAT-TTGCTTAAAA--GGTGCACTTGCATCA
Streptococcus agalactiae       AATACCGCATAAGAGTAATTAACACATGTTAG-TTATTTAAAA--GGAGCAATTGCTTCA
Streptococcus pyogenes         AATACCGCATAAGAGACTAACGCATGTTAG-TAATTTAAAA--GGGGCAATTGCTCCA
Enterococcus faecalis          AATACCGCATAACAGTTTAT-GCCGCATGGCATAAGAGTGAAAGGCGCTTTCGGGTGTCG
Enterococcus faecium           AATACCGTATAACAAATCAAAACCGCATGGTTTTGATTTGAAAGGCGCTTTCGGGTGTCG
Proteus mirabilis              AATACCGCATAATGTCTACGGACCAAAG----------CAGGGGCTCTTCGGACCTTGCA
Escherichia coli               AATACCGCATAACGTCGCAAGACCAAAG----------AGGGGGACCTTCGGGCCTCTTG
Serratia marcescens            AATACCGCATAACGTCGCAAGACCAAAG----------AGGGGGACCTTCGGGCCTCTTG
Enterobacter aerogenes         AATACCGCATAACGTCGCAAGACCAAAG----------TGGGGGACCTTCGGGCCTCATG
Enterobacter cloacae           AATACCGCATAAYGTCGCAAGACCAAAG----------AGGGGGACCTTCGGGCCTCTTG
Klebsiella pneumoniae          AATACCGCATAACGTCGCAAGACCAAAG----------TGGGGGACCTTCGGGCCTCATG
Pseudomonas aeruginosa         AATACCGCATACGTCCTGAGGGAGAAAG----------TGGGGGATCTTCGGACCTCACG
Acinetobacter calcoaceticus    AATACCGCATACGTCCTACGGGAGAAAG----------CAGGGGACCTTCGGGCCTTGCG
                               ******** ***
```

Figure 1 (continued)



Figure 1 (continued)

Substitute Sheet
(Rule 26) RO/AU

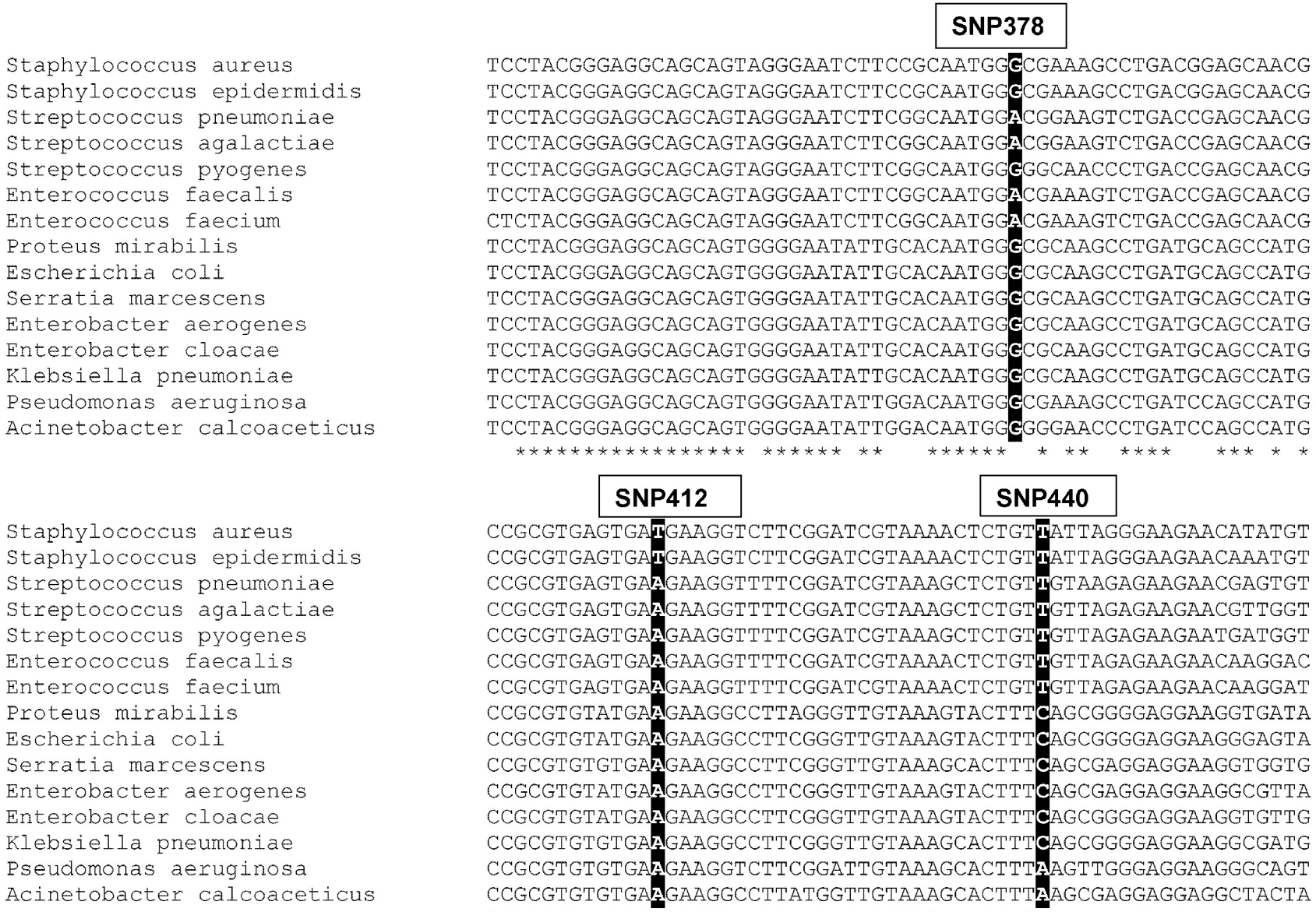


Figure 1 (continued)

Substitute Sheet (Rule 26) RO/AU

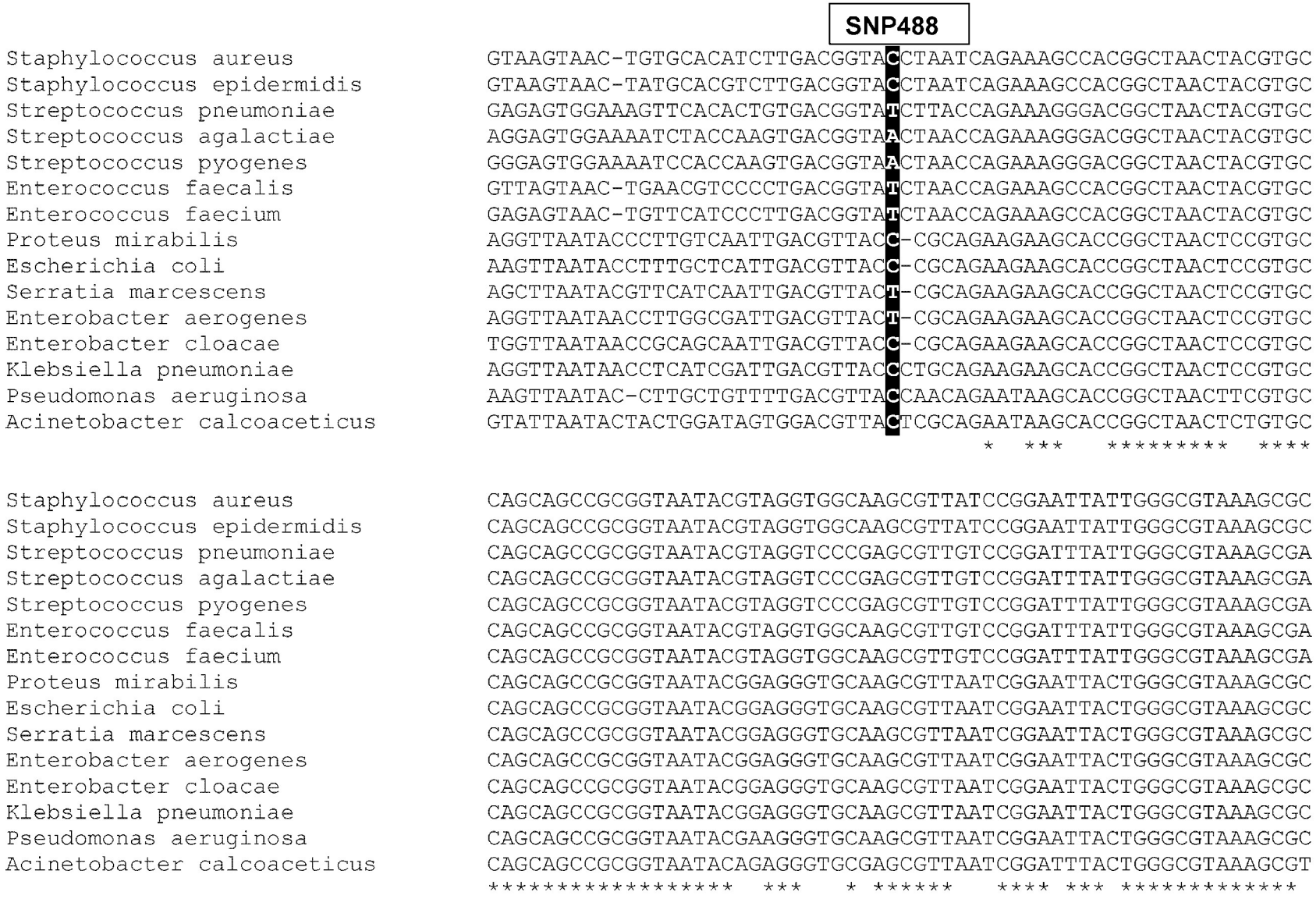


Figure 1 (continued)

Substitute Sheet
(Rule 26) RO/AU

