

>53TVGPR82|gb|CE02DLCKS|Mnola|Unknown Mycoplasmataceae

AGAGTTTGTATCCTGGCTCAGGATTAACGCTAGCGGTATGCCTAATACATGCAAGTCGAGCGGAGGTAGCAATA
CCTTAGCGGCGAACGGGTGAGTAATACGTATCTAATCTGCCCTTTAGAAAGGAACAACAGATCGAAAGATTTG
CTAATACCTTATATGATATACATTTCGCATGAAAGTATATTTAAAGTTGCGTTTGCAACGCTTTAGGATGAGGG
TGCGGTTTATCAGATAGTTGGTGAGGTAATGGCTCACCAAGTCAATGACGAATAGCTATGCTGAGAGGTAGAA
TAGCCACAAGGGGACTGAGACACGGCCCCTACTCCTACGGGAGGCAGCAGTAGGGAATTTTTACAATGGGCG
AAAGCCTGATGGAGCAATACCGCGTGAATGATGAAGGTCTTCGGATTGTAATAATTCTTTTATTAGGGACGAAC
GGCACTAAGAGGAAATGCTTAGTGATTGACTGTACCTATTGAATAAGTAACGGCAAACCTATGTGCCAGCAGCC
GCGGTAATACATAGGTTACAAGCGTTATCCGGATTTACTGGGCGTAAAGCGAGCGCAGGCTGATTAACAAGTC
TAGTGTGAAATGCAGTTGCTTAACAACCTGTTTGCATTGGAACTGTTAGTCTGGAGTGTGATAGGGAGTTCTG
GAACTCCATATGGAGCGGTGGAATGCGTAGATATATGGAAGAACACCTGTGGCGAAAGCGAGAACCTTAGGTCA
CAACTGACGCTTAGGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGA
TGGTTATTAGTTGTTGGTACGAAGTACTAGTAACGAAGCTAACGCATTAAATAACCCGCCTGGGTAGTACATT
CGCAAGAATGAACTCAAACGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTTGTTTAATTCGACAGT
ACACGAAGAACCTTACCAGGGTTTGACATCCTCGGCAAAGCTATAGAAATATAGTGGAGGTTAACCGAGAGAC
AGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTAT
TGTTAGTTACTTTATCTAACGAGACTGCTAACGCAAGTTAGAGGAAGGTGGGGATGACGTCAAATCATCATGC
CCTTTATATCCTGGGCCACAAACGTGCTACAATGGTTGGTACAACTGTTGCCAAACTGTAAAGTGGAGCTAA
TCAGAAAAAACCAATCTCAGTTCGGATTGAGGGCTGAAATTCGTCCTCATGAAGTTGGAATCACTAGTAATCG
CGAATCAGACATGTCGCGGTGAATGCGTTCTCGGGTCTTGTACACACCGCCCGTCAAACCTATGAGAGTCGTTA
ATACCTAAAACCGTCCTGCTAACCGTAAGGGAGCGGATGTCTAGGGTAGGAATGATGATTGGAGTTAAGTCGT
ACAAGGTAACC

>119352238|gb|EF120361.1|L.iners|Uncultured Lactobacillus sp. clone

MZH0805-46 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTCTGCCTTGAAGATCGGAGTGCTTGCA
CTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACACGTGGGTAACCTGCCCAAGAGATCG
GGATAACACCTGGAAACAGATGCTAATACCGGATAACAACAGATGATGCCTATCAACTGTTTAAAAGATG
GTTCTGCTATCACTCTTGATGGACCTGCGGTGCATTAGCTAGTTGGTAGGGTAACGGCCTACCAAGGCG
ATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCCAACTCCTACGGG
AGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAGGAAGGG
TTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGGGGTAGTAACCTGACCTTTGTTTGACGGTAA
TCAATTAGAAAGTCACGGCTAACTACGTGCCAGTAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGG
ATTTATTGGGCGTAAAGCGAGTGCAGGCGGCTCGATAAGTCTGATGTGAAAGCCTTCGGCTCAACCGGAG
AATTGCATCAGAACTGTTCGAGCTTGAGTACAGAAGAGGAGAGTGGAACCTCCATGTGTAGCGGTGAAATG
CGTAGATATATGGAAGAACACCGGTGGCGAAGGCGGCTCTCTGGTCTGTTACTGACGCTGAGGCTCGAAA
GCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGA
GGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGA
AACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGA
ACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATTAGATGTTCCCTTCGGGGACTATGAGACAG
GTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCGACGAGCGCAACCCCTTG
TCATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAACTGGAGGAAGGTGGGGA
TGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTGCACACGTGCTACAATGGACGGTACAACGAGAAG
CGACCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTCCGATTGCAGGCTGCAACTCGCCTGC
ATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTGAATACGTTCCCGGGCCTTGTAACA
CCGCCCCGTACACCATGAGAGTCTGTAACGCCCGAAGCCGGCGGGATAACCGAAAGGAGTCAGCCGTCTA
AGGCGGGACAGATGATTAGGGTG

>42521630|gb|AY526083.1|L.iners|Lactobacillus iners 16S ribosomal RNA
gene, partial sequence

GACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTCTGCCTTGAAGATCGGAGTGCTTGCA
CTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACACGTGGGTAACCTGCCCAAGAGATCG
GGATAACACCTGGAAACAGATGCTAATACCGGATAACAACAGATGATGCCTATCAACTGTTTAAAAGATG
GTTCTGCTATCACTCTTGATGGACCTGCGGTGCATTAGCTAGTTGGTAGGGTAACGGCCTACCAAGGCG
ATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCCAACTCCTACGGG
AGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGG

TTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGGGGTAGTAACTGACCTTTGTTTGACGGTAA
TCAATTAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGG
ATTTATTGGGCGTAAAGCGAGTGCAGGCGGCTCGATAAGTCTGATGTGAAAGCCTTCGGCTCAACCGGAG
AATTGCATCAGAACTGTGAGCTTGAGTACAGAAGAGGAGAGTGGAACTCCATGTGTAGCGGTGAAATG
CGTAGATATATGGAAGAACACCGGTGGCGAAGGCGGCTCTCTGGTCTGTTACTGACGCTGAGGCTCGAAA
GCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGA
GGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGA
AACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTGCAAGCAACGCGAAGA
ACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATTAGATGTTCCCTTCGGGGACTATGAGACAG
GTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTG
TCATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGA
TGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGACGGTACAACGAGAAG
CGACCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGC
ATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTGAATACGTTCCCGGGCCTTGTACACA
CCGCCCGTCACACCATGAGAGTCTGTAACGCCCGAAGCCGGCGGGATAACCGAAAGGAGTCAGCCGTCTA
AGGCGGGAC

>66878605|gb|AY958899.1|L.iners|Uncultured bacterium clone rRNA126 16S
ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGT
CTGCCTTGAAGATCGGAGTGCTTGCACTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAAC
ACGTGGGTAACTGCCCCAAGAGATCGGGATAACACCTGGAACAGATGCTAATACCGGATAACAACAGAT
GATGCCTATCAACTGTTTAAAAGATGGTTCTGCTATCACTCTTGGATGGACCTGCGGTGCATTAGCTAGT
TGGTAGGGTAACGGCCTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGAC
TGAGACACGGCCCCAACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGG
AGCAACGCCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGGGGT
AGTAACTGACCTTTGTTTGACGGTAATCAATTAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTA
ATACGTAGGTGGCAAGCGTTGTCCGATTTATTGGGCGTAAAGCGAGTGCAGGCGGCTCGATAAGTCTGA
TGTGAAAGCCTTCGGCTCAACCGGAGAATTGCATCAGAAACTGTGAGCTTGAGTACAGAAGAGGAGAGT
GGAATCCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGGCTCTCTGG
TCTGTTACTGACGCTGAGGCTCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCG
TAAACGATGAGTGCTAAGTGTGGGAGGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCG
CCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATG
TGGTTTAATTGCAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATTAGA
TGTTCCCTTCGGGGACTATGAGACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGT
AAGTCCCGCAACGAGCGCAACCCCTTGTCATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCC
GGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGT
GCTACAATGGACGGTACAACGAGAAGCGACCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTT
CGGATTGCAGGCTGCAACTCGCCTGCATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGT
GAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTCTGTAACGCCCGAAGCCGGCGG
GATAACCGAAAGGAGTCAGCCGTCTAAGGCGGGACAGATGATTAGGTTGAAGTCGTAACAAGGTAACCGT
AAAGGGC

>310975118|ref|NR_036982.1|L.iners|Lactobacillus iners strain DSM 13335
16S ribosomal RNA, partial sequence

TGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTCTGCCTTGAAGATCGGAG
TGCTTGCACTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACACGTGGGTAACTGCCCA
AGAGATCGGGATAACACCTGGAAACAGATGCTAATACCGGATAACAACAGATGATGCCTATCAACTGTTT
AAAAGATGGTTCTGCTATCACTCTTGGATGGACCTGCGGTGCATTAGCTAGTTGGTAGGGTAACGGCCTA
CCAACGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCCAACT
CCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTG
AGAAGGGTTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGGGGTAGTAACTGACCTTTGTTT
GACGGTAATCAATTAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCG
TTGTCCGATTTATTGGGCGTAAAGCGAGTGCAGGCGGCTCGATAAGTCTGATGTGAAAGCCTTCGGCTC
AACCGGAGAATTGCATCAGAACTGTGAGCTTGAGTACAGAAGAGGAGAGTGGAACTCCATGTGTAGCG
GTGAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGGCTCTCTGGTCTGTTACTGACGCTGAG

GCTCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAG
TGTTGGGAGGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGC
AAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAA
CGCGAAGAACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATTAGATGTTCCCTTCGGGGACTA
TGAGACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGC
AACCCTTGTCATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAA
GGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGACGGTACA
ACGAGAAGCGACCCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTCCGATTGCAGGCTGCAAC
TCGCCTGCATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTGAATACGTTCCCGGGCCT
TGTACACACCGCCCGTCACACCATGAGAGTCTGTAACGCCCGAAGCCGGCGGGATAACCGAAAGGAGTCA
GCCGTCTAAGGCGGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAGCCGTAGGAGAACCTGCGGCTG
>66878566|gb|AY958860.1|L.iners|Uncultured bacterium clone rRNA087 16S
ribosomal RNA gene, partial sequence

TTCCGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCG
AGTCTGCCTTGAAGATCGGAGTGCTTGCCTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGT
AACACGTGGGTAACCTGTCCAAGAGATCGGGATAACACCTGGAAACAGATGCTAATACCGGATAACAACA
GGTGATGCCTATCAACTGTTTAAAAGATGGTTCTGCTATCACTCTTGATGGACCTGCGGTGCATTAGCT
AGTTGGTAGGGTAACGGCCTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGCCACATTGG
GACTGAGACACGGCCCAAACCTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGA
TGGAGCAACGCCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGG
GGTAGTAAGTACCTTTGTTTGACGGTAATCAATTAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCG
GTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGTGCAGGCGGCTCGATAAGTC
TGATGTGAAAGCCTTCGGCTCAACCGGAGAATTGCATCAGAACTGTTCGAGCTTGAGTACAGAAGAGGAG
AGTGGAAGTCCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGGCTCTC
TGGTCTGTTACTGACGCTGAGGCTCGAAAGCATGGGCAGCGAACAGGATTAGATACCCTGGTAGTCCATG
CCGTAAACGATGAGTGCTAAGTGTTGGGAGGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACT
CCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGGCCGACAAAGCGGTGGAGC
ATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATT
AGATGTTCCCTTCGGGGACTATGAGACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGTTGG
GTTAAGTCCCGCAACGAGCGCAACCCTTGTCATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACT
GCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACA
CGTGCTACAATGGACGGTACAACGAGAAGCGACCCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCA
GTTCCGATTGCAGGCTGCAACTCGCCTGCATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGC
GGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTCTGTAACGCCCGAAGCCGG
CGGGATAACCGAAAGGAGTCAGCCGTCTAAGGCGGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAGC
CGTAAAGGGC

>119352235|gb|EF120358.1|Megasphaera1|Uncultured Megasphaera sp. clone
MZH9600 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGAGGACATGGGAAGCTTGCTTCCTATGA
AATCGAGTGGCAAACGGGTGAGTAACGCGTAAACAACCTGCCCTTCGGATGGGGATAACAGCCGGAAACG
GCTGCTAATACCGAATACGATCTTTTCGTGCGATGACGGAAAGAAGAAAGGATGGCCTCTATACAAAGCT
ATCGCCGAAGGAGGGGTTTGCGTCTGATTAGCTGGTTGGAGGGGTAACGGCCCAACAAGGCGATGATCAG
TAGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGTCTTCGGAT
TGTAAGCTCTGTTATACGGGACGAAAAAGACGGATGCCAACAGTATCCGTCCGTGACGGTACCGTAAGA
GAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATT
GGGCGTAAAGGGCGCGCAGGCGGTTCCGTAAGTCTGTCTTAAAGTGCGGGGCTTAACCCCGTGAGGGGA
CGGAAACTGTGCAACTTGAGTGTCCGAGAGGAAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATA
TTAGGAGGAACACCGGTGGCGAAAGCGGCTTTCTGGACGACAACTGACGCTGAGGCGCGAAAGCGTGGGG
AGCAAACAGGATTAGATACCCCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGCATCGAC
CCCTTCTGTGCCGTAGTTAACGCTATAAGTATCCCGCTGGGGAGTACGGCCGCAAGGTTGAAACTCAA
GGAATTGACGGGGGCCCCGACAAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACC
AAGCCTTGACATTGATCGCAATTTTCAGAGATGAGAAGTTCCTCTTCGGAGGACGAGAAAAACAGGTGGTG
CACGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTCT

GTTACCAGCACGTAAGGGTGGGGACTCAGGAGAGACTGCCGCAGACAATGCGGAGGAAGGCGGGGATGAC
GTCAAGTCATCATGCCCCCTTATGGCTTGGGCTACACACGTACTACAATGGCTCTAAATAGAGGGAAGCGA
AGGAGCGATCCGGAGCAAAACCCAAAAACAGAGTCCCAGTTCCGATTGCAGGCTGCAACTCGCCTGCATG
AAGCAGGAATCGCTAGTAATCGCAGGTTCAGCATACTGCGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCACACCACGAAAGTCATTACACCCGAAGCCGGTGAGGTAACCGCAAGGAGCCAGCCGTCGAAGG
TGGGGGCGATGATTGGGGTG
>66878799|gb|AY959093.1|Megasphaera1|Uncultured bacterium clone rRNA320
16S ribosomal RNA gene, partial sequence
CCTTAGAGTTTGTATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGAGG
ACATGGGAAGCTTGCTTCCCTATGAAATCGAGTGGCAAACGGGTGAGTAACGCGTAAACAACCTGCCCTTC
GGATGGGGATAACAGCCGGAACGGCTGCTAATACCGAATACGATCTTTTCGTGCGATGACGGAAAGAAG
AAAGGATGGCCTCTATACAAAGCTATCGCCGAAGGAGGGGTTTTCGTCTGATTAGCTGGTTGGAGGGGTA
ACGGCCCAACAAGGCGATGATCAGTAGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGACACGG
CCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCG
CGTGAGTGAAGAAGGTCTTCGGATTGTAAAGCTCTGTCATACGGGACGAAAAAGACGGATGCCAACAGTA
TCCGTCCGTGACGGTACCGTAAGAGAAAGCCACGGCTAACTACGTGCCTGCAGCCGCGTAATACGTAGG
TGGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCGCGCAGGCGGTTTCGGTAAGTCTGTCTTAAAGT
GCGGGGCTTAACCCCGTGAGGGGACGGAACTGTGCAACTTGAGTGTGCGAGAGGAAAGCGGAATTCCCTA
GTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAAGCGGCTTTCTGGACGACAACTG
ACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGG
ATACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGTAGTTAACGCTATAAGTATCCCGCCTGGGGAGT
ACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCGCGCACAAGCGGTGGAGTATGTGGTTTAATT
CGACGCAACGCGAAGAACCCTTACCAAGCCTTGACATTGATCGCAATTTTCAGAGATGAGAAGTTCCTCTT
CGGAGGACGAGAAAACAGGTGGTGCACGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCG
CAACGAGCGCAACCCCTATCTTCTGTTACCAGCACGTAAGGGTGGGGACTCAGGAGAGACTGCCGCAGAC
AATGCGGAGGAAGGCGGGGATGACGTCAAGTCATCATGCCCCCTTATGGCTTGGGCTACACACGTACTACA
ATGGCTCTAAATAGAGGGGAAGCGAAGGAGCGATCCGGAGCAAAACCCAAAAACAGAGTCCCAGTTCGGAT
TGCAGGCTGCAACTCGCCTGCATGAAGCAGGAATCGCTAGTAATCGCAGGTTCAGCATACTGCGGTGAATA
CGTTCCTGGGCCTTGTACACACCGCCCGTCACACCACGAAAGTCATTACACCCGAAGCCGGTGAGGTAA
CCGCAAGGAGCCAGCCGTCGAAGGTGGGGGCGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAGG
CGG

>66878510|gb|AY958804.1|Megasphaera1|Uncultured bacterium clone rRNA031
16S ribosomal RNA gene, partial sequence
TCGCCCTTAGAGTTTGTATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGA
GAGGACATGGGAAGCTTGCTTCCCTATGAAATCGAGTGGCAAACGGGTGAGTAACGCGTAAACAACCTGCC
CTTCGGATGGGGATAACAGCCGGAACGGCTGCTAATACCGAATACGATCTTTTCGTGCGATGACGAAAA
GAAGAAAGGATGGCCTCTATACAAAGCTATCGCCGAAGGAGGGGTTTTCGTCTGATTAGCTGGTTGGAGG
GGTAACGGCCCAACAAGGCGATGATCAGTAGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGAC
ACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAAC
GCCGCGTGAGTGAAGAAGGTCTTCGGATTGTAAAGCTCTGTTATACGGGACGAAAAAGACGGATGCCAAC
AGTATCCGTCCGTGACGGTACCGTAAGAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGTAATACG
TAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCGCGCAGGCGGTTTCGGTAAGTCTGTCTTAA
AAGTGCGGGGCTTAACCCCGTGAGGGGACGGAACTGTGCAACTTGAGTGTGCGAGAGGAAAGCGGAATT
CCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAAGCGGCTTTCTGGACGACA
ACTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
ATGGATACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGTAGTTAACGCTATAAGTATCCCGCCTGGG
GAGTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCGCGCACAAGCGGTGGAGTATGTGGTTT
AATTTCGACGCAACGCGAAGAACCCTTACCAAGCCTTGACATTGATCGCAATTTTCAGAGATGAGAAGTTC
TCTTCGGAGGACGAGAAAAACAGGTGGTGCACGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGT
CCCGCAACGAGCGCAACCCCTATCTTCTGTTACCAGCACGTAAGGGTGGGGACTCAGGAGAGACTGCCGC
AGACAATGCGGAGGAAGGCGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGC
TACAATGGACGGTACAACGAGAAGCGACCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCCAGTTTCG
GATTGCAGGCTGCAACTCGCCTGCATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTGA
ATACGTTCCCGGCCTTGTACACACCGCCCGTCACACCATGAGAGTCTGTAACGCCCGAAGCCGGCGGGGA

TAACCGAAAGGAGTCAGCCGTCTAAGGCGGGACAGATGATTAGGGTGAA
>119352236|gb|EF120359.1|Megasphaera2|Uncultured Megasphaera sp. clone
MZH4520 16S ribosomal RNA gene, partial sequence
GACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGAGGATATGGAAAGCTTGCTTTCTATAA
AATCTAGTGGCAAACGGGTGAGTAACGCGTAAACAACCTGCCCTTCGGATGGGGACAACAGCTGGAAACG
GCTGCTAATACCGAATACGCTCTTTTCATCGCATGGTGAGAAGAAGAAAGGACGGCCTCTATACAAAGCG
GTCGCCGAAGGAGGGGTTTGCCTCTGATTAGCTAGTTGGAGGGGTAACGGCCCAACAAAGCGACGATCAG
TAGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGACGGTCTTCGGAT
TGTAAGGCTCTGTTATACGGGACGAACGGCAAGGTGGTAAATAGCCATCATGAGTGACGGTACCCTAAGA
GAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATT
GGGCGTAAAGGGCGCGCAGGCGGTTTTTTAAGTCGGTCTTAAAAGTGCGGGGCTTAACCCCGTGAGGGGA
CCGAAACTGGAAGACTTGAGTGTCTGAGAGGAAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATA
TTAGGAGGAACACCGGTGGCGAAAGCGGCTTTCTGGGCGACAACCTGACGCTGAGGCGCGAAAGCGTGGGG
AGCAAACAGGATTAGATAACCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGTATCGAC
TCCTTCTGTGCCGTAGTTAACGCTATAAGTATCCCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAA
GGTATTGACGGGGGCGCACAAGCGGTGGAGTATGTGGTTTTAATTCGACGCAACGCGAAGAACCTTACC
AAGCCTTGACATTGATCGCAATTCTCAGAGATGAGAAGTTCCTCTTCGGAGGACGAGAAAACAGGTGGTG
CACGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTCT
GTTACCAGCACGTAAAGGTGGGACTCAGGAGAGACTGCCGAGACAATGCGGAGGAAGGCGGGGATGAC
GTCAAGTCATCATGCCCCCTCATGGCTTGGGCTACACACGTACTACAATGGCTCTTAATAGAGGGAAGCGA
AGGAGTGATCTGGAGCAAACCCCAAAAACAGAGTCTCAGTTCGGATTGTAGGCTGCAACTCGCCTACATG
AAGCAGGAATCGCTAGTAATCGCAGGTGAGCATACTGCGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCACACCACGAAAGTCATTACACCCGAAGCCGGTGAGGTAGCCGCAAGGAGCCAGCCGTCGAAGG
TAGGGGTGATGATTGGGGTG

>63146120|gb|AY995255.1|Megasphaera2|Uncultured Megasphaera sp. clone
FX8B2-5 16S ribosomal RNA gene, partial sequence
GGGGGCGTGCTTACCATGCAGTCGAACGAGAGGATATGGAAAGCTTGCTTTCTATAAAAATCTAGTGGCAA
ACGGGTGAGTAACGCGTAAACAACCTGCCCTTCGGATGGGGACAACAGCTGGAAACGGCTGCTAATACCG
AATACGTTCTTTTCATCGCATGGTGAGAAGAAGAAAGGACGGCCTCTACACAAAGCGGTGCGCGAAGGAG
GGGTTTGCCTCTGATTAGCTAGTTGGAGGGGTAACGGCCCAACAAGGCGACGATCAGTAGCCGGTCTGAG
AGGATGAACGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTC
CGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGACGGTCTTCGGATTGTAAAGCTCTGT
TATACGGGACGAACGGCAAGGTGGTAAATAGCCATCATGAGTGACGGTACCCTAAGAGAAAGCCACGGCT
AACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGGGC
GCGCAGGCGGTTTTTTAAGTCGGTCTTAAAAGTGCGGGGCTTAACCCCGTGAGGGGACCGAAACTGGAAG
ACTTGAGTGTCTGAGAGGAAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACAC
CGGTGGCGAAAGCGGCTTTCTGGACGACAACCTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATT
AGATAACCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGTATCGACTCCTTCTGTGCCG
TAGTTAACGCTATAAGTATCCCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGG
GCCCCGACAAGCGGTGGAGTATGTGGTTTTAATTCGACGCAACGCGAAGAACCTTACCAAGCCTTGACATT
GATCGCAATTTTCAGAGATGAGAAGTTCCTCTTCGGAGGACGAGAAAACAGGTGGTGACGGCTGTCTGTC
AGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTCTGTTACCAGCACGT
AAAGGTGGGACTCAGGAGAGACTGCCGAGACAATGCGGAGGAAGGCGGGGATGACGTCAAGTCATCAT
GCCCCTTATGGCTTGGGCTACACACGTACTACAATGGCTCTTAATAGAGGGAAGCGAAGGAGTGATCTGG
AGCAAACCCCAAAAACAGAGTCTCAGTTCGGATTGTAGGCTGCAACTCGCCTACATGAAGCAGGAATCGC
TAGTAATCGCAGGTGAGCATACTGCCGG

>110169818|gb|DQ666099.1|Megasphaera2|Uncultured bacterium clone C7 16S
ribosomal RNA gene, partial sequence
AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGAGGATAT
GGAAAGCTTGCTTTCTATAAAAATCTAGTGGCAAACGGGTGAGTAACGCGTAAACAACCTGCCCTTCGGAT
GGGGACAACAGCTGGAAACGGCTGCTAATACCGAATACGTTCTTTTCATCGCATGGTGAGAAGAAGAAAG
GACGGCCTCTACACAAAGCGGTGCGCGAAGGAGGGGTTGCGTCTGATTAGCTAGTTGGAGGGGTAACGG
CCCAACAAGGCGACGATCAGTAGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGACACGGCCCA

GACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTG
AGTGAAGACGGTCTTTCGGATTGTAAAGCTCTGTTATACGGGACGAACGGCAAGGTGGTAAATAGCCATCA
TGAGTGACGGTACCGTAAGAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGC
AAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCGCGCAGGCGGTTTTTTAAGTCGGTCTTAAAAGTGCGG
GGCTTAACCCCGTGAGGGGACCGAAACTGGAAGACTTGAGTGTCCGAGAGGAAAGCGGAATTCCTAGTGT
AGCGGTGAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAAGCGGCTTTCTGGACGACAACCTGACGC
TGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGGATAC
TAGGTGTAGGAGGTATCGACTCCTTCTGTGCCGTAGTTAACGCTATAAGTATCCCGCCTGGGGAGTACGG
CCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGAC
GCAACGCGAAGAACCTTACCAAGCCTTGACATTGATCGCAATTTTCAGAGATGAGAAGTTCCTCTTCGGA
GGACGAGAAAACAGGTGGTGCACGGCTGTCGTACGCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAAC
GAGCGCAACCCCTATCTTCTGTTACCAGCACGTAATGGTGGGGACTCAGGAGAGACTGCCGCAGACAATG
CGGAGGAAGGCGGGGATGACGTCAAGTCATCATGCCCCCTATGGCTTGGGCTACACACGTACTACAATGG
CTCTTAATAGAGGGAAGCGAAGGAGCGATCTGGAGCAAACCCCAAAAACAGAGTCTCAGTTCGGATTGTA
GGCTGCAACTCGCCTACATGAAGCAGGAATCGCTAGTAATCGCAGGTCAGCATACTGCGGTGAATACGTT
CCCGGGCCTTGTACACACCGCCCGTCACACCACGAAAGTCATTACACCCGAAGCCGGTGAGGTAACCGC
AAGGAGCCAGCCGTGCAAGGTAGGGGTGATGATTGGGGTGAAGTCGTAACAAGGTAACC

>CP001849.1|1483562|1485035|Gardnerella|Gardnerella vaginalis 409-05,
complete genome

CCCAATCACGAGCCTCACCTTAGACGGCTCCATCCCCAAAAGGTTAGGCCACCGGCTTCGGGTGCTGCCC
ACTTTTCATGACTTGACGGGCGGTGTGTACAAGGCCCGGAACGCATTACCGCGACGTTGCTGATTCGCG
ATTACTAGCGACTCCGCCTTCACGTAGTCGAGTTGCAGACTACGATCCGAACCTGAGACCGGTTTTTAAGGG
ATCCGCTCCATGTCAACCATGTGCGATCCCGTTGTACCGGCCATTGTAGCATGCGTGAAGCCCTGGACGTA
AGGGGCATGATGATCTGACGTCATCCCCACCTTCCTCCGAGTTAACCCCGGCGGTCCCCCGTGAGTTCCC
GGCATAACCCGCTGGCAACACAGGGCGAGGGTTGCGCTCGTTGCGGGACTTAACCCAACATCTCACGACA
CGAGCTGACGACGACCATGCACCACCTGTGAACCTGCCCGAAGGGAAACCACATCTCTGCAGTCGACAG
GCACATGTCAAGCCCAGGTAAGGTTCTTCGCGTTGCATCGAATTAATCCGCATGCTCCGCCGCTTGTGCG
GGCCCCCGTCAATTTCTTTGAGTTTTAGCCTTGCGGGCCGTACTCCCCAGGCGGGACGCTTAACGCGTTAG
CTCCGACACGGAACCCGTGGAATGGGCCCCACATCCAGCGTCCACCGTTTACGGCGTGACTACCAGGGT
ATCTAATCCTGTTTCGCTCCCCACGCTTTCGCTTCTCAGCGTCAGTAACAGCCCAGAGACCTGCCTTCGCC
ATTGGTGTTCCTTCCCGATATCTACACATTCCACCGTTACACCGGGAATTCCAGTCTCCCCTACTGCACTC
TAGCCCGCCCGTACCCGGCGCAGACCCACCGTTAAGCGATGGGCTTTCACACCAGACGCGACGAACCGCC
TACAAGCTCTTTACGCCCAATAATTCCGATAACGCTTGCGCCCTACGTATTACCGCGGCTGCTGGCACG
TAGTTAGCCGGCGCTTATTCGAAAGGTACACTCACCCGAAAGCTTGCTCCCAATCAAAAAGCGTTTTACAA
CCCGAAGGCCTTCATCCCGCACGCGGCGTTCGCTGCGTCAGGGTTTTCCCCCATTGCGCAATATTCCCCACT
GCTGCCTCCCGTAGGAGTCTGGGCGGTATCTCAGTCCCAATGTGGCCGTCCGCCCTCTCAGGCCGGCTAC
CCGTGCAAGCCTAGGTGGGCCATTACCCCGCTACAAGCTGATAGGACGCGACCCCATCCCATGCCACTA
AACACTTTCCCAACAAGACATGCGTCAAGTTGGAGCATCCAGCATTACCACCGTTTCCAAGAGCTATTC
TGGAGCATGGGGCAGGTTGGTCACGCATTACTCACCCGTTCCGCACTCTCACCAACCAGCAAGCTGGTCA
GATCCCGTTGACTTGCATGTGTTAAGCACGCCGCCAGCGTTCATCCTGAGCCAGAATCGAACCCCTCCAC
GAAA