```
Staphylococcus aureus          GCGTAGGCGGTTTTTTAAGTCTGATGTGAAAGCCCACGGCTCAACCGTGGAGGGTCATTG
Staphylococcus epidermidis     GCGTAGGCGGTTTTTTAAGTCTGATGTGAAAGCCCACGGCTCAACCGTGGAGGGTCATTG
Streptococcus pneumoniae       GCGCAGGCGGTTCTTAAGATTAAGTCTGAAGTTAAAGGCTGTGGCTTAACCATAGT-AGGCTTTG
Streptococcus agalactiae       GCGCAGGCGGTTCTTTAAGTCTGAAGTTAAAGGCAGTGGCTTAACCATTGT-ACGCTTTG
Streptococcus pyogenes         GCGCAGGCGGTTTTTTTAAGTCTGAAGTTAAAGGCATTGGCTCAACCAATGT-ACGCTTTG
Enterococcus faecalis          GCGCAGGCGGTTTCTTAAGTCTGATGTGAAAGCCCCCGGCTCAACCGGGAGGGTCATTG
Enterococcus faecium           GCGCAGGCGG-TTCTTAAGTCTGATGTGAAAGCCCCCGGCTCAACCGGGAGGGTCATTG
Proteus mirabilis              ACGCAGGCGGTCAATTAAGTCAGATGTGAAAGCCCCGAGCTTAACTTGGGAATTGCATCT
Escherichia coli               ACGCAGGCGGTTTGTTAAGTCAGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATCT
Serratia marcescens            ACGCAGGCGGTTTGTTAAGTCAGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATTT
Enterobacter aerogenes         ACGCAGGCGGTCTGTCAAGTCGGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATTC
Enterobacter cloacae           ACGCAGGCGGTCTGTCAAGTCGGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATTC
Klebsiella pneumoniae          ACGCAGGCGGTCTGTCAAGTCGGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATTC
Pseudomonas aeruginosa         GCGTAGGTGGTTCAGCAAGTTGGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATCC
Acinetobacter calcoaceticus    GCGTAGGCGGCCATTTAAGTCAAATGTGAAATCCCCGAGCTTAACTTGGGAATTGCATTG
                                ** *** **      ****   * ** ***  *    *** ***    *     * *
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SNP647 **SNP653**

```
Staphylococcus aureus          GAAACTGGAAAACTTGAGTGCAGAAGAGGAAAGTGGAATTCCATGTGTAGCGGTGAAATG
Staphylococcus epidermidis     GAAACTGGAAAACTTGAGTGCAGAAGAGGAAAGTGGAATTCCATGTGTAGCGGTGAAATG
Streptococcus pneumoniae       GAAACTGTTTAACTTGAGTGCAAGAGGGGAGAGTGGAATTCCATGTGTAGCGGTGAAATG
Streptococcus agalactiae       GAAACTGGAGGACTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTAGCGGTGAAATG
Streptococcus pyogenes         GAAACTGGAGAACTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTAGCGGTGAAATG
Enterococcus faecalis          GAAACTGGCGAGACTTGAGTGCAGAAGAGGAGAGTGGAATTCCATGTGTAGCGGTGAAATG
Enterococcus faecium           GAAACTGGCGAGACTTGAGTGCAGAAGAGGAGAGTGGAATTCCATGTGTAGCGGTGAAATG
Proteus mirabilis              GAAACTGGTTGGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCATGTGTAGCGGTGAAATG
Escherichia coli               GATACTGGCCAAGCTTGAGTCTCGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATG
Serratia marcescens            GAAACTGGCAAGCTAGAGTCTCGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATG
Enterobacter aerogenes         GAAACTGGCAGGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATG
Enterobacter cloacae           GAAACTGGCAGGCTGGAGTCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATG
Klebsiella pneumoniae          GAAACTGGCAGGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATG
Pseudomonas aeruginosa         AAAACTACTTGAGCTAGAGTCAGTACGGTAGAGGGTGTGGTGGAATTTCCTGTGTAGCGGTGAAATG
Acinetobacter calcoaceticus    CATACTGGAATGGCTAGAGTATGGGAGAGGATGGTAGAATTCCAGGTGTAGCGGTGAAATG
                                * ****     **  ****      **  **    **  *****  *  **********
```

Figure 1 (continued)

```
Staphylococcus aureus          CGCAGAGATATGGAGGAACACCAGTGGCGAAGGCGACTTTCTGGTCTGTAACTGACGCTG
Staphylococcus epidermidis     CGCAGAGATATGGAGGAACACCAGTGGCGAAGGCGACTTTCTGGTCTGTAACTGACGCTG
Streptococcus pneumoniae       CGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGCTTGTAACTGACGCTG
Streptococcus agalactiae       CGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAACTGACGCTG
Streptococcus pyogenes         CGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAACTGACGCTG
Enterococcus faecalis          CGTAGATATATGGAGGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGTAACTGACGCTG
Enterococcus faecium           CGTAGATATATGGAGGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGTAACTGACGCTG
Proteus mirabilis              CGTAGAGATGTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTC
ESCHERICHIA COLI               CGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACGAAGACTGACGCTC
Serratia marcescens            CGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACGAAGAGACTGACGCTC
Enterobacter aerogenes         CGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTC
Enterobacter cloacae           CGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTC
Klebsiella pneumoniae          CGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTC
Pseudomonas aeruginosa         CGTAGATATAGGAAGGAACACCAGTGGCGAAGGCGACCACCTGGACTGATACTGACACTG
Acinetobacter calcoaceticus    CGTAGAGATCTGGAGGAATACCGATGGCGAAGGCAGCCATCTGGCCTAATACTGACGCTG
                               ** *** **  * ***** *** ********  ** ****      ****** **

Staphylococcus aureus          ATGTGCGAAAGCGTGGGGATCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Staphylococcus epidermidis     ATGTGCGAAAGCGTGGGGATCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Streptococcus pneumoniae       AGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACG
Streptococcus agalactiae       AGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Streptococcus pyogenes         AGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Enterococcus faecalis          AGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Enterococcus faecium           AGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Proteus mirabilis              AGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACG
Escherichia coli               AGGTGTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Serratia marcescens            AGGTGCCAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACG
Enterobacter aerogenes         AGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Enterobacter cloacae           AGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Klebsiella pneumoniae          AGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Pseudomonas aeruginosa         AGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
Acinetobacter calcoaceticus    AGGTACGAAAGCATGGGAGCAGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACG
                               * *  * ***** **** *      ********************** ** *******
```

Figure 1 (continued)

```
Staphylococcus aureus              ATGAGTGCTAAGTGTTAGGGGGTTTCCGCCCCTTAGTGCTGCAGCTAACGCATTAAGCAC
Staphylococcus epidermidis         ATGAGTGCTAAGTGTTAGGGGGTTTCCGCCCCTTAGTGCTGCAGCTAACGCATTAAGCAC
Streptococcus pneumoniae           ATGAGTGCTAGGTGTTAGACCCTTTCCGGGGTTTAGTGCCGTAGCTAACGCATTAAGCAC
Streptococcus agalactiae           ATGAGTGCTAGGTGTTAGGCCCTTTCCGGGGCTTAGTGCCGCAGCTAACGCATTAAGCAC
Streptococcus pyogenes             ATGAGTGCTAGGTGTTAGGCCCTTTCCGGGGCTTAGTGCCGGAGCTAACGCATTAAGCAC
Enterococcus faecalis              ATGAGTGCTAAGTGTTGGAGGGTTTCCGCCCTTCAGTGCTGCAGCAAACGCATTAAGCAC
Enterococcus faecium               ATGAGTGCTAAGTGTTGGAGGGTTTCCGCCCTTCAGTGCTGCAGCTAACGCATTAAGCAC
Proteus mirabilis                  ATGTCGATTTAGAGGTTGTGGTCTTG-AACCGTGGCTTCTGGAGCTAACGCGTTAAATCG
Escherichia coli                   ATGTCGACTTGGAGGTTGTGCCCTTG-AGGCGTGGCTTCCGGAGCTAACGCGTTAAGTCG
Serratia marcescens                ATGTCGATTTGGAGGTTGTGCCCTTG-AGGCGTGGCTTCCGGAGCTAACGCGTTAAATCG
Enterobacter aerogenes             ATGTCGACTTGGAGGTTGTGCCCTTG-AGGCGTGGCTTCCGGAGCTAACGCGTTAAGTCG
Enterobacter cloacae               ATGTCGATTTGGAGGTTGTGCCCTTG-AGGCGTGGCTTCCGGAGCTAACGCGTTAAATCG
Klebsiella pneumoniae              ATGTCGATTTGGAGGTTGTGCCCTTG-AGGCGTGGCTTCCGGAGCTAACGCGTTAAATCG
Pseudomonas aeruginosa             ATGTCGACTAGCCGTTGGGATCCTTG-AGATCTTAGTGGCGCAGCTAACGCGATAAGTCG
Acinetobacter calcoaceticus        ATGTTTACTAGCCGTTGGGGCCTTTG-AGGCTTTAGTGGCGCAGCTAACGCGATAAGTAG
                                   ***    *    * * *    **        *    *  * *** *****  ***

Staphylococcus aureus              TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGACCCGCACA
Staphylococcus epidermidis         TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGACCCGCACA
Streptococcus pneumoniae           TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACA
Streptococcus agalactiae           TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACA
Streptococcus pyogenes             TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACA
Enterococcus faecalis              TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACA
Enterococcus faecium               TCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACA
Proteus mirabilis                  ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Escherichia coli                   ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Serratia marcescens                ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Enterobacter aerogenes             ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Enterobacter cloacae               ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Klebsiella pneumoniae              ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Pseudomonas aeruginosa             ACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGCCCGCACA
Acinetobacter calcoaceticus        ACCGCCTGGGGAGTACGGTCGCAAGACTAAAACTCAAATGAATTGACGGGGGCCCGCACA
                                   ********************  ******  * **********  ********************  ********
```