>119352239|gb|EF120362.1|Gardnerella|Uncultured Gardnerella sp. clone
MZH0805-03 16S ribosomal RNA gene, partial sequence

GATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGATCTGACCAGCTTGCTGGTTGGTGAGA
GTGGCGAACGGGTGAGTAATGCGTGACCAACCTGCCCCATGCTCCAGAATAGCTCTTGGAACGGGTGGT
AATGCTGGATGCTCCAACCTGACGCATGTCTTGTTGGGAAAGTGTTTAGTGGCATGGGATGGGGTTCGCGT
CCTATCAGCTTGTAGGCGGGGTAATGGCCCACCTAGGCTTCGACGGGTAGCCGGCCTGAGAGGGCGGACG
GCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCGCAATGGGG
GAAACCCTGACGCAGCGACGCCGCGTGCGGGATGAAGGCCCTTCGGGTGTAAACCGCTTTTGATTGGGAG
CAAGCTTTCGGGTGAGTGTACCTTTCGAATAAGCGCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACG
TAGGGCGCAAGCGTTATCCGGAATTATTGGGCGTAAAGAGCTTGTAGGCGGTTTCGTCGCGTCTGGTGTGA
AAGCCCATCGCTTAACGGTGGGTCTGCGCCGGGTACGGGCGGGCTAGAGTGCAGTAGGGGAGACTGGAAT
TCCCGGTGTAACGGTGGAAATGTGTAGATATCGGGAAGAACCAATGGCGAAGGCAGGTCTCTGGCTGTT
ACTGACGCTGAGAAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG

GTGGACGCTGGATGTGGGGCCCATTCCACGGGTCCCGTGTCGGAGCTAACGCGTTAAGCGTCCCGCCTGG
GGAGTACGGCCGCAAGGCTAAAACTCAAAGAAATTGACGGGGGCCCCGCACAAGCGGCGGAGCATGCGGAT
TAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGTGCCTGTCGACTGCAGAGATGTGGTTTC
CCTTCGGGGCAGGTTACAGGTGGTGCATGGTCGTCGTCAGCTCGTGTGAGATGTTGGGTAAAGTCC
CGCAACGAGCGCAACCCCTGCCCTGTGTTGCCAGCGGGTTATGCCGGGAACACAGGGGGACCGCCGGG
TTAACTCGGAGGAAGGTGGGGATGACGTCGGATCATCATGCCCCTTACGTCCAGGGCTTCACGCATGCTA
CAATGGCCAGTACAACGGGTGCGACATGGTGACATGGAGCTAATCCCTTAAAACTGGTCTCAGTTCGGA
TCGTAGTCTGCAACTCGACTACGTGAAGGCGGAGTCGCTAGTAATCGCGAATCAACAACGTCGCGGTGAA
TGCCTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCATGAAAGTGGGCAGCACCCGAAGCCGGTGGCCT
GACCTTTTTGGAGGGAGCCGTCTAAGGTGAGGCTCGTGATTGGGACT

>66878517|gb|AY958811.1|Gardnerella|Uncultured bacterium clone rRNA038
16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGA
TCTGACCAGCTTGCTGGTTGGTGAGAGTGGCGAACGGGTGAGTAATGCGTGACCAACCTGCCCCATGCTC
CAGAATAGCTCTTGGAACGGGTGGTAATGCTGGATGCTCCAACCTGACGCATGTCTTGTGGGAAAGTG
TTTAGTGGCATGGGATGGGGTCGCGTCCTATCAGCTTGTAGGCGGGTAATGGCCACCTAGGCTTCGAC
GGGTAGCCGGCCTGAGAGGGCGGACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCGCAATGGGGGAACCCCTGACGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCG
GGTTGTAAACCGCTTTTGATTGGGAGCAAGCCTTCGGGTGAGTGTACCTTTCGAATAAGCGCCGGCTAAC
TACGTGCCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTTATCCGGAATTATTGGGCGTAAAGAGCTTG
TAGGCGGTTTCGTGCGCTCTGGTGTGAAAGCCCATCGCTTAACGGTGGGTCTGCGCCGGGTACGGGCGGGC
TAGAGTGCAGTAGGGGAGACTGGAATTCCCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGAACACCA
ATGGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGAAGCGAAAGCGTGGGGAGCGAACAGGATTAG
ATACCCTGGTAGTCCACGCCGTAAACGGTGGACGCTGGATGTGGGGCCATTCCACGGGTTCCTGTTCGG
AGCTAACGCGTTAAGCGTCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGAAATTGACGGGGG
CCCGCACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGT
GCCTGTCGACTGCAGAGATGTGGTTTCCCTTCGGGGCAGGTTACAGGTGGTGCATGGTCGTCGTCAGCT
CGTGTGTCGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTGCCCTGTGTTGCCAGCGGGTTATG
CCGGGAACCTCACGGGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATCATGCCC
CTTACGTCCAGGGCTTCACGCATGCTACAATGGCCAGTACAACGGGTGCGACATGGTGACATGGAGCTA
ATCCCTTAAAACTGGTCCCAGTTCGGATCGTAGTCTGCAACTCGACTACGTGAAGGCGGAGTCGCTAGTA
ATCGCGAATCAGCAACGTCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCATGAAA
GTGGGCAGCACCCGAAGCCGGTGGCCTGACCTTTTTGGAGGGAGCCGTCTAAGGTGAGGCTCGTGATTGG
GACTAAGTCGTAACAAGGTAACCGTAAAGGGCG

>66878877|gb|AY959171.1|Gardnerella|Uncultured bacterium clone rRNA398
16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCACGATGAACGATGGCGGCGTGCTTAACACATGCAAGTCGAACGGGA
TCTGACCAGCTTGCTGGTTGGTGAGAGTGGCGAACGGGTGAGTAATGCGTGACCAACCTGCCCCATGCTC
CAGAATAGCTCTTGGAACGGGTGGTAATGCTGGATGCTCCAACCTGACGCATGTCTTGTGGGAAAGTG
TTTAGTGGCATGGGATGGGGTCGCGCCCTATCAGCTTGTAGGCGGGTAATGGCCACCTAGGCTTCGAC
GGGTAGCCGGCCTGAGAGGGCGGACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCA
GCGGTGGGGAATATTGCGCAATGGGGGAACCCCTGACGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCG
GGTTGTAAACCGCTTTTGATTGGGAGCAAGCCTTCGGGTGAGTGTACCTTTCGAATAAGCGCCGGCTAAC
TACGTGCCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTTATCCGGAATTATTGGGCGTAAAGAGCTTG
TAGGCGGTTTCGTGCGCTCTGGTGTGAAAGCCCATCGCTTAACGGTGGGTCTGCGCCGGGTACGGGCGGGC
TAGAGTGCAGTAGGGGAGACTGGAATTCCCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGAACACCA
ATGGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGAAGCGAAAGCGTGGGGAGCGAACAGGATTAG
ATACCCTGGTAGTCCACGCCGTAAACGGTGGACGCTGGATGTGGGGCCATTCCACGGGTTCCTGTTCGG
AGCTAACGCGTTAAGCGTCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGAAATTGACGGGGG
CCCGCACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGT
GCCTGTCGACTGCAGAGATGTGGTTTCCCTTCGGGGCAGGTTACAGGTGGTGCATGGTCGTCGTCAGCT
CGTGTGTCGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTCGCCCTGTGTTGCCAGCGGGTTATG
CCGGGAACCTCACGGGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATCATGCCC
CTTACGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGATGCGACATGGTGACATGGAGCGG

ATCCCTTAAAACCGGTCTCAGTTCGGATCGTAGTCTGCAACTCGACTACGTGAAGGCGGAGTCGCTAGTA
ATCGCGAATCAGCAACGTCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCATGAAA
GTGGGCAGCACCCGAAGCCGGTGGCCTAACCCCTTTTGGGATGGAGCCGTCTAAGGTGAGGCTCGTGATTG
GGACTAAGTCGTAACAAGGTAACCGTAAAGGGCGA

>119352240|gb|EF120363.1|Sneathia|Uncultured Sneathia sp. clone MZH0805-
40 16S ribosomal RNA gene, partial sequence

GATAAACGCTGACAGAATGCTTAACACATGCAAGTCGATGATGGGAGCTAGCTTGCTAGAAGAAGTCATG
GCGGACGGGTGAGTAACGTGTAAAGAACTTACCATATAGACTGGGATAACAGAGGGAACTTCTGATAAT
ACTGGATAAGTTAGTAGTAGCATTACTAAGTAATGAAAGGTAGCAATACGCTATATGAGAGCTTTGCATC
CTATTAGCTAGTTGGTGGGGTAAAAGCCTACCAAGGCGATGATAGGTAGCCGGCCCGAGAGGGTGGACGG
CCACAAGGGGACTGAGATACGGCCCTTACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGAGG
CAACTCTGATCCAGCAATTCTGTGTGTGTGAAGAAGGTTTTAGGACTGTAAAACACTTTTAGTAGGGAAG
AAATAAATGACGGTACCTACAGAAGAAGCGACGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGT
CGCGAGCGTTATCCGGAATTATTGGGCCTAAAGGGCATCTAGGCGGTAAGACAAGTTGAAGGTGAAAACC
TGTGGCTCAACCATAGGCTTGCCTACAAAACCTGTTGAACTAGAGTACTGGAAAGGTGGGTGGAACCTACAC
GAGTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGTTGAAGATAACTCACTGGACAGCAACTG
ACGCTGAAGTGCAGAAAGCTAGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCTAGCTGTAAACGATGA
TCACTGGGTGTGGGGATTCTGAAGTCTCTGTGCCGAAGCAAAAAGCGATAAGTGATCCGCCTGGGGAGTACG
TTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTGGTTTTAATTCGA
CGCAACGCGAGGAACCTTACCAGATCTTGACATCCTCCGAAGAGCATAGAAGTATGCTTGTGCCTACGGG
AACGGAGAGACAGGTGGTGCACGGCTGTCGACAGCTCGTGTTGTGAGATGTTGGGTAAAGTCCCGCAACG
AGCGAAACCCCTATCATTAGTTACCATCATTAAGTTGGGGACTCTAATGAAACTGCCTACGAAGAGTAGG
AGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCTTATGATCTGGGCTACACACGTGCTACAATGGGTA
GTACAAAGAGAAGCTTTGTAGCGATACATGGCGAAACTTAAAAAGCTATTCTTAGTTCCGATTGAAGTCT
GCAACTCGACTTCATGAAGTTGGAATCACTAGTAATCGTGAATCAGCAATGTCACGGTGAATACGTTCTC
GGGCCTTGTACACACCGCCCGTCACACCACGAGAGTTGTTTGCACCTGAAATTACCGGCCTAACCGTAAG
GAGGGAGGTACTGAAGGTGTGGATAGTGATTGGGGTG

>219878348|ref|NR_025487.1|Sneathia|Sneathia sanguinegens strain CCUG
41628 16S ribosomal RNA, partial sequence

TGGCTCAGGATAAACGCTGACAGAATGCTTAACACATGCAAGTCGATGATGGGAGCTAGCTTGCTAGAAG
AAGTCATGGCGGACGGGTGAGTAACGTGTAAAGAACTTACCATATAGACTGGGATAACAGAGGGAACTT
CTGATAATACTGGATAAGTTAGTAGTAGCATTACTAAGTAATGAAAGGTAGCAATACGCTATATGAGAGC
TTTGCATCCTATTAGCTAGTTGGTGGGGTAAAAGCCTACCAAGGCGATGATAGGTAGCCGGCCTGAGAGG
GTGGACGGCCACAAGGGGACTGAGATACGGCCCTTACTCCTACGGGAGGCAGCAGTGGGGAATATTGGAC
AATGGAGGCAACTCTGATCCAGCAATTCTGTGTGTGTGAAGAAGGTTTTAGGACTGTAAAACACATTTTA
GTAGGGAAGAAAGAAATGACGGTACCTACAGAAGAAGCGACGGCTAAATACGTGCCAGCAGCCGCGGTAA
TACGTATGTGCGGAGCGTTATCCGGAATTATTGGGCTTAAAGGGCATCTAGGCGGTTAAACAAGTTGAAG
GTGAAAACCTGTGGCTCAACCATAGGCTTGCCTACAAAACCTGTATAACTAGAGTACTGGAAAGGTGGGTG
GAACTACACGAGTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGATGAAGATAACTCACTGGA
CAGCAACTGACGCTGAAGTGCGAAAGCTAGGGGAGCAAAACAGGATTAGATACCCTGGTATCCTAGCTGTA
AACGATGATCACTGGGTGTGGGGATTCTGAAGTCTCTGTGCCGAAGCAAAAAGCGATAAGTGATCCGCCTGG
GGAGTACGTTTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTGGTT
TAATTCGACGCAACGCGAGGAACCTTACCAGATCTTGACATCCTCCGAAGAGCATAGAAGTATGCTTGTG
CCTACGGGAACGGAGAGACAGGTGGTGCATGGCTGTCCACAGCTCNTGTTGTGAGATGTTGGGTAAAGTC
CCGCAACGAGCGAAACCCCTATCATTAGTTACCATCATTAAGTTGGGGACTCTAATGAAACTGCCTACGA
AGAGTAGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCTTATGATCTGGGCTACACACGTGCTAC
AATGGATAGTACAAAGAGAAGCTTTGTAGCGATACATGGCAAACTAAGAAAGCTATTCTTAGTTCCGAT
TGAAGTCTGCAACTCGACTTCATGAAGTTGGNATCACTAGTAATCGTGAATCAGCAATGTCACGGTGAAT
ACGTTCTCGGGGTCTTGTACACACCGCCCGTC

>66878620|gb|AY958914.1|Sneathia|Uncultured bacterium clone rRNA141 16S
ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGATAAACGCTGACAGAATGCTTAACACATGCAAGTCGATGATGGG
AGCTAGCTTGCTAGAAGAAGTCATGGCGGACGGGTGAGTAACGTGTAAAGAACTTACCATATAGACTGGG
ATAACAGAGGGAACTTCTGATAATACTGGATAAGTTAGAAGTAGCATTACTAAGTAATGAAAGGTAGAA