Figure 1 (continued)

```
Staphylococcus aureus          AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAAATCTTGACAT
Staphylococcus epidermidis     AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAAATCTTGACAT
Streptococcus pneumoniae       AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACAT
Streptococcus agalactiae       AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACAT
Streptococcus pyogenes         AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACAT
Enterococcus faecalis          AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACAT
Enterococcus faecium           AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACACGAAGAACCTTACCAGGTCTTGACAT
Proteus mirabilis              AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACAT
Escherichia coli               AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTGGTCTTGACAT
Serratia marcescens            AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACAT
Enterobacter aerogenes         AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACAT
Enterobacter cloacae           AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTGGTCTTGACAT
Klebsiella pneumoniae          AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTGGTCTTGACAT
Pseudomonas aeruginosa         AGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCTGGCCTTGACAT
Acinetobacter calcoaceticus    AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTGGCCTTGACAT
                               ********************** ***** ********************** ********

Staphylococcus aureus          CCTTTGACAACTCTAGAGATAGAGCTTTCCCCTTCGGGGGACAAAGTGACAGGTGGTGCA
Staphylococcus epidermidis     CCTCTGACCCCTCTAGAGATAGAGTTTTCCCCTTCGGGGGACAGAGTGACAGGTGGTGCA
Streptococcus pneumoniae       CCCTCTGACCGCTCTAGAGATAGAGTTTT--CCTTCGGGACAGAGGTGACAGGTGGTGCA
Streptococcus agalactiae       CCTTCTGACCGGCCTAGAGATAGGCTTTC--TCTTCGGAGCAGAAGTGACAGGTGGTGCA
Streptococcus pyogenes         CCCGATGCCCGCTCTAGAGATAGAGTTTT--ACTTCGGTACATCGGTGACAGGTGGTGCA
Enterococcus faecalis          CCTTTGACCACTCTAGAGATAGAGCTTTC--CCTTCGGGGACAAAGTGACAGGTGGTGCA
Enterococcus faecium           CCTTTGACCACTCTAGAGATAGAGCTTCC--CCTTCGGGGGCAAAGTGACAGGTGGTGCA
Proteus mirabilis              CCAGCGAATCCTTTAGAGATAGAGGAGTG--CCTTCGGGAACGCTGAGACAGGTGCTGCA
Escherichia coli               CCACAGAACTTTCCAGAGATGGATTGGTG--CCTTCGGGAACTGTGAGACAGGTGCTGCA
Serratia marcescens            CCAGAGAACTTTCCAGAGATGGATTGGTG--CCTTCGGGAACTCTGAGACAGGTGCTGCA
Enterobacter aerogenes         CCAGAGAACTTAGCAGAGATGCTTTGGTG--CCTTCGGGAACTCTGAGACAGGTGCTGCA
Enterobacter cloacae           CCACAGAACTTTCCAGAGATGGATTGGTG--CCTTCGGGAACTGTGAGACAGGTGCTGCA
Klebsiella pneumoniae          CCACAGAACTTTCCAGAGATGGATTGGTG--CCTTCGGGAACTGTGAGACAGGTGCTGCA
Pseudomonas aeruginosa         GCTGAGAACTTTCCAGAGATGGATTGGTG--CCTTCGGGAACTCAGACACAGGTGCTGCA
Acinetobacter calcoaceticus    ACTAGAAACTTTCCAGAGATGGATTGGTG--CCTTCGGGAATTTAGATACAGGTGCTGCA
                               *                 *  **      *  ******* ****
```

Figure 1 (continued)

```
Staphylococcus aureus          TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Staphylococcus epidermidis     TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Streptococcus pneumoniae       TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCC
Streptococcus agalactiae       TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCC
Streptococcus pyogenes         TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCC
Enterococcus faecalis          TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Enterococcus faecium           TGGTTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Proteus mirabilis              TGGCTGTCGTCAGCTCGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Escherichia coli               TGGCTGTCGTCAGCTCGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Serratia marcescens            TGGCTGTCGTCAGCTCGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Enterobacter aerogenes         TGGCTGTCGTCAGCTCGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Enterobacter cloacae           TGGCTGTCGTCAGCTCGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Klebsiella pneumoniae          TGGCTGTCGTCAGCTCGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
Pseudomonas aeruginosa         TGGCTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGTAACGAGCGCAACCCT
Acinetobacter calcoaceticus    TGGCTGTCGTCAGCTCGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
                               *** ********************* **** ********************** **********

Staphylococcus aureus          TAAGCTTAGTTGCCATCATT--AAGTTGGGCACTCTAAGTTGACTGCCGGTGACAAACCG
Staphylococcus epidermidis     TAAGCTTAGTTGCCATCATT--AAGTTGGGCACTCTAAGTTGACTGCCGGTGACAAACCG
Streptococcus pneumoniae       TATTGTTAGTTGCCATCATT--CAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCG
Streptococcus agalactiae       TATTGTTAGTTGCCATCATT--AAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCG
Streptococcus pyogenes         TATTGTTAGTTGCCATCATT--AAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCG
Enterococcus faecalis          TATTGTTAGTTGCCATCATT--TAGTTGGGCACTCTAGCGAGACTGCCGGTGACAAACCG
Enterococcus faecium           TATTGTTAGTTGCCATCATT--CAGTTGGGCACTCTAGCAAGACTGCCGGTGACAAACCG
Proteus mirabilis              TATCCTTTGTTGCCAGCACGTAATGGTGGGAACTCAAAGGAGACTGCCGGTGATAAACCG
Escherichia coli               TATCTTTGTTGCCAGCGGT-CCGGCCGGGAACTCAAAGGAGACTGCCAGTGATAAACTG
Serratia marcescens            TATCCTTTGTTGCCAGCGGT-TCGGCCGGGAACTCAAAGGAGACTGCCAGTGATAAACTG
Enterobacter aerogenes         TATCCTTTGTTGCCAGCGGT-CCGGCCGGGAACTCAAAGGAGACTGCCAGTGATAAACTG
Enterobacter cloacae           TATCCTTTGTTGCCAGCGGT-CCGGCCGGGAACTCAAAGGAGACTGCCAGTGATAAACTG
Klebsiella pneumoniae          TATCCTTTGTTGCCAGCGGT-TAGGCCGGGAACTCAAAGGAGACTGCCAGTGATAAACTG
Pseudomonas aeruginosa         TGTCCTTAGTTACCAGCACC-TCGGGTGGGCACTCTAAGGAGACTGCCGGTGACAAACCG
Acinetobacter calcoaceticus    TTTCCTTACTTGCCAGCATT-TCGGATGGGAACTTTAAGGATACTGCCAGTGACAAACTG
                               *   **  ** *** *     *  *** *** *   *      ****** ** * **** *
```

Figure 1 (continued)

```
Staphylococcus aureus          GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGATTTGGGCTACACACGTGC
Staphylococcus epidermidis     GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGATTTGGGCTACACACGTGC
Streptococcus pneumoniae       GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGACCTGGGCTACACACGTGC
Streptococcus agalactiae       GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGACCTGGGCTACACACGTGC
Streptococcus pyogenes         GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGACCTGGGCTACACACGTGC
Enterococcus faecalis          GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGACCTGGGCTACACACGTGC
Enterococcus faecium           GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATGACCTGGGCTACACACGTGC
Proteus mirabilis              GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGC
Escherichia coli               GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGACCAGGGCTACACACGTGC
Serratia marcescens            GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGC
Enterobacter aerogenes         GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGC
Enterobacter cloacae           GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGACCAGGGCTACACACGTGC
Klebsiella pneumoniae          GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGACCAGGGCTACACACGTGC
Pseudomonas aeruginosa         GAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGGCCAGGGCTACACACGTGC
Acinetobacter calcoaceticus    GAGGAAGGCGGGGACGACGTCAAGTCATCATGGCCCTTACGGCCAGGGCTACACACGTGC
                               ********** ***** ********** ********** *      **********

Staphylococcus aureus          TACAATGGACAATACAAAGGGCAGCGAAACCGTGAGGTCAAGCAAATCCCATAAAGTTGT
Staphylococcus epidermidis     TACAATGGACAATACAAAGGGCAGCGAAACCGCGAGGTCAAGCAAATCCCATAAAGTTGT
Streptococcus pneumoniae       TACAATGGCTGGTACAACGAGTCGCAAGCCGGTGACGGCAAGCTAATCTCTTAAAGCCAG
Streptococcus agalactiae       TACAATGGTTGGTACAACGAGTCGCAAGCCGGTGACGGCAAGCTAATCTCTTAAAGCCAA
Streptococcus pyogenes         TACAATGGTTGGTACAACGAGTCGCAAGCCGGTGACGGCAAGCTAATCTCTTAAAGCCAA
Enterococcus faecalis          TACAATGGGAAGTACAACGAGTCGCTAGACCGCGAGGTCATGCAAATCTCTTAAAGCTTC
Enterococcus faecium           TACAATGGGAAGTACAACGAGTTGCGAAGTCGCGAGGCTAAGCTAATCTCTTAAAGCTTC
Proteus mirabilis              TACAATGGCAGATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGAACTCATAAAGTCTG
Escherichia coli               TACAATGGCGCATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTGCG
Serratia marcescens            TACAATGGCATATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTATG
Enterobacter aerogenes         TACAATGGCATATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTATG
Enterobacter cloacae           TACAATGGCGCATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTGCG
Klebsiella pneumoniae          TACAATGGCATATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTATG
Pseudomonas aeruginosa         TACAATGGTCGGTACAAAGGGTTGCCAAGCCGCGAGGTGGAGCTAATCCCATAAAAACCGA
Acinetobacter calcoaceticus    TACAATGGTCGGTACAAAGGGTTGCTACCTAGCGATAGGATGCTAATCTCAAAAAGCCGA
                               *********    ***** * *  ** *   * **      **  * * *  ***
```

Figure 1 (continued)

```
Staphylococcus aureus                TCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGT
Staphylococcus epidermidis           TCTCAGTTCGGATTGTAGTCTGCAACTCGACTATATGAAGCTGGAATCGCTAGTAATCGT
Streptococcus pneumoniae             TCTCAGTTCGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAATCGCTAGTAATCGC
Streptococcus agalactiae             TCTCAGTTCGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAATCGCTAGTAATCGC
Streptococcus pyogenes               TCTCAGTTCGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAATCGCTAGTAATCGC
Enterococcus faecalis                TCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGCCGGAATCGCTAGTAATCGC
Enterococcus faecium                 TCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGCCGGAATCGCTAGTAATCGC
Proteus mirabilis                    TCGTAGTCCGGATTGGAGTCTGCAACTCCATGAAGTCGGAATCGCTAGTAATCGT
Escherichia coli                     TCGTAGTCCGGATTGGAGTCTGCAACTCCATGAAGTCGGAATCGCTAGTAATCGT
Serratia marcescens                  TCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGT
Enterobacter aerogenes               TCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGT
Enterobacter cloacae                 TCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGT
Klebsiella pneumoniae                TCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGT
Pseudomonas aeruginosa               TCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGAATCGCTAGTAATCGT
Acinetobacter calcoaceticus          TCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGC
                                     **  *** ***** * ** ********** **   *****  **********  *********

Staphylococcus aureus                AGATCAGCATGCTACGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCAC
Staphylococcus epidermidis           AGATCAGCATGCTACGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCAC
Streptococcus pneumoniae             GGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAC
Streptococcus agalactiae             GGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAC
Streptococcus pyogenes               GGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAC
Enterococcus faecalis                GGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAC
Enterococcus faecium                 GGATCAGCACGCCGC-GTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAC
Proteus mirabilis                    AGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Escherichia coli                     GGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Serratia marcescens                  AGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Enterobacter aerogenes               AGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Enterobacter cloacae                 AGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Klebsiella pneumoniae                AGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Pseudomonas aeruginosa               GAATCAGAATGTCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
Acinetobacter calcoaceticus          GGATCAGAATGCCC--GGTGATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCAT
                                       ******  * *     *   ********************  **********  *********
```

Figure 1 (continued)

```
Staphylococcus aureus          GAGAGTTTGTAACACCCGAAGCCGGTGGAGTAACCTTTTAGGAGCTAGCCGTCGAAGGTG
Staphylococcus epidermidis     GAGAGTTTGTAACACCCGAAGCCGGTGGAGTAACCATT-TGGAGCTAGCCGTCGAAGGTG
Streptococcus pneumoniae       GAGAGTTTGTAACACCCGAAGTCGGTGAGGTAACCG-TAAGGAGCCAGCCGCCTAAGGTG
Streptococcus agalactiae       GAGAGTTTGTAACACCCGAAGTCGGTGAGGTAACCTTTTAGGAGCCAGCCGCCTAAGGTG
Streptococcus pyogenes         GAGAGTTTGTAACACCCGAAGTCGGTGAGGTAACCTATTAGGAGCCAGCCGCCTAAGGTG
Enterococcus faecalis          GAGAGTTTGTAACACCCGAAGTCGGTGAGGTAACCTTTTTGGAGCCAGCCGCCTAAGGTG
Enterococcus faecium           GAGAGTTTGTAACACCCGAAGTCGGTGAGGTAACCTTT-TGGAGCCAGCCGCCTAAGGTG
Proteus mirabilis              GGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTC-GGGAGGGCGCTTACCACTTTG
Escherichia coli               GGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTC-GGGAGGGCGCTTACCACTTTG
Serratia marcescens            GGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTC-GGGAGGGCGCTTACCACTTTG
Enterobacter aerogenes         GGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTC-GGGAGGNCGCTTTACCACTT-
Enterobacter cloacae           GGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTC-GGGAGGGCGCTTACCACTTTG
Klebsiella pneumoniae          GGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTC-GGGAGGGCGCTTACCACTTTG
Pseudomonas aeruginosa         GGGAGTGGGTTGCTCCAGAAGTAGCTAGTCTAACCGCA-AGGGGGACGGTTACCACGGAG
Acinetobacter calcoaceticus    GGGAGTTTGTTGCACCAGAAGTAGGTAGTCTAACCGCA-AGGAGGACGCTTACCACGGTG
                               * ***** **  *     ****  * *     *****     ** *   *

Staphylococcus aureus          GGACAAATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATC
Staphylococcus epidermidis     GGACAAATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATC
Streptococcus pneumoniae       GGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAG----------------
Streptococcus agalactiae       GGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGG---------------
Streptococcus pyogenes         GGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATC
Enterococcus faecalis          GGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCC----------------------------
Enterococcus faecium           GGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCTGAAGGTGCGGCTGGATC
Proteus mirabilis              TGATTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGTTGGATC
Escherichia coli               TGATTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGTTGGATC
Serratia marcescens            TGATTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGG--------
Enterobacter aerogenes         ---------------------------------------------------------
Enterobacter cloacae           TGATTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGCTGGATC
Klebsiella pneumoniae          TGATTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGTTGGATC
Pseudomonas aeruginosa         TGATTCATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAGGGGAACCTGCGGCTGGATC
Acinetobacter calcoaceticus    TGGCCGATGACTGGGGTGAAGTCGTAACAAGGTAACCA-----------------------
```

Figure 1 (continued)

```
Staphylococcus aureus                ACCTCCTTTCT
Staphylococcus epidermidis           ACCTCCTTTCT
Streptococcus pneumoniae             ----------
Streptococcus agalactiae             ----------
Streptococcus pyogenes               ACCTCCTTT--
Enterococcus faecalis                ----------
Enterococcus faecium                 ACCTCCTTT--
Proteus mirabilis                    ACCTCCTTA--
Escherichia coli                     ACCTCCTTA--
Serratia marcescens                  ----------
Enterobacter aerogenes               ----------
Enterobacter cloacae                 ACCTCCTTG--
Klebsiella pneumoniae                ACCTCCTTT--
Pseudomonas aeruginosa               ACCTCCTTA--
Acinetobacter calcoaceticus          ----------
```

Figure 1 (continued)