ATACGCTATATGAGAGCTTTGCATCCTATTAGCTAGTTGGTGGGGTAAAAGCCTACCAAGGCGATGATAG
GTAGCCGGCCTGAGAGGGTGGACGGCCACAAGGGGACTGAGATACGGCCCTTACTCCTACGGGAGGCAGC
AGTGGGGAATATTGGACAATGGAGGCAACTCTGATCCAGCAATTCTGTGTGTGTGAAGAAGGTTTTAGGA
CTGTAAAACACTTTTAGTAGGGAAGAAAAAATGACGGTACCTACAGAAGAAGCGACGGCTAAATACGTGC
CAGCAGCCGCGTAATACGTATGTCGCGAGCGTTATCCGGAATTATTGGGCTTAAAGGGCATCTAGGCGG
TTAAACAAGTTGAAGGTGAAAACCTGTGGCTCAACCATAGGCTTGCCTACAAAACCTGTATACTAGAGTA
CTGGAAAGGTGGGTGGAACCTACACGAGTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGATGA
AGATAACTCACTGGACAGCAACTGACGCTGAAGTGCGAAAAGCTAGGGGAGCAAACAGGATTAGATACCCT
GGTAGTCCTAGCTGTAAACGATGATCACTGGGTGTGGGGATTCTGAAGTCTCTGTGCCGAAGCAAAGCGA
TAAGTGATCCGCTGGGGAGTACGTTTCGCAAGAATGAACTCAAAGGAATTGACGGGGACCCGCACAAGT
GGTGGAGCATGTGGTTTAATTCGACGCAACGCGAGGAACCTTACCAGATCTTGACATCCTCCGAAGAGCA
TAGAAGTATGCTTGTGCCTACGGGAACGGAGAGACAGGTGGTGCATGGCTGTGACAGCTCGTGTGTGA
GATGTTGGGTAAAGTCCCGCAACGAGCGAAACCCCTATCATTAGTTACCATCATTAAGTTGGGGACTCTA
ATGAAACTGCCTACGAAGAGTAGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGATCTGG
GCTACACACGTGCTACAATGGATAGTACAAAGAGAAGCTTTGTAGCGATACATGGCAAACTAAGAAAGC
TATTCTTAGTTTCGGATTGAAGTCTGCAACTCGACTTCATGAAGTTGGAATCACTAGTAATCGTGAATCAG
CAATGTCACGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGTTGTTTGTACC
TGAAATTACTGGCCTAACTGCAAAGGGGGAGGTACTGAAGGTGTGGATAGCGATTGGGGTGAAGTCGTAA
CAAGGTAACCGTAAAGGG

>239924008|gb|Q179730.1|Sneathia|Uncultured Sneathia sp. clone VE12E10
16S ribosomal RNA gene, partial sequence

GATAAACGCTGACAGAATGCTTAACACATGCAAGTCGATGATGGGAGCTAGCTTGCTAGAAGAAGTCATG
GCGGACGGGTGAGTAACGTGTAAAGAACTTACCATATAGACTGGGATAACAGAGGGAACTTCTGATAAT
ACTGGATAAGTTAGTAGTAGCATTACTAAGTAATGAAAGGTAGTAATACGCTATATGAGAGCTTTGCATC
CTATTAGCTAGTTGGTGGGGTAAAAGCCTACCAAGGCGATGATAGGTAGCCGGCCTGAGAGGGTGGACGG
CCACAAGGGGACTGAGATACGGCCCTTACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGAGG
CAACTCTGATCCAGCAATTCTGTGTGTGTGAAGAAGGTTTTAGGACTGTAAAACACTTTTAGTAGGGAAG
AAAGAAATGACGGTACCTACAGAAGAAGCGACGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGT
CGCGAGCGTTATCCGGAATTATTGGGCTTAAAGGGCATCTAGGCGGTTAAACAAGTTGAAGGTGAAAACC
TGTGGCTCAACCATAGGCTTGCCTACAAAACCTGTATAACTAGAGTACTGGAAAGGTGGGTGGAACCTACAC
GAGTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGATGAAGATAACTCACTGGACAGCAACTG
ACGCTGAAGTGCGAAAAGCTAGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCTAGCTGTAAACGATGA
TCACTGGGTGTGGGGATTCTGAAGTCTCTGTGCCGAAGCAAAGCGATAAGTGATCCGCTGGGGAGTACG
TTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTGGTTTTAATTCGA
CGCAACGCGAGGAACCTTACCAGATCTTGACATCCTCCGAAGAGCATAGAAGTATGCTTGTGCCTACGGG
AACGGAGAGACAGGTGGTGCATGGCTGTGACAGCTCGTGTTGTGAGATGTTGGGTAAAGTCCCGCAACG
AGCGAAACCCCTATCATTAGTTACCATCATTAAGTTGGGGACTCTAATGAAACTGCCTACGAAGAGTAGG
AGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGATCTGGGCTACACACGTGCTACAATGGATA
GTACAAAGAGAAGCTTTGTAGCGATACATGGCAAACTAAGAAAGCTATTCTTAGTTTCGGATTGAAGTCT
GCAACTCGACTTCATGAAGTTGGAATCACTAGTAATCGTGAATCAGCAATGTCACGGTGAATACGTTCTC
GGGTCTTGTACACACCGCCCGTCACACCACGAGAGTTGTTTGCACCTGAAATTACTGGCCTAACTGCAA
GGGGGAGGTACTGAAGGTGTGGATAGCGATTGGGGTGAAGTCGTAACAAGGTA

>45476684|gb|AY489565.1|Leptotrichia|Leptotrichia amnionii 16S ribosomal
RNA gene, partial sequence

CCCTGTACGACTTCACCCCAATCACTATCCACACCTTCAGTACCTCCCTCCTTCGGTTAGGCCGGTAATT
TCAGGTGCAAACAACTCTCGTGGTGTGACGGGCGGTGTGTACAAGGCCGAGAACGTATTCACCGTGACA
TTGCTGATTACGATTACTAGTGATTCCAACCTTCATGAAGTCGAGTTGCAGACTTCAATCCGAACCTAAGA
ATAGCTTTTTAAGTTTCGCCATGTATCGCTACAAAGCTTCTCTTTGTACTACCCATTGTAGCACGTGTGT
AGCCCAGATCATAAGGGGCATGATGACTTGACGTCATCCCCACCTTCCTCCTACTCTTCGTAGGCAGTTT
CATTAGAGTCCCCAACTTAATGATGGCAACTAATGATAGGGGTTTCGCTCGTTGCGGGACTTAACCCAAC
ATCTCACACACGAGCTGTGACAGCCATGCACCACCTGTCTCTCGGTTCCCGAAGGCACAAGTATACTT
CTATACTCTCCCGAGGATGTCAAGATCTGGTAAGGTTCCCTCGCGTTGCGTCAATTAAACCACATGCTCC
ACCACTTGTGCGGGCCCCCGTCAATTCCCTTTGAGTTTCATTCTTGCGAACGTACTCCCCAGGCGGATCAC
TTATCGCTTTTGTCTCGGCACAGAGACTTCGCATCCCCACACCCAGTGATCATCGTTTACAGCTAGGACT

ACCAGGGTATCTAATCCTGTTTGTCTCCCCTAGCTTTTCGCACTTCAGCGTCAGTTTCTGTCCAGTGAGTTA
TCTTCATCATCGGCATTCTACACATATCTACGAATTTACCTCTACTCGTGTAGTTCCACCCACCTTTC
CAGTACTCTAGTTCAACAGTTTTGTAGGCAAGCCTATGGTTGAGCCACAGGTTTTACCTTCAACTTGTC
TTACCGCCTAGATGCCCTTTAAGCCCAATAATTCCGGATAACGCTCGCAACATACGTATTACCGCGGCTG
CTGGCACGTATTTAGCCGTTGCTTCTTCTGTAGGTACCGTCATTTTTTTTCTTCCCTACTAAAAGTGTTTT
ACAGTCCTAAAACCTTCTTCACACACACAGAATTGCTGGATCAGAGTTTCTCCATTGTCCAATATTCCC
CACTGCTGCCTCCCGTAGGAGTAAGGGCCGTATCTCAGTCCCCTTGTGGCCGTCCACCTCTCAGGCCGG
CTACCTATCATCGCCTTGGTAAGCTCTTACCTTACCAACTAGCTAATAGGACGCAAAGCTCTCCTTTAGT
GCCGTAGCTTTTCATTTGCATATCATGCGATATACTAACTTATCCAGTATTATCAGAAGTTTCCCTCTGTT
ATCCCAGTCTAAAGGGCAAGTTCTTTACGCGTTACTCACCCGTCCGCCATGAGTCCATTAGCAAGCTAA
ACTTCCTCATAGACTTGCATGTGTTAAGCATTCTGTGACGCTTTATCCTGAGCCAGGATCAAACCTCTA

>119352241|gb|EF120364.1|Leptotrichia|Uncultured Leptotrichia sp. clone
MZH0805-11 16S ribosomal RNA gene, partial sequence

GATAAACGCTGACAGAATGCTTAACACATGCAAGTCTATGAGGAAGTTTAGCTCGCTAAATGGACTCATG
GCGGACGGGTGAGTAACGCGTAAAGAACTTGCCCTTTAGACTGGGATAACAGAGGGAACTTCTGATAAT
ACTGGATAAGTTAGTATATCGCATGATATGCAAATGAAAGCTACGGCACTAAAGGAGAGCTTTGCGTCCT
ATTAGCTAGTTGGTAAGGTAAGAGCTTACCAAGGCGATGATAGGTAGCCGGCCTGAGAGGGTGGACGGCC
ACAAGGGGACTGAGATACGGCCCTTACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGAGGAA
ACTCTGATCCAGCAATTCTGTGCGTGTGAAGAAGTTTTAGGACTGTAAAACACTTTTAGTAGGGAAGAA
AAAAATGACGGTACCTACAGAAGAAGCAACGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGTTG
CGAGCGTTATCCGGAATTATTGGGCTTAAAGGGCATCTAGGCGGTAAGACAAGTTGAAGGTGAAAACCTG
TGGCTCAACCATAGGCTTGCCTACAAAACCTGTTGAGCTAGAGTACTGGAAAGGTGGGTGGAACCTACACGA
GTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGATGAAGATAACTCACTGGACAGAACTGAC
GCTGAAGTGCAGAAAGCTAGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCTAGCTGTAAACGATGATC
ACTGGGTGTGGGGATGCGAAGTCTCTGTGCCGAAGCAAAAGCGATAAGTGATCCGCTGGGGAGTACGTT
CGCAAGAATGAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGTGGTGGAGCATGTGGTTTTAATTCGACG
CAACGCGGGGAACCTTACCAGATCTTGACATCCTCGGGAGAGTATAGAAGTATACTTGTGCCTTCGGGAA
CCGAGAGACAGGTGGTGCATGGCTGTGACAGCTCGTGTGTGAGATGTTGGGTAAAGTCCCGCAACGAG
CGAAACCCCTATCATTAGTTGCCACCATTAAGTTGGGGACTCTAATGAAACTGCCTACGAAGAGTAGGAG
GAAGGTGGGGATGACGTCAAGTCATCATGCCCCTTATGATCTGGGCTACACACGTGCTACAATGGGTAGT
ACAAAGAGAAGCTTTGTAGCGATACATGGCGAGACTTAAAAGGCTATTCTTAGTTTCGGATTGAAGTCTGC
AACTCGACTTCATGAAGTTGGAATCACTAGTAATCGTGAATCAGCAATGTCACGGTGAATACGTTCTCGG
GCCTTGTACACACCGCCCGTCACACCACGAGAGTTGTTTGCACCTGAAATTACCGGCCTAACCGTAAGGA
GGGAGGTACTGAAGGTGTGGATAGTGATTGGGGTG

>186915011|gb|EU644469.1|Leptotrichia|Uncultured Leptotrichia sp. clone
531 16S ribosomal RNA gene, partial sequence

GTTTGATCCTGGCTCAGGATAAACGCTGACAGAATGCTTAACACATGCAAGTCTATGAGGAAGTTTAGCT
TGCTAAATGGACTCATGGCGGACGGGTGAGTAACGCGTAAAGAACTTGCCCTTTAGACTGGGATAACAGA
GGGAAACTTCTGATAATACTGGATAAGTTAGTATATCGCATGATATGCAAATGAAAGCTACGGCACTAAA
GGAGAGCTTTGCGTCCTATTAGCTAGTTGGTAAGGTAAGAGCTTACCAAGGCGATGATAGGTAGCCGGCC
TGAGAGGGTGGACGGCCACAAGGGGACTGAGATACGGCCCTTACTCCTACGGGAGGCAGCAGTGGGGAAT
ATTGGACAATGGAGGGAACTCTGATCCAGCAATTCTGTGTGTGTGAAGAAGTTTTAGGACTGTAAAACA
CTTTTAGTAGGGAAGAAAAAATGACGGTACCTACAGAAGAAGCAACGGCTAAATACGTGCCAGCAGCCG
CGGTAATACGTATGTTGCGAGCGTTATCCGGAATTATTGGGCTTAAAGGGCATCTAGGCGGTAAGACAAG
TTGAAGGTGAAAACCTGTGGCTCAACCATAGGCTTGCCTACAAAACCTGTTGAACTAGAGTACTGGAAAGG
TGGGTGGAACCTACACGAGTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGATGAAGATAACTC
ACTGGACAGAACTGACGCTGAAGTGCAGAAAGCTAGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCT
AGCTGTAAACGATGATCACTGGGTGTGGGGATGCGAAGTCTCTGTGCCGAAGCAAAAGCGATAAGTGATC
CGCTGGGGAGTACGTTTCGCAAGAATGAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGTGGTGGAGCA
TGTGGTTTTAATTCGACGCAACGCGAGGAACCTTACCAGATCTTGACATCCTCGGGAGAGTATAGAAGTAT
ACTTGTGCCTTCGGGAACCGAGAGACAGGTGGTGCATGGCTGTGACAGCTCGTGTGTGAGATGTTGGG
TTAAGTCCCGCAACGAGCGAAACCCCTATCATTAGTTGCCATCATTAAGTTGGGGACTCTAATGAACTG
CCTACGAAGAGTAGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCTTATGATCTGGGCTACACAC
GTGCTACAATGGGTAGTACAAAGAGAAGCTTTGTAGCGATACATGGCGAAACTTAAAAGCTATTCTTAG

TTCGGATTGAAGTCTGCAACTCGACTTCATGAAGTTGGAATCACTAGTAATCGTGAATCAGCAATGTCAC
GGTGAATACGTTCTCGGGCCTTGTACACACCGCCCGTCACACCACGAGAGTTGTTTGCACCTGAAATTAC
CGGCCTAACCGTAAGGAGGGAGGTACTGAAGGTGTGGATAGTGATTGGGGTGAAGTCGTAACAAGGTA
>119352242|gb|EF120365.1|Peptostreptococcus|Uncultured Peptostreptococcus
sp. clone MZH0805-43 16S ribosomal RNA gene, partial sequence
GACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGAGTTAGATCGAATGAGTTTTTCGGACAA
GTGAGATTTAACGAAAGTGGCGAACGGGTGAGTAACACGTGAGCAACCTGCCTTACACAGGGGGATAGCC
ATTGGAACGGTGATTAATACCCCATAGACCACAATACCGCATGGTAAAAGGGTAAAAGGGATACCGGT
GTAAGATGGGCTCGCGTCTGATTAGCTAGTTGGTGGGGTAAAGGCCTACCAAGGCGACGATCAGTAGCCG
GTCTGAGAGGATGAACGGCCACATTGTAAGTACGACACGGTCCAACTCCTACGGGAGGCAGCAGTGGGG
AATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGGCTTTCGAGTCGTAAA
GCTCTGTCTATGAGAAGATAATGACGGTATCATAGGAGGAAGCCCTGGCTAAATACGTGCCAGCAGCCG
CGGTAATACGTATGGGGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGTACGTAGGCGGTTTTTTAAG
TCAGGTGTCAAAGCGTGGAGCTTAAGTCCATTAAGCACTTGAACTGAAAGACTTGAGTGAAGGAGAGGA
AAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAATACCGGTGGCGAAGGCGACTTT
CTGGACTTTTACTGACGCTCAGGTACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCAC
GCCGTAAACGATGAATGCTAGGTGTTGGGAGTCAAATCTCGGTGCCGAAGTTAACACATTAAGCATTCCG
CCTGGGGAGTACGGTGGCAACACTGAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCATG
TGGTTTAATTGCAAGCAACGCGAAGAACCTTACCAAGGCTTGACATATAGTTGAGTTATTGAGAAATTGA
TAAGTCCCTCGGGACAACATAACAGGTGGTGCATGGTTGTCGTGAGTCTGTGCTGAGATGTTGGGTTA
AGTCCCGCAACGAGCGCAACCCTTATTTTCAGTTATCAGCATTTAAGGTGGGGACTCTGAAGAGACTGCC
GATGACAAATCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGTCTTGGGCTACACACGT
GCTACAATGGTTCGGTACAACGAGAAGCGAGATAGTGATGTTAAGCGAACTCTAAAAGCCGATCTCAGTT
CGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAGTTGCTAGTAATCGCGAATCAGAACGTCGCGGT
GAATGCGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGCTTGTAATACCCGAAGCCGTCGA
TCCAACCGCAAGGAGGAAGACGTGCAAGGCAGGACAAGTGACTGGGGTG

>66878646|gb|AY958940.1|Peptostreptococcus|Uncultured bacterium clone
rRNA167 16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAG
AGTTAGATCGAATGAGTTTTTCGGACAAGTGAGATTTAACGAAAGTGGCGAACGGGTGAGTAACACGTGAG
CAACCTGCCTTACACAGGGGGATAGCCATTGGAACGGTGATTAATACCCCATAGACCACAATACCGCA
TGGTAAAAGGGTAAAAGGGATACCGGTGTAAGATGGGCTCGCGTCTGATTAGCTAGTTGGTGGGGTAAAG
GCCTACCAAGGCGACGATCAGTAGCCGGTCTGAGAGGATGAACGGCCACATTGGAAGTGAACACGGTCC
AACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGT
GAGCGAAGAAGGCTTTCGAGTCGTAAAGCTCTGTCTATGAGAAGATAATGACGGTATCATAGGAGGAAG
CCCTGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGGGGCGAGCGTTGTCCGGAATTATTGGGCG
TAAAGGGTACGTAGGCGGTTTTTTAAGTCAGGTGTCAAAGCGTGGAGCTTAAGTCCATTAAGCACTTGAA
ACTGAAAGACTTGAGTGAAGGAGAGGAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGG
AGGAATACCGGTGGCGAAGGCGACTTTCTGGACTTTTACTGACGCTCAGGTACGAAAGCGTGGGGAGCAA
ACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAATGCTAGGTGTTGGGAGTCAAATCTCGGT
GCCGAAGTTAACACATTAAGCATTCCGCCTGGGGAGTACGGTGGCAACACTGAACTCAAAGGAATTGAC
GGGGACCCGCACAAGCAGCGGAGCATGTGGTTAATTGCAAGCAACGCGAAGAACCTTACCAAGGCTTGA
CATATAGTTGAGTTATTGAGAAATTGATAAGTCCCTCGGGACAACATAACAGGTGGTGCATGGTTGTCGT
CAGTCTGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATTTTCAGTTACCAGCATT
TAAGGTGGGGACTCTGAAGAGACTGCCGATGACAAATCGGAGGAAGGTGGGGATGACGTCAAATCATCAT
GCCCTTTATGTCTTGGGTACACACGTGCTACAATGGTTCGGTACAACGAGAAGCGAGATAGTGATGTTAA
GCGAACTCTAAAAGCCGATCTCAGTTTCGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAGTTGCT
AGTAATCGCGAATCAGAACGTCGCGGTGAATGCGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATG
GGAGCTTGTAATACCCGAAGCCGTCGATCCAACCGCAAGGAGGAAGACGTGCAAGGCAGGACAAGTGACT
GGGGTGAAGTCGTAACAAGGTAACCGTA

>239923970|gb|GQ179692.1|Peptostreptococcus|Uncultured Peptostreptococcus
sp. clone VE58A09 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGAGTTAGATCGAATGAGTTTTTCGGACAA
GTGAGATTTAACGAAAGTGGCGAACGGGTGAGTAACACGTGAGCAACCTGCCTTACACAGGGGGATAGCC

ATTGGAACGGTGATTAATACCCCATAAGACCACAATGCCGCATGGTAAAAGGGTAAAAGGGATACCGGT
GTAAGATGGGCTCGCGTCTGATTAGCTAGTTGGTGGGGTAAAGGCCTACCAAGGCGACGATCAGTAGCCG
GTCTGAGAGGATGAACGGCCACATTGGAAGTGAAGACACGGTCCAACTCCTACGGGAGGCAGCAGTGGGG
AATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGGCTTTCGAGTCGTAAA
GCTCTGTCTATGAGAAGATAATGACGGTATCATAGGAGGAAGCCCTGGCTAAATACGTGCCAGCAGCCG
CGGTAATACGTATGGGGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGTACGTAGGCGGTTTTTTAAG
TCAGGTGTCAAAGCGTGGAGCTTAAGTCCATTAAGCACTTGAACTGAAAGACTTGAGTGAAGGAGAGGA
AAGTGAATTTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAATACCGGTGGCGAAGGCGACTTT
CTGGACTTTTACTGACGCTCAGGTACGAAAGCGTGGGGAGCAAGCAGGATTAGATACCTGGTAGTCCAC
GCCGTAAACGATGAATGCTAGGTGTTGGGAGTCAAATCTCGGTGCCGAAGTTAACACATTAAGCATTCCG
CCTGGGGAGTACGGTGGCAACACTGAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCATG
TGGTTTAATTTCGAAGCAACGCGAAGAACCTTACCAAGGCTTGACATATAGTTGAGTTATTGAGAAATTGA
TAAGTCCCTCGGGACAACATAACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGAGATGTTGGGTTA
AGTCCCGCAACGAGCGCAACCCTTATTTTTCAGTTACCAGCATTTAAGGTGGGGACTCTGAAGAGACTGCC
GATGACAAATCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGTCTTGGGCTACACACGT
GCTACAATGGTCGGTACAACGAGAAGCGAGATAGTGATGTTAAGCGAACTCTAAAAGCCGATCTCAGTT
CGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAGTTGCTAGTAATCGCGAATCAGAACGTCGCGGT
GAATGCGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGCTTGTAATACCCGAAGCCGTCGA
TCCAACCGCAAGGAGGAAGACGTGCAAGGCAGGACAAGTGACTGGGGTGAAGTCGTAACAAGGTA
>119352243|gb|EF120366.1|BVAB1|Uncultured Lachnospiraceae bacterium clone
MZH0805-50 16S ribosomal RNA gene, partial sequence
GATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAAGTGCTACGACGGAAGTTTTTCGGACGGA
AGATGTAGTTACTTAGTGCGGACGGGTGAGTAACGCGTGGGGAACCTGCCCTGTACCGGGGGATAGCAG
CCGGAACGGCTGATAATACCGCATAAGCGCACGAATGTCGCATGACATGGTGTGAAAACTCCGGTGGT
ATAGGATGGACCCGCGTCTGATTAGCCGGTTGGTGGGGTAAAAGCCTACCAAAGCGAAGATCAGTAGCCG
AGTTGAGAGACTGACCGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGG
AATATTGCACAATGGGGGAAAGCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTTCGGTATGTAAA
GCTCTATCAGAAGGGAAGAAAATGACGGTACCTTACTAAGAAGCTCCGGCTAAATACGTGCCAGCAGCCG
CGGTAATACGTATGGAGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGTGTAGGCGGCACTATAAG
TCTGATGTGAAAACCTAAGGCTTAACCATAGGATTGCATTGGAACTGTAGAGCTGGAGTATCGGAGAGG
CAAGCGGAATTCCTGGTGTAGTGGTGAATACGTAGATATCAGGAAGAACATCGGTGGCGAAGGCGGCTT
GCTGGATGATAACTGACGCTAAGGCTCGAAAGCGTGGGAAGCGAACAGGATTAGATACCTGGTAGTCCA
CGCTGTAAACGATGAACACTAGGTGTTGGGAGGCTAAGCCTTTCAGTGCCGCAGCAAACGCAATAAGTGT
TCCACCTGGGGAGTACGTTTCGAAGAATGAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAG
CATGTGGTTTTAATTTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCTGTGACAGTATATGTAA
TGTATATTTTCTACGGAACACAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGAGATGTTG
GGTTAAGTCCCGCAACGAGCGCAACCCTTGTACTTAGTAGCCAGCATTAAGGTGGGCACTCTAAGTAGAC
TGCCGGGGTGAACCCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGACTTGGGCTACAC
ACGTGCTACAATGGCGTGAACAGAGGGAAGCGAAGGAGCGATCCGGAGCAAATCTCATAAAGCACGTCCC
AGTTCCGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGAATCGCTAGTAATCGCAGATCATCATGCTG
CGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTCTGGAATGCCCCAAGTCA
GTGGCCAAACCGAGAGGATGGAGCTGCCGAAGGCAGGCCCGGTAAGTGGGGT
>66878775|gb|AY959069.1|BVAB1|Uncultured bacterium clone rRNA296 16S
ribosomal RNA gene, partial sequence
TTCGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACG
AAGTGCTACGACGGAAGTTTTTCGGACGGAAGATGTAGTTACTTAGTGCGGACGGGTGAGTAACGCGTGG
GGAACCTGCCCTGTACCGGGGGATAGCAGCCGGAACGGCTGATAATACCGCATAAGCGCACGAATGTCTG
CATGACATGGTGTGAAAACTCCGGTGGTATAGGATGGACCCGCGTCTGATTAGCCAGTTGGTGGGGTAA
AAGCCTACCAAAGCGAAGATCAGTAGCCGAGTTGAGAGACTGACCGGCCACATTGGGACTGAGACACGGC
CCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGC
GTGAGCGAAGAAGTATTTTCGGTATGTAAAGCTCTATCAGAAGGGAAGAAAATGACGGTACCTTACTAAGA
AGCTCCGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGGAGCAAGCGTTATCCGGATTTACTGGG
GTAAAGGGAGTGTAGGCGGCACTATAAGTCTGATGTGAAAACCTAAGGCTTAACCATAGGATTGCATTG
GAACTGTAGAGCTGGAGTATCGGAGAGGCAAGCGGAATTCCTGGTGTAGTGGTGAATACGTAGATATC

AGGAAGAACATCGGTGGCGAAGGCGGCTTGCTGGACGATAACTGACGCTAAGGCTCGAAAGCGTGGAAG
CGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGAACACTAGGTGTTGGGAGGCTAAGCCT
TTCAGTGCCGCAGCAAACGCAATAAGTGTTCACCTGGGGAGTACGTTTCGAAGAATGAAACTCAAAGGA
ATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCAAG
TCTTGACATCCCTGTGACAGTATATGTAATGTATATTTTCTACGGAACACAGGAGACAGGTGGTGCATGG
TTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGACTTAGTAGC
CAGCATTAAGGTGGGCACTCTAAGTAGACTGCCGGGGTGAACCCGGAGGAAGGTGGGGATGACGTCAAAT
CATCATGCCCCCTTATGACTTGGGCTACACACGTGCTACAATGGCGTGAACAGAGGGAAGCGAAGGAGCGA
TCCGGAGCAAATCTCATAAAGCACGTCCAGTTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGA
ATCGCTAGTAATCGCAGATCATCATGCTGCGGTGAATACGTTCCCGGGTCTTGACACACCGCCCGTCAC
ACCATGGGAGTCTGGAATGCCCGAAGTCAGTGGCCAAACCGAAAGGATGGAGCTGCCGAAGGCAGGCCCCG
GTAAGTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAG

>44307592|gb|AY471619.1|BVAB1|Uncultured bacterium clone 7200A-2c13Sm 16S
ribosomal RNA gene, partial sequence

GATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAAGTGTACGACGGAAGTTTTTCGGACGGA
AGATGTAGTTACTTAGTGCGGACGGGTGAGTAACGCGTGGGGAACCTGCCCTGTACCGGGGGATAGCAG
CCGGAACGGCTGATAATACCGCATAAGCGCACAAATGTGCGATGACATGGTGTGAAAACTCCGGTGGT
ATAGGATGGACCCGCGTCTGATTAGCCAGTTGGTGGGGTAAAAGCCTACCAAAGCGAAGATCAGTAGCCG
AGTTGAGAGACTGACCGGCCACATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGG
AATATTGCACAATGGGCGAAAAGCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTCCGTATGTAAA
GCTCTATCAGAAGGGAAGAAAATGACGGTACCTTACTAAGAAGCTCCGGCTAAATACGTGCCAGCAGCCG
CGGTAATACGTATGGAGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGTGTAGGCGGCACTATAAG
TCTGATGTGAAAACCTAAGGCTTAACCATAGGATTGCATTGGAACTGTAGAGCTGGAGTATCGGAGAGG
CAAGCGGAATTCCTGGTGTAGTGGTGAATACGTAGATATCAGGAAGAACATCGGTGGCGAAGGCGGCTT
GCTGGACGATAACTGACGCTAAGGCTCGAAAGCGTGGGAAGCGAACAGGATTAGATACCCTGGTAGTCCA
CGCTGTAAACGATGAACACTAGGTGTTGGGAGGCTAAGCCTTTTCAGTGCCGCAGCAAACGCAATAAGTGT
TCCACCTGGGGAGTACGTTTCGAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAG
CATGTGGTTTTAATTCGAAGCAACGCGAAGAACCCTTACCAAGTCTTGACATCCCTGTGACAGTATATGTAA
TGTATATTTTCTACGGAACACAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGAGATGTTG
GGTTAAGTCCCGCAACGAGCGCAACCCTTGACTTAGTAGCCAGCATTAAAGGTGGGCACTCTAAGTAGAC
TGCCGGGGTGAACCCGGAGGAAGGTGGGGATGACGTCAAAATCATCATGCCCCCTTATGACTTGGGCTACAC
ACGTGCTACAATGGCGTGAACAGAGGGAAGCTAAGGAGCGATCCGGAGCAAAATCTCATAAAGCACGTCC
CAGTTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGAATCGCTAGTAATCGCAGATCATCATGCT
GCGGTGAATACGTTCCCGGGTCTTGACACACCGCCCGTCACACCATGGGAGTCTGGAATGCCCGAAGTC
AGTGGCCAAACCGAAAGGATGGAGCTGCCGAAGGCAGGCCCGGTAAGTGGGGT