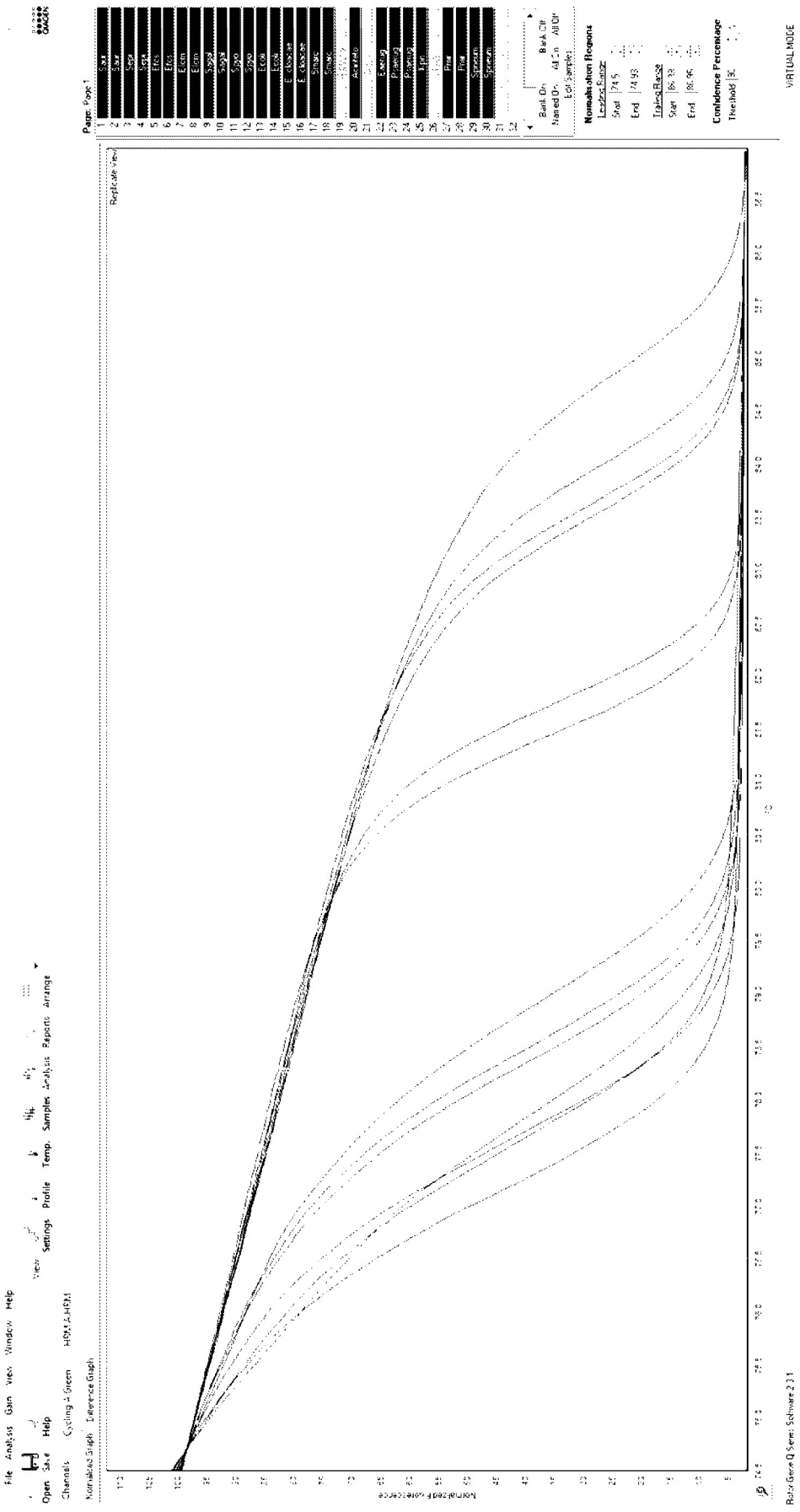


Figure 2

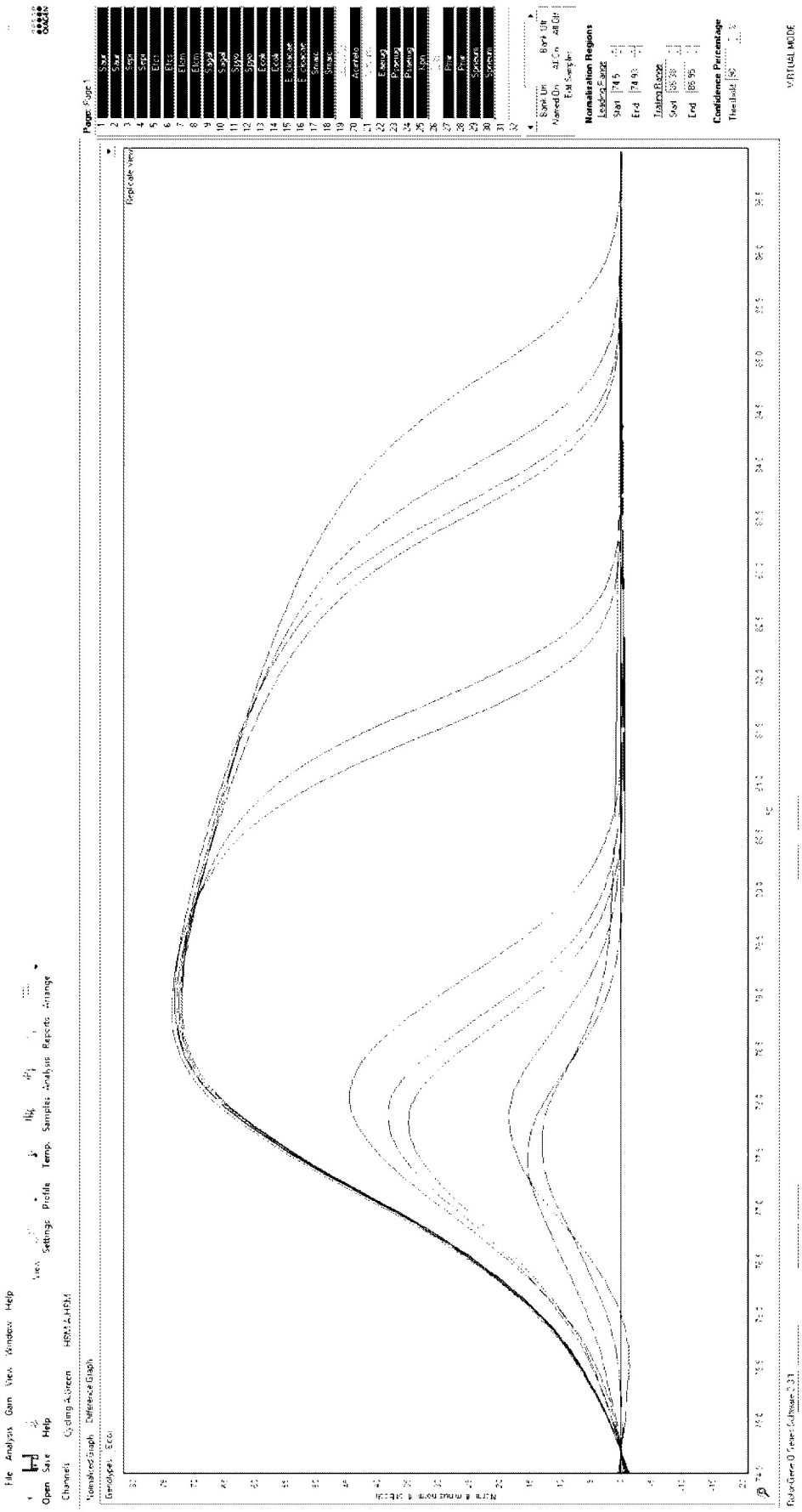


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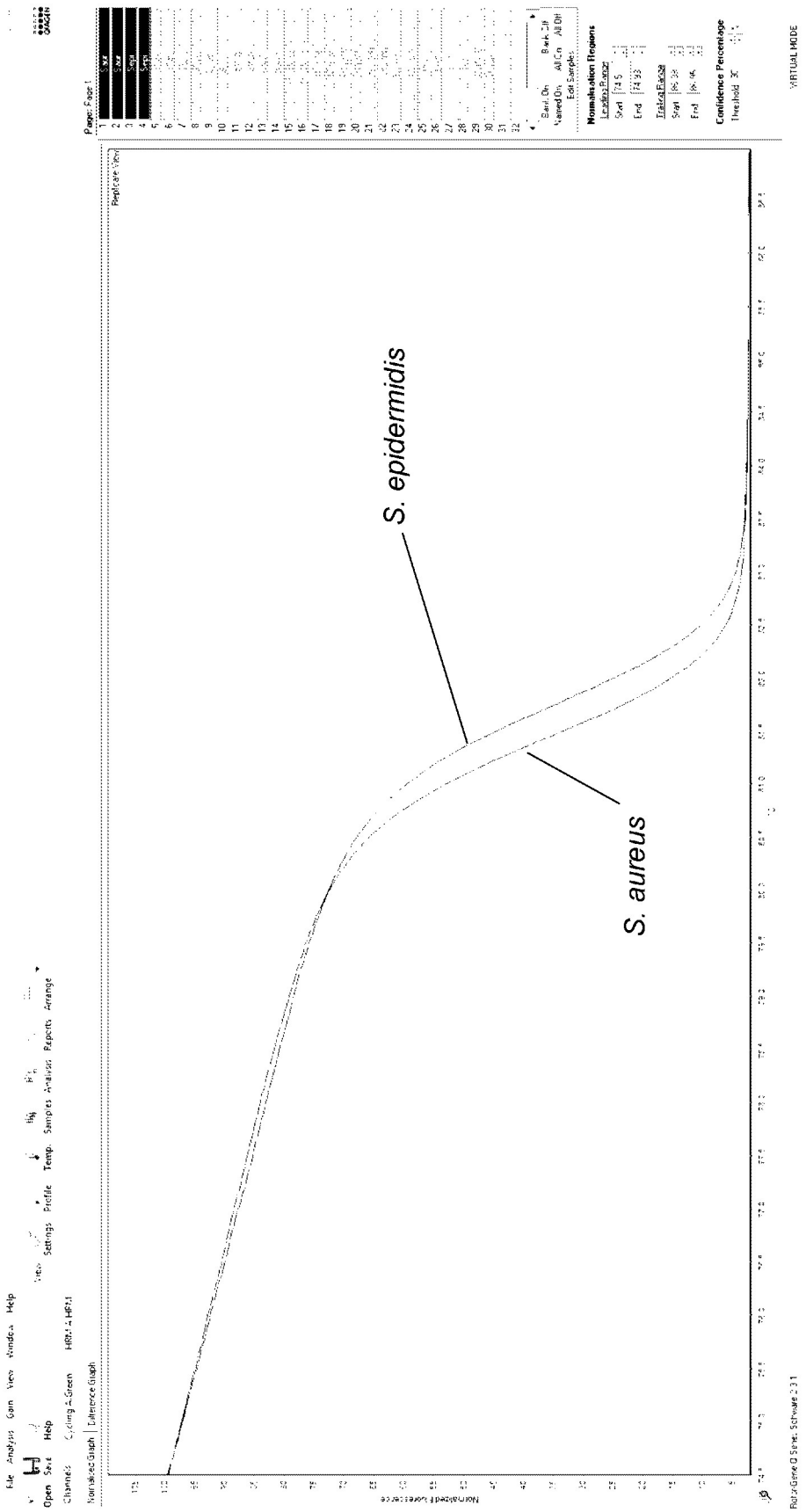


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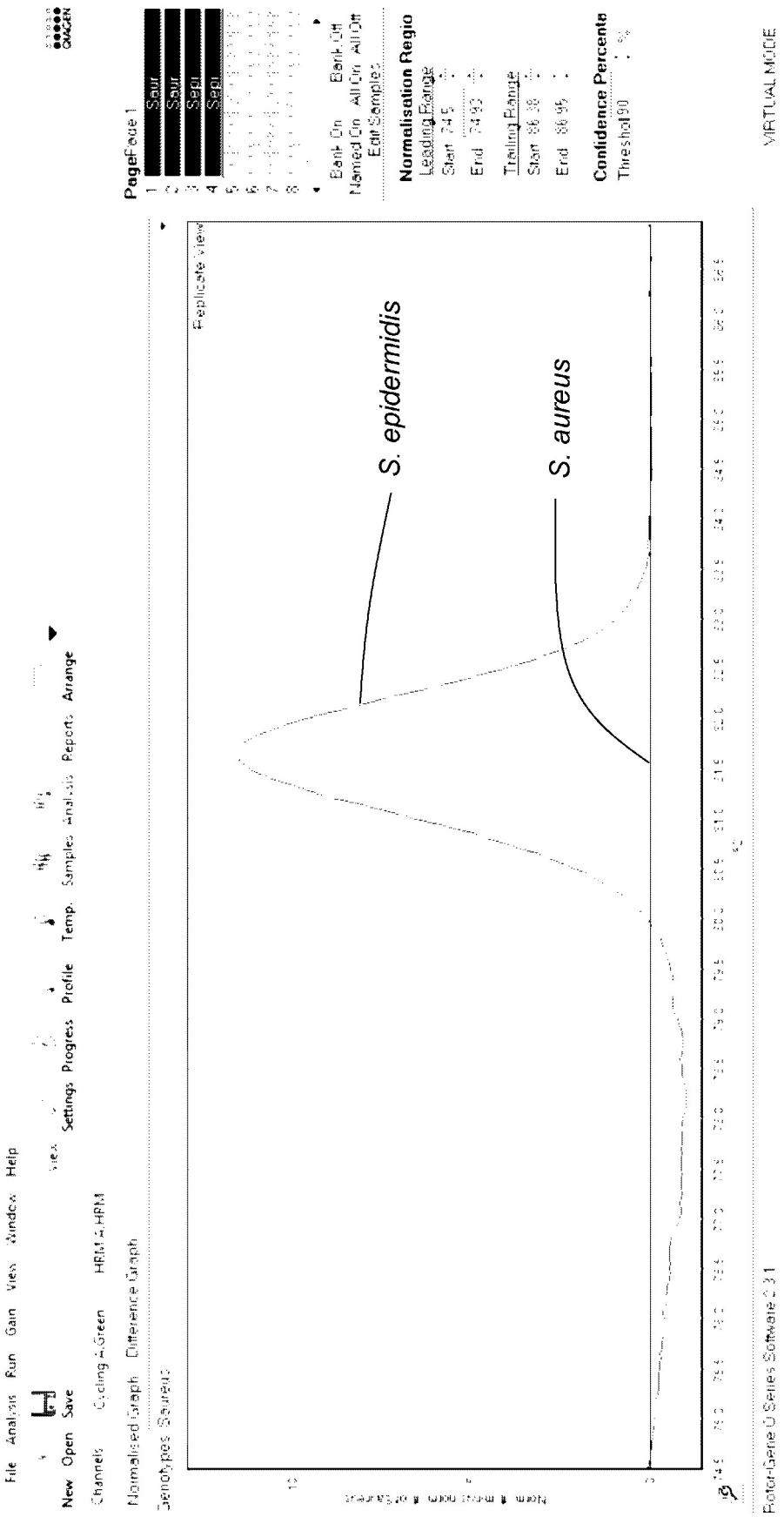

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New Open Save
Settings Progress Profile Temp. Samples Analysis Reports Arrange
Channels Cycling A.Green HRM 1-HRM
Normalised Graph Difference Graph
Genotypes Sequence
Replicate View
S. epidermidis
S. aureus
Page Page 1
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Bank On Bank Off
Named On All On All Off
Edit Samples
Normalisation Regio
Leading Range
Trailing Range
Confidence Percente
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 5