>66878803|gb|AY959097.1|BVAB1|Uncultured bacterium clone rRNA324 16S
ribosomal RNA gene, partial sequence

TTCGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACG
AAGTGCTACGACGGAAGTTTTTCGGACGGAAGATGTAGTTACTTAGTGCGGACGGGTGAGTAACGCGTGG
GGAACCTGCCCTGTACCGGGGGATAGCAGCCGGAACGGCTGATAATACCGCATAAGCGCACGAATGTGCG
CATGACATGGTGTGAAAAACTCCGGTGGTATAGGATGGACCCGCGTCTGATTAGCCGGTTGGTGGGGTAA
AAGCCTACCAAAGCGAAGATCAGTAGCCGAGTTGAGAGACTGACCGGCCACATTGGGACTGAGACACGGC
CCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGC
GTGAGCGAAGAAGTATTTCCGGTATGTAAAGCTCTATCAGAAGGGAAGAAAATGACGGTACCTTACTAAGA
AGCTCCGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGGAGCAAGCGTTATCCGGATTTACTGGG
TGTAAGGGAGTGTAGGCGGCACTATAAGTCTGATGTGAAAACCTAAGGCTTAACCATAGGATTGCATTG
GAACTGTAGAGCTGGAGTATCGGAGAGGTAAGCGGAATTCCTGGTGTAGTGGTGAATACGTAGATATC
AGGAAGAACATCGGTGGCGAAGGCGGCTTGCTGGACGATAACTGACGCTAAGGCTCGAAAGCGTGGAAG
CGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGAACACTAGGTGTTGGGAGGCTAAGCCT
TTCAGTGCCGCAGCAAACGCAATAAGTGTTCACCTGGGGAGTACGTTTCGAAGAATGAAACTCAAAGGA
ATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCAAG
TCTTGACATCCCTGTGACAGTATATGTAATGTATATTTTCTACGGAACACAGGAGACAGGTGGTGCATGG
TTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGACTTAGTAGC
CAGCATTAAGGTGGGCACTCTAAGTAGACTGCCGGGGTGAACCCGGAGGAAGGTGGGGACGACGTCAAAT

CATCATGCCCCCTTATGGCTTGGGCTACACACGTGCTACAATGGCGTGAACAGAGGGAAGCGAAGGAGCGA
TCCGGAGCAAATCTCATAAAGCACGTCCCAGTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGA
ATCGCTAGTAATCGCAGATCATCATGCTGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCAC
ACCATGGGAGTCTGGAATGCCCGAAGTCAGTGGCCAAACCGAAAGGATGGAGCTGCCGAAGGCAGGCCCG
GTAAGTGGGTGAA

>52222196|gb|AY724739.1|BVAB1|Uncultured bacterium clone 123-f 57 16S
ribosomal RNA gene, partial sequence

TGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCTGAGCGAAGAAGTATTTCCGTAT
GTAAAGCTCTATCAGAAGGGAAGAAAATGACGGTACCTTACTAAGAAGCTCCGGCTAAATACGTGCCAGC
AGCCGCGTAATACGTATGGAGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGTGTAGGCGGCACT
ATAAGTCTGATGTGAAAACCTAAGGCTTAACCATAGGATTGCATTGGAACTGTAGAGCTGGAGTATCGG
AGAGGCAAGCGGAATTCCTGGTGTAGTGGTGAATACGTAGATATCAGGAAGAACATCGGTGGCGAAGGC
GGCTTGCTGGACGATAACTGACGCTAAGGCTCGAAAGCGTGGGAAGCGAACAGGATTAGATACCCTGGTA
GTCCACGCTGTAAACGATGAACACTAGGTGTTGGGAGGCTAAGCCTTTCAGTGCCGAGCAAACGCAATA
AGTGTTCACCTGGGGAGTACGTTTCGAAGAATGAACTCAAAGGAATTGACGGGGACCCGCACAAGCGG
TGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCTGTGACAGTATA
TGTAATGTATATTTTCTACGGAACACAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGTCGTAGA
TGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGACTTAGTAGCCAGCATTAAGGTGGGCACTCTAAG
TAGACTGCCGGGTGAACCCGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGACTTGGGC
TACACACGTGCTACAATGGCGTGAACAGAGGGAAGCGAAGGAGCGATCCGGAGCAAATCTCATAAAGCAC
GTCCAGTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGAATCGCTAGTAATCGCAGATCATCA
TGCTGCGGTGAATACGTTCCCGGGTCT

>66878839|gb|AY959133.1|P.timonensis|Uncultured bacterium clone rRNA360
16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGCAGGGT
AACATGAGGAAAGCTTGCTTTCCTTGATGACGACTGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCC
ATAACTACGGGATAACCCGTTGAAAGACGGCCTAATACCGTATGATATCGTTTGCTGACATCAAATAACG
ATTAAAGGTTTAGCGGTTATGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAAACGGCCCACCAAG
GCGACGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAAGACACGGTCCAAACTCCTAC
GGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGAAGAC
GGCCCTATGGGTTGTAAACTGCTTTTATGTGGGGATAAAGTGCGTGACGTGTCATGCATTGCAGGTACCA
CATGAATAAGGACCGGCTAATTCGCTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGAT
TTATTGGGTTTAAAGGGAGCGTAGGCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGC
TTGCAGCGCAACTGGTCGACTTGAGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCT
TAGATATCATGACGAACTCCGATTGCGCAGGCAGCTTACTGTAGCATAACTGACGCTGATGCTCGAAAGT
GCGGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCTCGCTATTCGTCCT
ATTTGGATGAGTGGCCAAGTGAAAACATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAACTC
AAAGGAATTGACGGGGGGCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTT
ACCCGGGCTTGAAGTGCCAGCGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTG
CATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCTTTTCTTTA
GTTGCCATCAGGTAATGCTGGGCACTCTATGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGAC
GTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTT
AACGCAAGTTTGGTCTAATCTTCAAAGTGTCTCCAGTTTCGGATTGGGGTCTGCAACCCGACCCCATGAA
GCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTAACACCGC
CCGTCAAGCCATGAAAGCTGGGGGTGCCTGAAGTCCGTAAACGTTAAGGAGCGGCCTAGGGCAAACTGG
TGATTGGGGCTAAGTCGTAACAAGGTAACCGTAAAGGGC

>302129314|dbj|AB547676.1|P.buccalis|Prevotella buccalis gene for 16S
ribosomal RNA, partial sequence, strain: JCM 12246

AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGCAGGGTAACGTGA
GGGAAGCTTGCTTCCCTTGACGACGACTGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCCATGACCA
CGGGATAACCCGTTGAAAGACGGACTAATACCGTATGACGTCGTTTGCTGACATCAAATAACGATTAAAG
GTTTAGCGGTGATGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAACGGCCCACCAAGGCGACGA
TCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAAGACACGGTCCAAACTCCTACGGGAGGC
AGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTA

TGGGTTGTAACTGCTTTTATGCGGGGATAAAGTGCGCGACGTGTCGTGCATTGCAGGTACCGCATGAAT
AAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGG
GTTTAAAGGGAGCGTAGGCCGCCAGGTAAGCGTGTTGTGAAATGTACCGGCTCAACCGGTGAATTGCAGC
GCGAACTGTCTGGCTTGAGTGACGGTAAGCAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATAT
CATGAAGAACTCCGATTGCGAAGGCAGCTTGCTGCAGTGCGACTGACGCTGATGCTCGAAGGTGCGGGTA
TCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAACGATGGATGCCCCGCTGTCCGCCCTTTTGTGG
CGGGTGGCCAAGCGAAAGCGTTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAA
TTGACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGG
CTTGAAGTGCAGTGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTT
GTCGTGAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTCAGTTGCCA
TCAGGTAATGCTGGGCACTCTGGAGATACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAAT
CAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTTAACGCAA
GTTTGGTCTAATCTTCAAAGTGTCTCCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGAT
TCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAA
GCCATGAAAGCCGGGGGTGCCTGAAGTCCGTAACCGTCAAGGAGCGGCCTAGGGCAAAACTGGTGATTGG
GGCTAAGTCGTAACAAGGTAACC

>302129308|dbj|AB547670.1|P.amnii|Prevotella amnii gene for 16S ribosomal
RNA, partial sequence, strain: JCM 14753

AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGCAGCATAT
AGATTGCTTGCAATTTATGATGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTACCCATTACTA
GGGAATAACCCAGCGAAAGTTGGCCTAATGCCCTATGTAGTCGTTTGATCGCCTGAGATTTGACGAAAG
ATTTATCGGTATTGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAAAGGCCACCAAGGCGACGA
TCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAAACTCCTACGGGAGGC
AGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTA
TGGGTTGTAACTGCTTTTATATGGAATAAAGTGAGGGACGTGTCCCTTATTGCATGTACCATATGAAT
AAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGG
GTTTAAAGGGAGCGTAGGCTGTTTGTTAAGCGTGTTGTGAAATGTAAGAGCTCAACTTTTAGATTGCAGC
GCGAACTGGCAGACTTGAGTGCGCACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATAT
CATGACGAACCTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTAAAGCTCGAAGGTGCGGGTA
TCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAACGATGGATGCCCCGCTGTTAGCACCTAGTGTT
AGCGGCTAAGCGAAAGCATTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATT
GACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCT
TGAATTGCAGATGTTTATATCAGAGATGATATATTCCCTTCGGGGCATTTGTGAAGGTGCTGCATGGTTG
TCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTTAGTTGCCAT
CAGGTAGTGCTGGGCACTCTAGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATC
AGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGAGAGTTGGTTGTACGCAAG
TGCGATCTAATCCTAAAAACCATTCCTCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATT
CGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAG
CCATGAAAGCCGGGGGTGCCTGAAGTTCGTGACCGTAAGGATCGACCTAGGGCAAAACTGGTAATTGGGG
CTAAGTCGTAACAAGGTAACC

>110169812|gb|DQ666093.1|P.amnii|Uncultured bacterium clone Y3 16S
ribosomal RNA gene, partial sequence

AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGCAGCATAT
AGATTGCTTGCAATTTATGATGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTACCCATTACTA
GGGAATAACCCAGCGAAAGTTGGCCTAATGCCCTATGTAGTCGTTTGATCGCCTGAGATTTGACGAAAG
ATTTATCGGTATTGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAAAGGCCACCAAGGCAACGA
TCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAAACTCCTACGGGAGGC
AGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTA
TGGGTTGTAACTGCTTTTATATGGAATAAAGTGAGGGACGTGTCCCTTATTGCATGTACCATACGAAT
AAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGG
GTTTAAAGGGAGCGTAGGCTGTTTGTTAAGCGTGTTGTGAAATGTAGGAGCTCAACTTTTAGATTGCAGC
GCGAACTGGCAGACTTGAGTGCGCACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATAT
CATGACGAACCTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTAAAGCTCGAAGGTGCGGGTA
TCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAACGATGGATGCCCCGCTGTTAGCACCTAGTGTT

AGCGGCTAAGCGAAAGCATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATT
GACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCT
TGAATTGCAGATGTTTATGTCAGAGATGATGTATTCTTTCGGGGCATTGTGAAGGTGCTGCATGGTTG
TCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTAGTTGCCAT
CAGGTAGTGCTGGGCACTCTAGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATC
AGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGAGAGTTGGTTGTACGCAAG
TGCAATCTAATCCTAAAAACCATTTCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATT
CGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCGCGGGCCTTGTACACACCGCCCGTCAAG
CCATGAAAGCCGGGGGTGCCTGAAGTTCGTGACCGTAAGGATCGACCTAGGGCAAAACTGGTAATTGGGG
CTAAGTCGTAACAAGGTAACC

>119352237|gb|EF120360.1|Atopobium|Uncultured Atopobium sp. clone
MZH0805-07 16S ribosomal RNA gene, partial sequence

GATGAACGCTGGCGGCGCGCCTAACACATGCAAGTCAACGGTTAAAGCATCTTCGGATGTGTATAAAGT
GGCGAACGGCTGAGTAACACGTGGGCAACCTGCCCTTTCGACTGGGATAGCCTCGGGAAACCGAGGTTAA
TACCGGATACTCCATATCCATCGCATGATAGATATGGGAAAGCTCCGGCGGCAAGGATGGGCCCCGCGC
CTGTTAGCTAGTTGGTGGGGTAGTGGCCTACCAAGGCAATGATGGGTAGCCGGGTTGAGAGACCGACCGG
CCAGATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTGCACAATGGGCG
AAAGCCTGATGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCGGGTTGTAAACCGCTTTCAGCAGGGACG
AGGCCGCAAGGTGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGCCTGCAGCCGCGGTAATACGT
AGGGGGCAAGCGTTATCCGGATTTCATTGGGCGTAAAGCGCGCGTAGGGCGTCTGTTAGGTCAGGAGTCAA
ATCTGGGGGCTCAACCCCTATCCGCTCCTGATACCGGCAGGCTTGAGTCTGGTATGGGAAGGTGGAATTC
CAAGTGTAGCGGTGAATTGCGCAGATATTTGGAAGAACACCAAGTGGCGAAGGCGGCCTTCTGGGCCATGA
CTGACGCTGAGGCGCGAAAGCTAGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCTAGCTGTAAACGA
TGGACACTAGGTGTGGGGAGATTATACTTTCCGTGCCGCAGCTAACGCATTAAGTGTCCCGCCTGGGGAG
TACGGTGCGAAGACTAAAACCTCAAAGGAATTGACGGGGGCGCACAAGCAGCGGAGCATGTGGCTTAAT
TCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATTTAGGTGAAGCAGTGGAAACACTGTGGCCGAAA
GGAGCCTAAACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACG
AGCGCAACCCCTCGTTCGCATGTTGCCAGCGGTTTCGGCCGGGCACCCATGCGAGACCGCCGGCGTTAAGCCG
GAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCCTTATGTCTGGGCTGCACACGTGCTACAATGGCC
GGCACAGAGGGCTGCTACTGCGCGAGCAGGAGCGAATCCCTAAAGCCGGTCCCAGTTCGGATTGGAGGCT
GCAACTCGCCTCCATGAAGTCGGAGTTGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATGCGTTCCTCG
GGCCTTGTACACACCGCCCGTACACACCCGAGTTCGTCTGCACCCGAAGTCGTTCGGCCTAACCCGCAAG
GGAGGGAGACGCCGAAGGTGTGGAGGGTAAGGGGGGTG

>66878878|gb|AY959172.1|Atopobium|Uncultured bacterium clone rRNA399 16S
ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGCGCCTAACACATGCAAGTCAACGGT
TAAAGCATCTTCGGATGTGTATAAAGTGGCGAACGGCTGAGTAACACGTGGGCAACCTGCCCTTTCGACT
GGGATAGCCTCGGGAAACCGAGGTTAATACCGGATACTCCATATCCATCGCATGATAGATATGGGAAAGC
TCCGGCGGCAAGGATGGGCCCCGCGGCCTGTTAGCTAGTTGGTGGGGTAGTGGCCTACCAAGGCAATGAT
GGGTAGCCGAGTTGAGAGACCGACCGCCAGATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATCTTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCG
GGTTGTAAACCGCTTTCAGCAGGGACGAGGCCGCAAGGTGACGGTACCTGCAGAAGAAGCCCCGGCTAAC
TACGTGCCAGCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGATTTCATTGGGCGTAAAGCGCGC
TAGGCGGTCTGTTAGGTCAGGAGTCAAATCTGGGGGCTCAACCCCTATCCGCTCCTGATACCGGCAGGCT
TGAGTCTGGTATGGGAAGGTGGAATTCGAAGTGTAGCGGTGAAATGCGCAGATATTTGGAAGAACACCAG
TGGCGAAGGCGGCCTTCTGGGCCATGACTGACGCTGAGGCGCGAAAGCTAGGGGAGCGAACAGGATTAGA
TACCCTGGTAGTCCTAGCTGTAAACGATGGACACTAGGTGTGGGGAGATTATACTTTCCGTGCCGCAGCT
AACGCATTAAGTGTCCCGCCTGGGGAGTACGGTGCGAAGACTAAAACCTCAAAGGAATTGACGGGGGCCCCG
CACAAGCAGCGGAGCATGTGGCTTAATTCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATTTAGGT
GAAGCAGTGGAAACACTGTGGCCGAAAGGAGCCTAAACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTG
TGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTCGTCGCATGTTGCCAGCGGTTCCGGCCGGGCAC
CCATGCGAGACCGCCGGCGTTAAGCCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCCTTATGTC
CTGGGCTGCACACGTGCTACAATGGCCGGCACAGAGGGCTGCTACTGCGCGAGCAGGAGCGAATCCCTAA
AGCCGGTCCCAGTTTCGGATTGGAGGCTGCAACTCGCCTCCATGAAGTCGGAGTTGCTAGTAATCGCGGAT

CAGCACGCCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCACACCACCCGAGTCGTCTGCA
CCCGAAGTCGTGGCCTAACCCGCGAGGGAGGGAGACGCCGAAGGTGTGGAGGGTAAGGGGGGTGAAGTC
GTAACAAGGTAGCCGTAAAGGGC

>12240234|gb|AF325325.1|Atopobium|Atopobium vaginae 16S ribosomal RNA
gene, partial sequence

GATGAACGCTGGCGGCGCGCCTAACACATGCAAGTCGAACGGTTAAAGCATCTTCGGATGTGTATAAAGT
GGCGAACGGCTGAGTAACACGTGGGCAACCTGCCCTTTGCACTGGGATAGCCTCGGGAAACCGAGGTTAA
TACCGGATACTCCATATTTGTCGCATGGCGAATATGGGAAAGCTCCGGCGGCAAAGGATGGGCCCCGCGC
CTGTTAGCTAGTTGGTGGGGTAGTGGCCTACCAAGGCAATGATGGGTAGCCGGGTTGAGAGACCGACCGG
CCAGATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTGCACAATGGGCG
AAAGCCTGATGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCGGGTTGTAAACCGCTTTCAGCAGGGACG
AGGCCGCAAGGTGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGT
AGGGGGCAAGCGTTATCCGGATTCAATTGGGCGTAAAGCGCGCGTAGGCGGTCTGTTAGGTCAGGAGTTAA
ATCTGGGGGCTCAACCCCTATCCGCTCCTGATACCGGCAGGCTTGAGTCTGGTAGGGGAAGATGGAATTC
CAAGTGTAGCGGTGAAATGCGCAGATATTTGGAAGAACACCGGTGGCGAAGGCGGTCTTCTGGGCCATGA
CTGACGCTGAGGCGCGAAAGCTAGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCTAGCTGTAAACGA
TGGACACTAGGTGTGGGGAGATTATACTTTCCGTGCCGCAGCTAACGCATTAAGTGTCCCGCCTGGGGAG
TACGGTCGCAAGACTAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAAT
TCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATTTAGGTGAAGCAGTGGAAACACTGTGGCCGAAA
GGAGCCTAAACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACG
AGCGCAACCCCTTGTCGCATGTTGCCAGCGGTTCCGGCCGGGCACCCATGCGAGACCGCCGGCGTTAAGCCG
GAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATGTCTGGGCTGCACACGTGCTACAATGGCC
GGCACAGAGGGCTGCTACTGCGCGAGCAGAAGCGAATCCCTAAAGCCGGTCCCAGTTCGGATTGGAGGCT
GCAACTCGCCTCCATGAAGTCGGAGTTGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATGCGTTCCCG
GGCCTTGTACACACCGCCCGTCACACCACCCGAGTCGTCTGCACCCGAAGTCGTGCGCCTAACCCGCAAG
GGAGGGAGGCGCCGAAGGTGTGGAGGGTAAGGGGGGT

>265679041|ref|NR_029349.1|Atopobium|Atopobium vaginae DSM 15829 strain
961*00022/98 16S ribosomal RNA, partial sequence

TCAGGATGAACGCTGGCGGCGCGCCTAACACATGCAAGTCGAACGGTTAAAGCATCTTCGGATGTGTATA
AAGTGGCGAACGGCTGAGTAACACGTGGGCAACCTGCCCTTTGCACTGGGATAGCCTCGGGAAACCGAGG
TTAATACCGGATACTCCATATTTNTCGCATGGCGAATATGGGAAAGCTCCGGCGGCAAAGGATGGGCCCCG
CGGCCTGTTAGCTAGTTGGTGGGGTAGTGGCCTACCAAGGCAATGATGGGTAGCCGGGTTGAGAGACCGA
CCGGCCAGATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTGCACAATG
GGCGAAAGCCTGATGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCGGGTTGTAAACCGCTTTCAGCAGG
GACNAGGCCGCAAGGTGACGGTACCTGCANAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAAT
ACGTAGGGGGCAAGCGTTATCCGGATTCAATTGGGCGTAAAGCGCGCGTAGGCGGTCTGTTAGGTCAGGAG
TTAAATCTGGGGGCTCAACCCCTATCCGCTCCTGATACCGGCAGGCTTGAGTCTGGTAGGGGAAGATGGA
ATTCCAAGTGTAGCGGTGAAATGCGCAGATATTTGGAAGAACACCGGTGGCGAAGGCGGTCTTCTGGGCC
ATGACTGACGCTGAGGCGCGAAAGCTAGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCTANCTGTAA
ACGATGGACACTAGGTGTGGGGAGATTATACTTTCCGTGCCGCAGCTAACGCATTAAGTGTCCCGCCTGG
GGAGTACGGTCGCAAGACTAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCT
TAATTCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATTTAGGTGAAGCAGTGGAAACACTGTGGCC
GAAAGGAGCCTAAACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGC
AACGAGCGCAACCCCTTGTCGCATGTTGCCAGCGGTTCCGGCCGGGCACCCATGCGAGACCGCCGGCGTTAA
GCCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCTTATGTCTGGGCTGCACACGTGCTACAAT
GGCCGGCACAGAGGGCTGCTACTGCGCGAGCAGAAGCGAATCCCTAAAGCCGGTCCCAGTTCGGATTGGA
GGCTGCAACTCGCCTCCATGAAGTCGGAGTTGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATGCGTT
CCCGGGCCTTGTACACACCGA

>66878497|gb|AY958791.1|L.crispatus|Uncultured bacterium clone rRNA018
16S ribosomal RNA gene, partial sequence

ACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGCGGAACCTAACAGATTTACCTCGGTAATG
ACGTTAGGAAAGCGAGCGGCGGATGGGTGAGTAACACGTGGGGAACCTGCCCCATAGTCTGGGATACCAC
TTGGAAACAGGTGCTAATACCGGATAAGAAAGCAGATCGCATGATCAGCTTTTAAAGGCGGCGTAAGCT
GTCGCTATGGGATGGCCCCGCGGTGCATTAGCTAGTTGGTAAGGTAAAGGCTTACCAAGGCGATGATGCA

TAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACCGAGACACGGCCCCAACTCCTACGGGAGGCAGCA
GTAGGGAATCTTCCACAATGGACGCAAGTCTGGTGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGAT
CGTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAC TGGCCTTTATTTGACGGTAATCAACCAG
AAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTG
GGCGTAAAGCGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAAGCCCTCGGCTTAACCGAGGAAGTGCAT
CGGAAACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTGGAACTCCATGTGTAGCGGTGGAATGCGTAGATA
TATGGAAGAACCAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGT
AGCGAACAAGATTAGATAACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAGGTTTCCG
CCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCTGGGGAGTACGACCGCAAGGTTGAAACTCAAA
GGAATTGACGGGGGCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACC
AGGTCTTGACATCTAGTGCCATTTGTAGAGATACAAAGTCCCTTCGGGGACGCTAAGACAGGTGGTGCA
TGGCTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTTATTAGT
TGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCA
AGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGCGAGCCTG
CGAAGGCAAGCGAATCTCTGAAAGCTGTTCTCAGTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCT
GGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTAACACACCGCCCGT
CACACCATGGGAGTCTGCAATGCCCAAAGCCGGTGGCCTAACCTTCGGGAAGGAGCCGTCTAAGGCAGGG
CAGATGACTGGGGTGAAGTCGTAACAAGGTAGCCGAAGG

>66878635|gb|AY958929.1|L.crispatus|Uncultured bacterium clone rRNA156
16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCCTAATACATGCAAGTCGAGCGAGC
GGAACTAACAGATTTACTTCGGTAATGACGTTAGGAAAGCGAGCGGCGGATGGGTGAGTAACACGTGGGG
AACCTGCCCCATAGTCTGGGATACCACTTGGAACAGGTGCTAATACCGGATAAGAAAGCAGATCGCATG
ATCAGCTTTTAAAAGGCGGCGTAAGCTGTCGCTATGGGATGGCCCCGCGGTGCATTAGCTAGTTGGTAAG
GTAAAGGCTTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACA
CGGCCCAAACCTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACG
CCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGAGGTAGTAAC
GGCCTTTATTTGACGGTAATCAACCAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTA
GGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAA
GCCCTCGGCTTAACCGAGGAACTGCATCGGAAACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTGGAACTC
CATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACCAAGTGGCGAAGGCGGCTCTCTGGTCTGCAA
CTGACGCTGAGGCTCGAAAGCATGGGTAGTGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGA
TGAGTGCTAAGTGTGGGAGGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGG
AGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCGCACAAGCGGTGGAGCATGTGGTTTA
ATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCTAGTGCCATTTGTAGAGATACAAAGTCCC
TTCGGGGACGCTAAGACAGGTGGTGCATGGCTGTGTCGTGAGATGTTGGGTAAAGTCCC
GCAACGAGCGCAACCCCTTGTTATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACA
AACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAA
TGGGCAGTACAACGAGAAGCGAGCCTGCGAAGGCAAGCGAATCTCTGAAAGCTGTTCTCAGTTCGGACTG
CAGTCTGCAACTCGACTGCACGAAGCTGGAATCGCTAGTAATTGCGGATCAGCACGCCGCGGTGAATACG
TTCCCGGGCCTTGTAACACACCGCCCGTCACACCATGGGAGTCTGCAATGCCCAAAGCCGGTGGCCTAAC
TTCGGGAAGGAGCCGTCTAAGGCAGGGCAGATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAGGGC
GAA

>323669187|emb|FR683088.1|L.crispatus|Lactobacillus crispatus partial 16S
rRNA gene, type strain DSM 20584T

GCCGGCGTGCCCTAATACATGCAAGTCGAGCGAGCGGAACCTAACAGATTTACTTCGGTAATGACGTTAGGA
AAGCGAGCGGCGGATGGGTGAGTAACACGTGGGGAACCTGCCCCATAGTCTGGGATACCACTTGGAACA
GGTGCTAATACCGGATAAGAAAGCAGATCGCATGATCAGCTTTTAAAAGGCGGCGTAAGCTGTCGCTATG
GGATGGCCCCGCGGTGCATTAGCTAGTTGGTAAGGTAAAGGCTTACCAAGGCGATGATGCATAGCCGAGT
TGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCCAACTCCTACGGGAGGCAGCAGTAGGGAAT
CTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAAAGCT
CTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAC TGGCCTTTATTTGACGGTAATCAACCAGAAAGTCACG
GCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAG
CGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAAGCCCTCGGCTTAACCGAGGAACTGCATCGGAAACTG

TTTTTCTTGAGTGCAGAAGAGGAGAGTGGAACCTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGA
ACACCAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGTAGCGAACAG
GATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTTGGGAGGTTTCCGCCTCTCAGT
GCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGAC
GGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGA
CATCTAGTGCCATTTGTAGAGATACAAAGTTCCCTTCGGGGACGCTAAGACAGGTGGTGCATGGCTGTCG
TCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTGTTATTAGTTGCCAGCAT
TAAGTTGGGCACCTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCAT
GCCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGCGAGCCTGCGAAGGCAA
GCGAATCTCTGAAAGCTGTTCTCAGTTCGGAAGTGCAGTCTGCAACTCGACTGCACGAAGCTGGAATCGCT
AGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTAACACACCGCCCGTCACACCATG
GGAGTCTGCAATGCCCAAAGCCGGTGGCCTAACCTTCGGGAAGGAGCCGTCTAAGGCAGGGCAGATGACT
GGGGTGAAGTCGTAACAAGGTAGCCGTAGGAGAACCTGCGGTTGGA