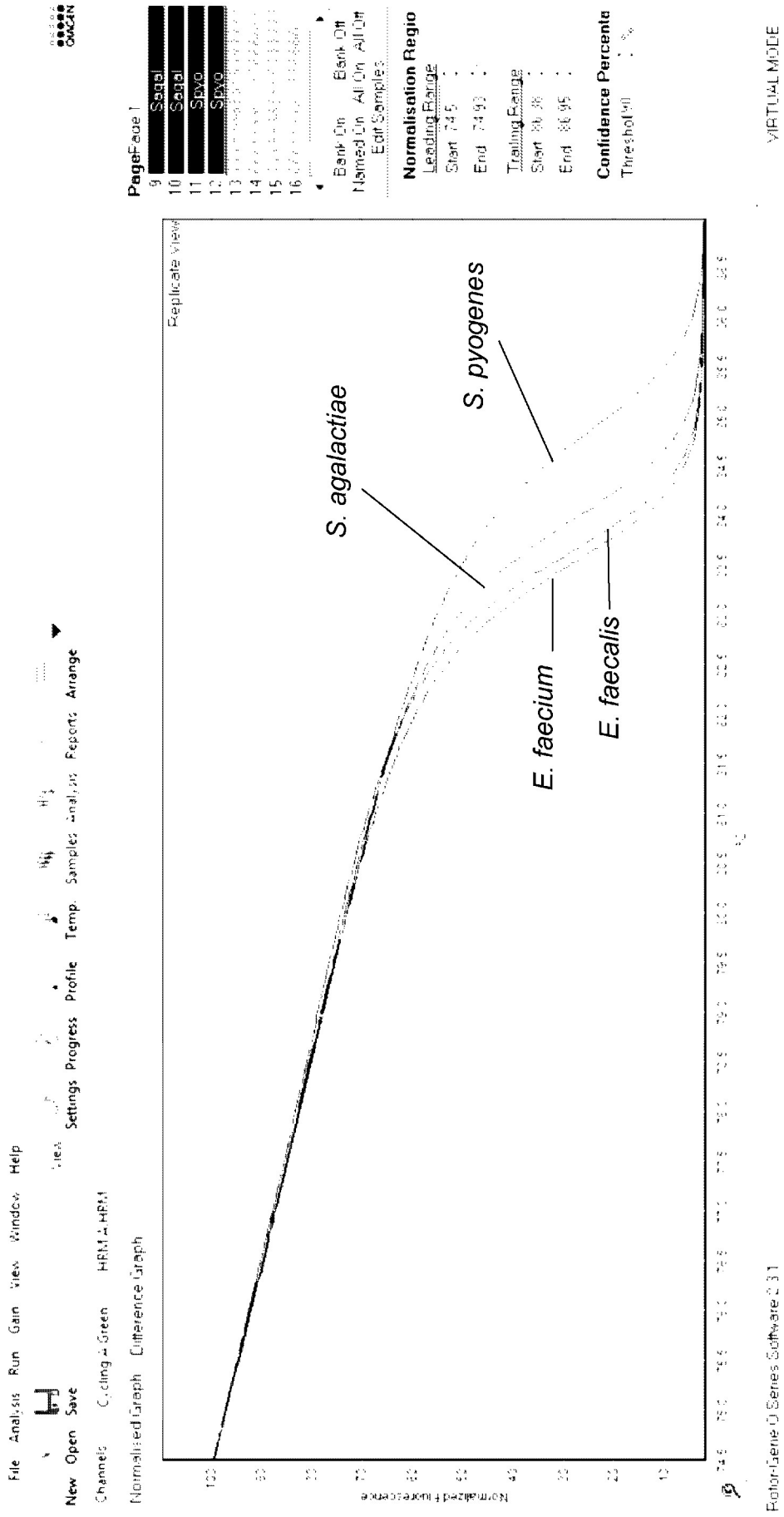

S. agalactiae
S. pyogenes
E. faecium
E. faecalis
Replicate View
Normalized Fluorescence
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 6

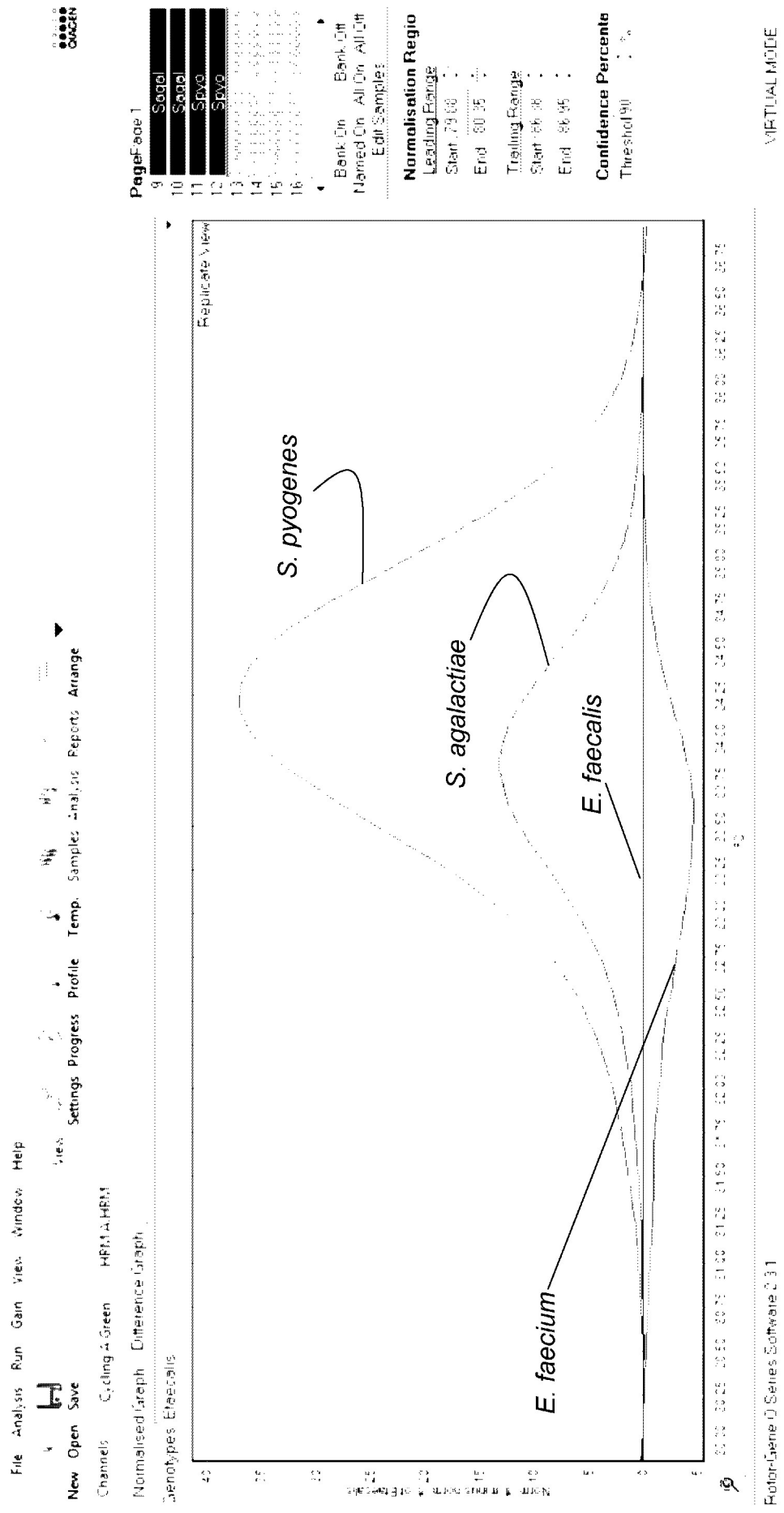


Figure 7

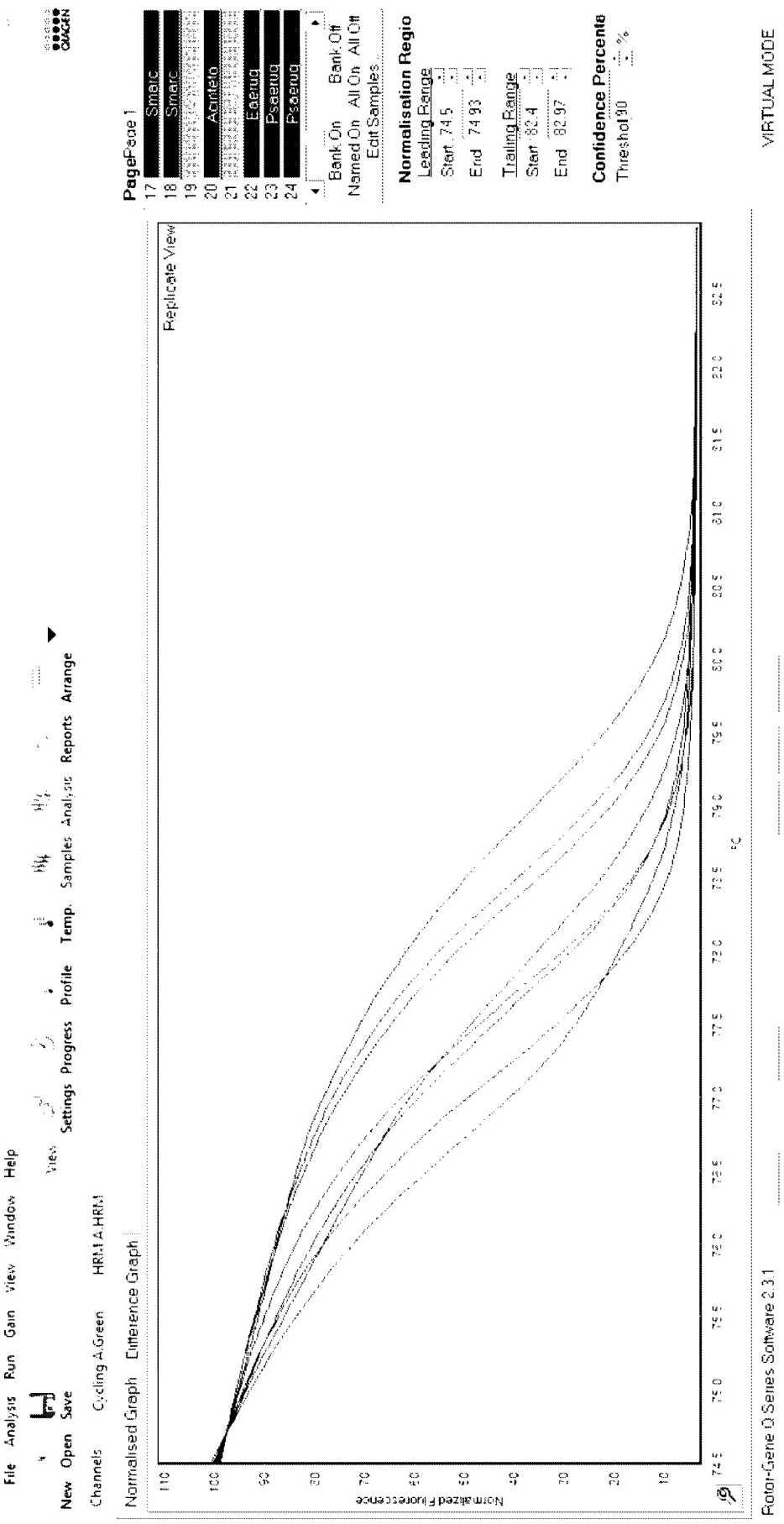

File Analysis Run Gain View Window Help
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Normalised Graph Difference Graph
Replicate View
Normalized Fluorescence
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Smarc
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Pseerug
Pseerug
Bank On Bank Off
Named On All On All Off
Edit Samples
Normalisation Regio
Leading Range
Start 74.5
End 74.93
Trailing Range
Start 82.4
End 82.97
Confidence Percente
Threshol 90 %
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 8

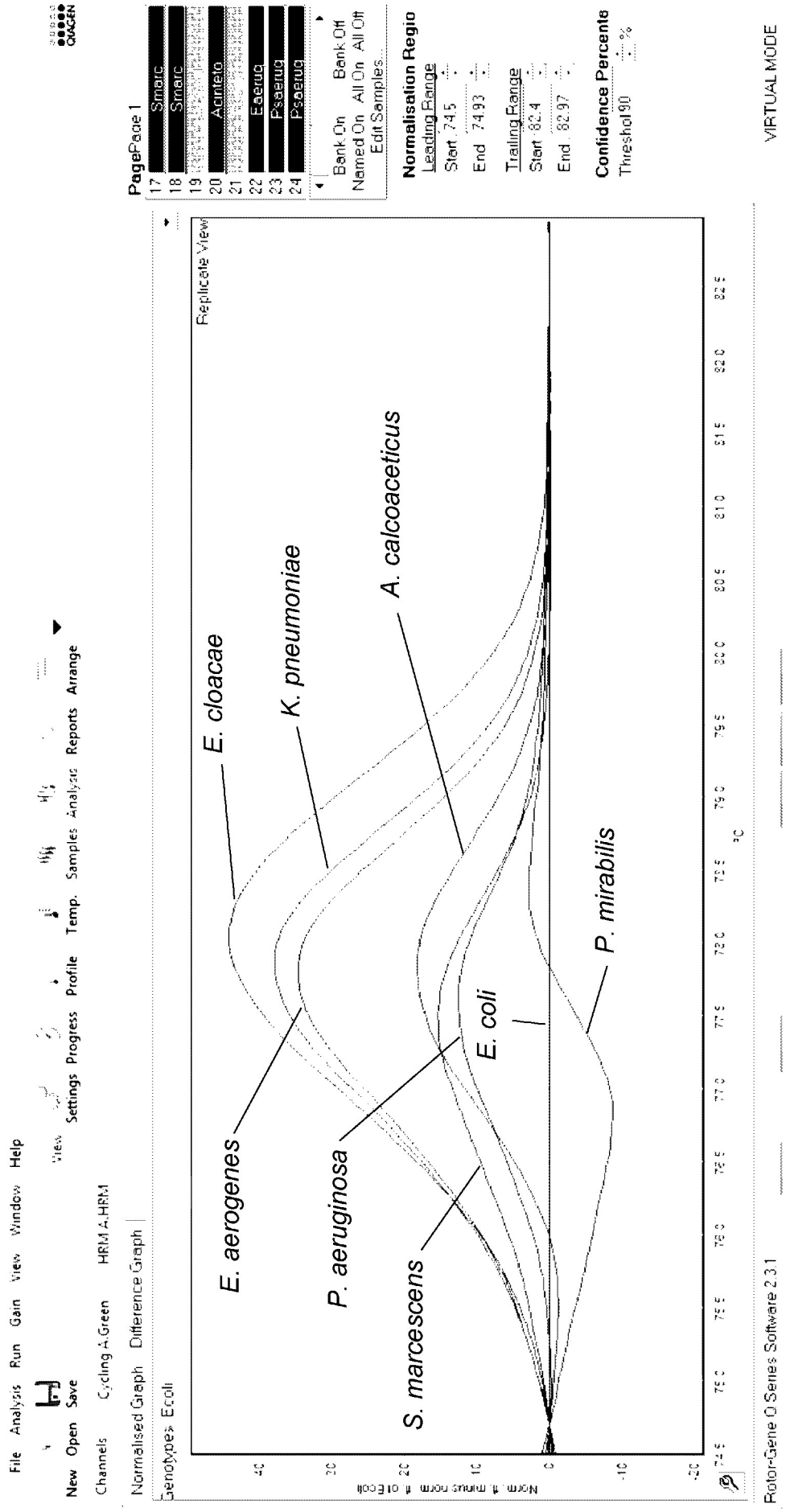

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Normalised Graph Difference Graph
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Replicate View
E. cloacae
K. pneumoniae
A. calcoaceticus
E. aerogenes
P. aeruginosa
E. coli
S. marcescens
P. mirabilis
Norm. à Mmes norm. à oEcoli
°C
Page Page 1
Smarc
Smarc
Acineto
Eaerug
Paerug
Paerug
Bank On Bank Off
Named On All On All Off
Edit Samples
Normalisation Regio
Leading Range
Start 74.5
End 74.93
Trailing Range
Start 82.4
End 82.97
Confidence Percente
Threshol 90 %
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 9

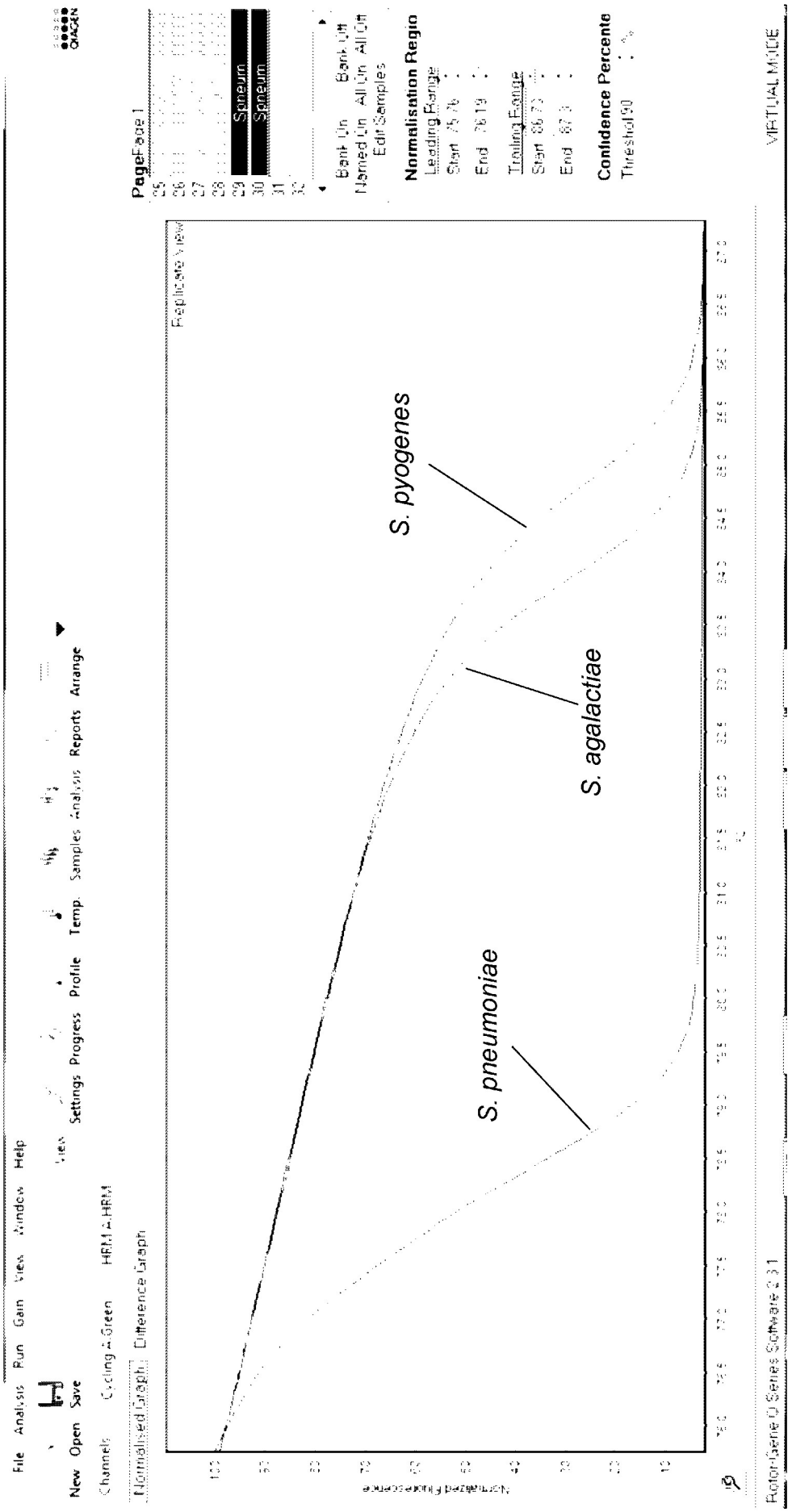


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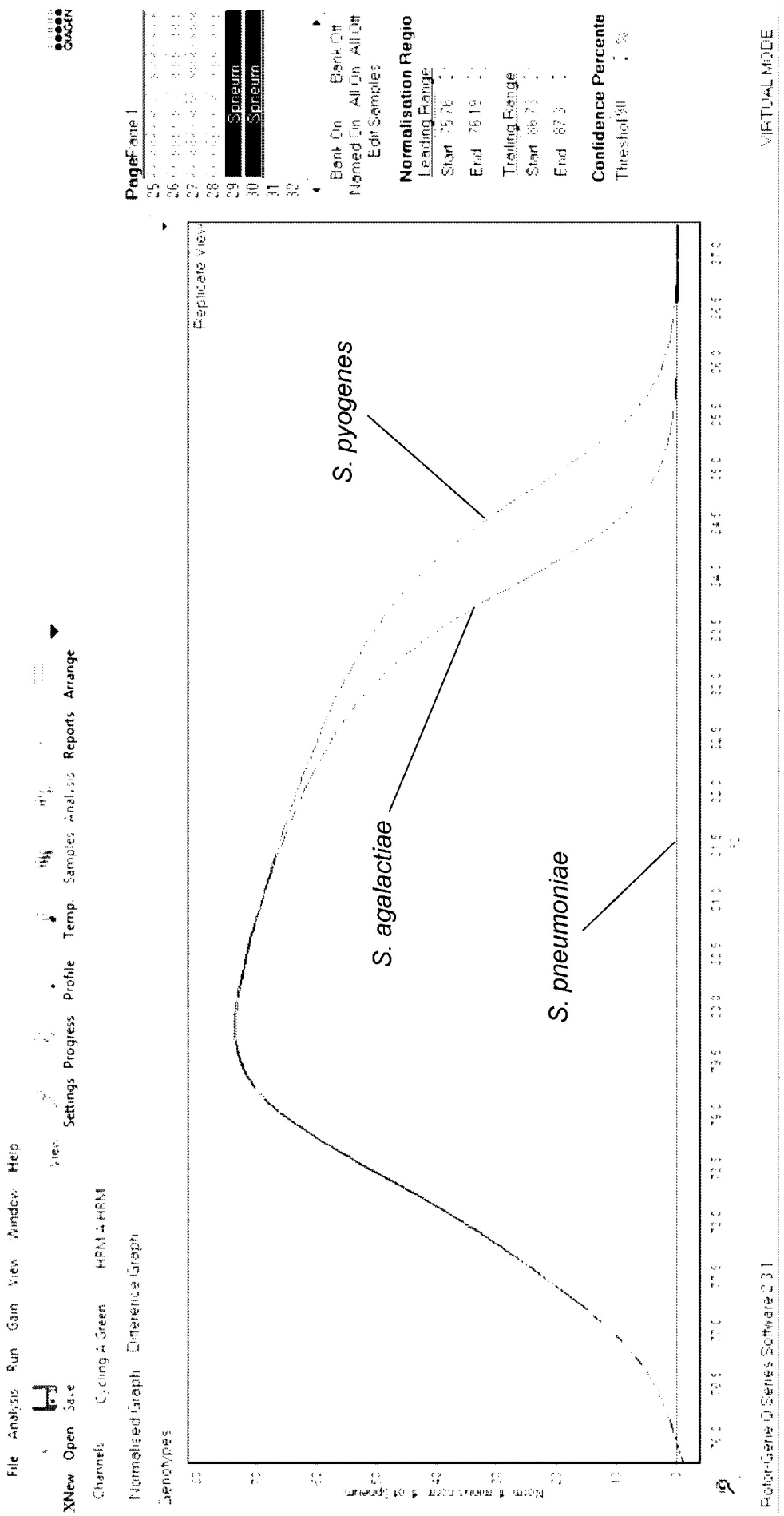

File Analysis Run Gain View Window Help
XNew Open Save
Settings Progress Profile Temp. Samples Analysis Reports Arrange
Channels Cycling A Green HRM A HRM
Normalised Graph Difference Graph
Genotypes
Replicate View
S. pyogenes
S. agalactiae
S. pneumoniae
Page Page 1
Spneum
Spneum
Bank On Bank Off
Named On All On All Off
Edit Samples
Normalisation Regio
Leading Range
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End 76.19
Trailing Range
Confidence Percente
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 11

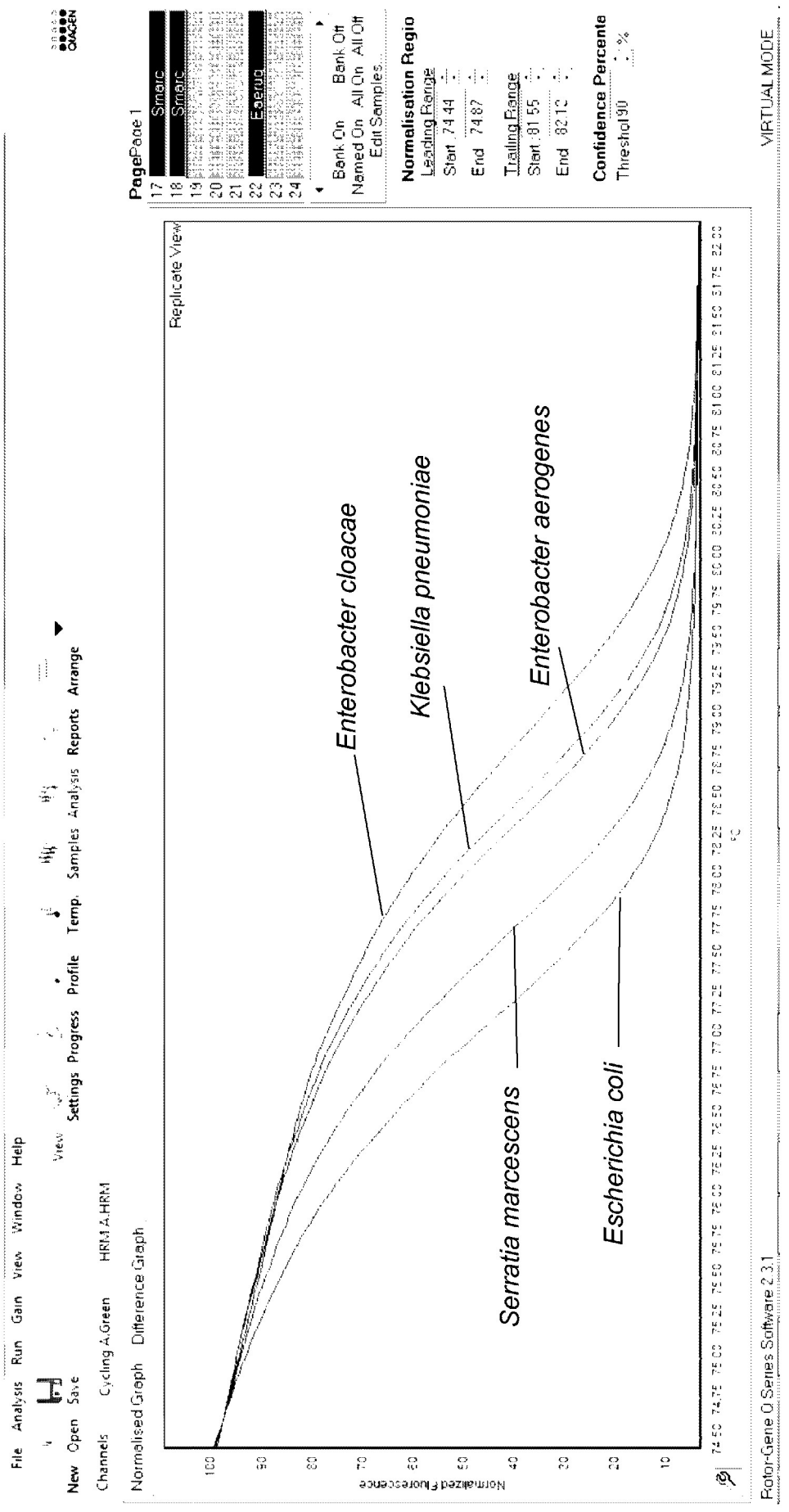

File Analysis Run Gain View Window Help
New Open Save
Settings Progress Profile Temp. Samples Analysis Reports Arrange
Channels Cycling A.Green HRM A.HRM
Normalised Graph Difference Graph
Replicate View
Enterobacter cloacae
Klebsiella pneumoniae
Enterobacter aerogenes
Serratia marcescens
Escherichia coli
Normalized Fluorescence
Page Page 1
Bank On Bank Off
Named On All On All Off
Edit Samples
Normalisation Regio
Leading Range
Start 74 44
End 74 87
Trailing Range
Start 81 55
End 82 12
Confidence Percente
Thresh 90 %
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 12

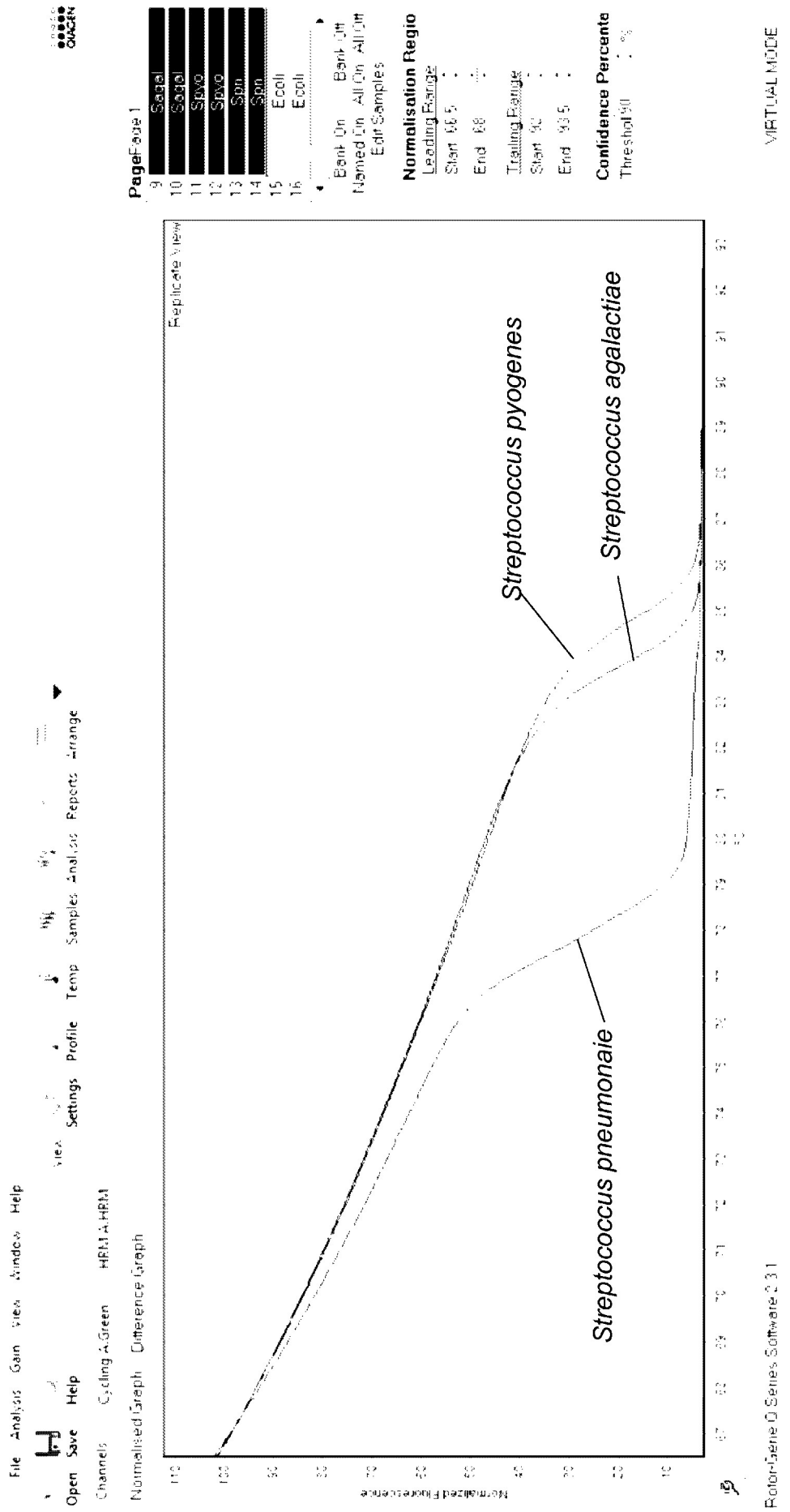

Streptococcus pyogenes
Streptococcus agalactiae
Streptococcus pneumonaie
Replicate View
Normalised Graph Difference Graph
Rotor-Gene Q Series Software 2.3.1
VIRTUAL MODE

Figure 13