>310941361|dbj|AB597000.1|*L.crispatus*|*Lactobacillus crispatus* gene for
16S rRNA, partial sequence, strain: CE3

GAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCCTAATACATGCAAGTCGAGCGAGCGGAACTA
ACAGATTTACTTTCGGTAATGACGTTAGGAAAGCGAGCGCGGATGGGTGAGTAACACGTGGGGAACCTGC
CCCATAGTCTGGGATACCACTTGGAAACAGGTGCTAATACCGGATAAGAAAGCAGATCGCATGATCAGCT
TTTAAAAGGCGGCGTAAGCTGTCGCTATGGGATGGCCCCGCGGTGCATTAGCTAGTTGGTAAGGTAAAGG
CTTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCA
AACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTG
AGTGAAGAAGGTTTTTCGGATCGTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTT
ATTTGACGGTAATCAACCAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCA
AGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAAGCCCTCG
GCTTAACCGAGGAAGTGCATCGGAAACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTGGAACCTCCATGTGT
AGCGGTGGAATGCGTAGATATATGGAAGAACACCAGTGCGCAAGGCGGCTCTCTGGTCTGCAACTGACGC
TGAGGCTCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGC
TAAGTGTTGGGAGGTTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGA
CCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAA
GCAACGCGAAGAACCTTACCAGGTCTTGACATCTAGTGCCATTTGTAGAGATACAAAGTTCCCTTCGGGG
ACGCTAAGACAGGTGGTGCATGGCTGTCGTGAGTCTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGA
GCGCAACCCCTTGTTATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGA
GGAAGGTGGGGATGACGTCAAGTCATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAG
TACAACGAGAAGCGAGCCTGCGAAGGCAAGCGAATCTCTGAAAGCTGTTCTCAGTTTCGGAAGTGCAGTCTG
CAACTCGACTGCACGAAGCTGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGG
GCCTTGTAACACACCGCCCGTCACACCATGGGAGTCTGCAATGCCCAAAGCCGGTGGCCTAACCTTCGGGA
AGGAGCCGTCTAAGGCAGGGCAGATGACTGGGGTGAAGTCGTAACAAGGTAGCC

>255040323|gb|FJ557001.1|*L.crispatus*|*Lactobacillus crispatus* strain BL221
16S ribosomal RNA gene, partial sequence

CGTGCGGCGGTGCCTAATACATGCAAGTCGAGCGAGCGGAACTAACAGATTTACTTCGGTAATGACGTT
AGGAAAGCGAGCGGCGGATGGGTGAGTAACACGTGGGGAACCTGCCCATAGTCTGGGATACCACTTGGA
AACAGGTGCTAATACCGGATAAGAAAGCAGATCGCATGATCAGCTTTTAAAAGGCGGCGTAAGCTGTGCG
TATGGGATGGCCCCGCGGTGCATTAGCTAGTTGGTAAGGTAAAGGCTTACCAAGGCGATGATGCATAGCC
GAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCCTACGGGAGGCAGCAGTAGG
GAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAA
AGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAATCAACCAGAAAGT
CACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGT
AAAGCGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAAGCCCTCGGCTTAACCGAGGAACTGCATCGGAA
ACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTGGAACCTCCATGTGTAGCGGTGGAATGCGTAGATATATGG
AGAACACCAAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGTAGCGA
ACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTTGGGAGGTTTCCGCCTCT
CAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAAT
TGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTC
TTGACATCTAGTGCCATTTGTAGAGATACAAAGTTCCCTTCGGGGACGCTAAGACAGGTGGTGCATGGCT

GTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTTATTAGTTGCCA
GCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCA
TCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGCGAGCCTGCGAAG
GCAAGCGAATCTCTGAAAGCTGTTCTCAGTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGAAT
CGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCGTCACAC
CATGGGAGTCTGCAATG

>52222197|gb|AY724740.1|BVAB2|Uncultured bacterium clone 123-f 23 16S
ribosomal RNA gene, partial sequence

TGGGGAATATTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAGTGATGAAGGCCTTCGGGTT
GTAAACTCTTTGGACAGGGACGAAGAAAGTGACGGTACCTGTAGAACAAGCCACGGCTAACTACGTGCC
AGCAGCCGCGGTAATACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGCGTAAAGGGCGTGTAGGCGGC
TAGATAAGTGTGATGTTTAAATCCAAGGCTTAACCTTGGGGTTCATTACAAACTGTTTAGCTTGAGTGCT
GGAGAGGATAGTGGAATTCCTAGTGTAGCGGTAAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAG
GCGGCTATCTGGACAGTAACCTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGG
TAGTCCACGCCGTAAACGATGAATACTAGCTGTAGGAGGTATCGACCCCTTCTGTGGCGCAGTTAACACA
ATAAGTATTCGCGCTGGGGAGTACGGCCGCAAGGTTAAACTCAAAGGAATTGACGGGGACCCGCACAAG
CAGTGGATTATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGACTTGACATCCTCTGACGATT
CAGGAGACTGAATTTTCTCTTCGGAGACAGAGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTG
AGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATTGATTGTTGCTAACAGTAAGATGAGCACTCA
ATTGAGACTGCCGTTGATAAAACGGAGGAAGGTGGGGACGACGTCAAATCATCATGCCCTTATGTTCTG
GGCTACACACGTAATACAATGGCTGTGACAGAGGGAAGCAAGAGGGCGACCTTAAGCGAATCCCAAACG
CAGTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATTGCTAGTAATGGCAGGTCAG
CATACTGCCGTGAATACGTTCCCGGTCT

>63146135|gb|AY995270.1|BVAB2|Uncultured bacterium clone FX88B4-11 16S
ribosomal RNA gene, partial sequence

TGGGGGTGCTACCATGCAAGTCGAACGGAGTTAATTTGAGGAAGCAAGCTTGCTTGAAAAATTAAATTAA
CTTAGTGCGGACGGGCGAGTAACACGTGAGCAACCTGCCTCTTACAGGGGAATAACAACGGGAAACCGT
TGCTAATACCGCATAACATGTTGAAAGGGCATCCTTTTAAACATCAAAGGAGCAATCCGGTAAGAGATGGG
CTCGCGTCCGATTAGCTAGTTGGTAGGGTAACGGCCTACCAAGGCGACGATCGGTAGCCGGACTGAGAGG
TCGAACGGCCGCATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGGC
AATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAGTGATGAAGGCCTTCGGGTTGTAAACTCTTTGGA
CAGGGACGAAGAAAGTGACGGTACCTGTAGAACAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAAT
ACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGCGTAAAGGGCGTGTAGGCGGCTAGATAAGTGTGATG
TTTAAATCCAAGGCTTAACCTTGGGGTTCATTACAAACTGTTTAGCTTGAGTGCTGGAGAGGATAGTGGA
ATTCTAGTGTAGCGGTAAAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAGGCGGCTATCTGGACA
GTAACCTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAA
ACGATGAATACTAGCTGTAGGAGGTATCGACCCCTTCTGCGGCGCAGTTAACACAATAAGTATTCGCGCT
GGGGAGTACGGCCGCAAGGTTAAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGTGGATTATGTGG
TTTAATTCGAAGCAACGCGAAGAACCTTACCAGGACTTGACATCCTCTGACGATTCAGGAGACTGAATTT
TCTCTTCGGAGACAGAGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTTAAG
TCCCGCAACGAGCGCAACCCCTATTGATTGTTGCTAACAGTAAGATGAGCACTCAATTGAGACTGCCGTT
GATAAAACGGAGGAAGGTGGGGACGACGTCAAATCATCATGCCCTTATGTTCTGGGCTACACACGTAAT
ACAATGGCTGTGACAGAGGGAAGCAAGAGGGCGACCTTAAGCGAATCCCAAACGCAGTCTCAGTTCGGA
TTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATTGCTAGTAATGGCAGGTCAGCATACTGCCCGGTAT

>66878594|gb|AY958888.1|BVAB2|Uncultured bacterium clone rRNA115 16S
ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGAG
TTAATTTGAGGAAGCAAGCTTGCTTGAAGAATTAAATTAACCTTAGTGCGGACGGGCGAGTAACACGTGA
GCAACCTGCCTCTTACAGGGGAATAACAACGGGAAACCGTTGCTAATACCGCATAACATGTTGAAAGGGC
ATCCTTTTAAACATCAAAGGAGCAATCCGTAAGAGATGGGCTCGCGTCCGATTAGCTAGTTGGTAGGGTA
ACGGCCTACCAAGGCGACGATCGGTAGCCGGACTGAGAGGTCGAACGGCCGCATTGGGACTGAGACACGG
CCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCG
CGTGAGTGATGAAGGCCTTCGGGTTGTAAACTCTTTGGACAGGGACGAAGAAAGTGACGGTACCTGTAG
ACAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCGAGCGTTATCCGGATTTAC

TGGGCGTAAAGGGCGTGTAGGCGGCTAGATAAGTGTGATGTTTAAATCCAAGGCTTAACCTTGGGGTTCA
TTACAAACTGTTTAGCTTGAGTGCTGGAGAGGATAGTGGAATTCCTAGTGTAGCGGTAAAAATGCGTAGAT
ATTAGGAGGAACACCGGTGGCGAAGGCGGCTATCTGGACAGTAAGTACGCTGAGGCGCGAAAGCGTGGG
GAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAATACTAGCTGTAGGAGGTATCGA
CCCCTTCTGTGGCGCAGTTAACACAATAAGTATTCCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAA
AGGAATTGACGGGGACCCGCACAAGCAGTGGATTATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTAC
CAGGACTTGACATCCTCTGACGATTGAGGAGACTGAATTTTCTCTTCGGAGACAGAGAGACAGGTGGTGC
ATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATTGATTG
TTGCTAACAGTAAGATGAGCACTCAATTGAGACTGCCGTTGATAAAACGGAGGAAGGTGGGGACGACGTC
AAATCATCATGCCCCCTTATGTTCTGGGCTACACACGTAATACAATGGCTGTGACAGAGGGAAGCAAGAGG
GCGACCTTAAGCGAATCCCAAACGCAGTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGTC
GGAATTGCTAGTAATGGCAGGTCAGCATACTGCCGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGT
CACACCATGAGAGTTTACAACACCCAAAGTCAGTAGCTTAACAGCAATGAGGGCGCTGCCTAAGGTGGGG
TAAATAATTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGC

>145582947|emb|AM697115.1|BVAB2|Uncultured bacterium partial 16S rRNA
gene, isolate BF0002B065

GATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGAGTTAATTTGAGGAAGCAAGCTTGTTTG
AAGAATTAAATTAAGTTAGTGGCGGACGGGCGAGTAACACGTGAGCAACCTGCCTCTTACAGGGGAATAA
CAACGGGAAACCGTTGCTAATACCGCATAACATGTTGAAAGGGCATCCTTTTAACATCAAAGGAGCAATC
CGGTAAGAGATGGGCTCGCGTCCGATTAGCTAGTTGGTAGGGTAACGGCCTACCAAGGCGACGATCGGTA
GCCGGACTGAGAGGTCGAACGGCCGCAATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATATTGGGCAATGGGCAAAGCCTGACCCAGCAACGCCGCGTGAGTGATGAAGGCCTTCGGGTTG
TAAACTCTTTGGACAGGGACGAAGAAAGTGACGGTACCTGTAGAACAAGCCACGGCTAACTACGTGCCA
GCAGCCGCGGTAATACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGCGTAAAGGGCGTGATAGGCGGCT
AGATAAGTGTGATGTTTAAATCCAAGGCTTAACCTTGGGGTTCATTACAAACTGTTTAGCTTGAGTGCTG
GAGAGGATAGTGGAATTCCTAGTGTAGCGGTAAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAGG
CGGCTATCTGGACAGTAAGTACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGT
AGTCCACGCCGTAAACGATGAATACTAGCTGTAGGAGGTATCGACCCCTTCTGTGGCGCAGTTAACACAA
TAAGTATTCCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAAGGAATTGACGGGGACCCGCACAAGC
AGTGGATTATGTGGTTTAAATTCGAAGCAACGCGAAGAACCTTACCAGGACTTGACATCCTCTGACGATTC
AGGAGACTGAATTTTCTCTTCGGAGGCAGAGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTA
GATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTGATTGTTGCTAACAGTAAGATGAGCACTCAA
TTGAGACTGCCGTTGATAAAACGGAGGAAGGTGGGGACGACGTCAAATCATCATGCCCCCTTATGTTCTGG
GCTACACACGTAATACAATGGCTGTGACAGAGGGAAGCAAGAGGGCGACCTTAAGCGAATCCCAAACGC
AGTCTCAGTTCCGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATTGCTAGTAATGGCAGGTCAGC
ATACTGCCGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGAGAGTTTACAACACCCA
AAGTCAGTAGCTTAACAGCAATGAGGGCGCTGCCTAAGGTGGGGTAAATAATTTGGGGTGAAGTCGTAAC
AAGGTAGCCGTATCGGAAGG

>63146137|gb|AY995272.1|BVAB2|Uncultured bacterium clone FX8B4-11 16S
ribosomal RNA gene, partial sequence (95%)

GGGGGCGGCTACACATGCAGTCGAACGGAGTTAATTTGAGGAAGCAAGCTTGCTTGAAAAATTAAATTAA
CTTAGTGGCGGACGGGCGAGTAACACGTGAGCAACCTGCCTCTTACAGGGGAATAACAACGGGAAACCGT
TGCTAATACCGCATAACATGTTGAAAGGGCATCCTTTTAACATCAAAGGAGCAATCCGGTAAGAGATGGG
CTCGCGTCCGATTAGCTAGTTGGTAGGGTAACGGCCTACCAAGGCGACGATCGGTAGCCGGACTGAGAGG
TCGAACGGCCGCAATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGGC
AATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAGTGATGAAGGCCTTCGGGTGTAAACTCTTTGGA
CAGGGACGAAGAAAGTGACGGTACCTGTAGAACAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAAT
ACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGCGTAAAGGGCGTGATAGGCGGCTAGATAAGTGTGATG
TTTAAATCCAAGGCTTAACCTTGGGGTTCATTACAAACTGTTTAGCTTGAGTGCTGGAGAGGATAGTGGA
ATTCCTAGTGTAGCGGTAAAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAGGCGGCTATCTGGACA
GTAAGTACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAA
ACGATGAATACTAGCTGTAGGAGGTATCGACCCCTTCTGTGGCGCAGTTAACACATAAGTATTCCGCCTG
GGGAGTACGGCCACAAGGTTGAAACTCAAAGGAATTGACGGGGGGCCCGCTCAAGCAGTGAGGATATGTGGT
TTAATTAGAAGCAACGCGAAGAACCTTACCAGGGTTTGTATCCTTTGAACGATGAAGAGATAGATATTT

CCATTCGGGGACAAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGT
CCCGCAACGAGCCCAACCCCTATTGCCAGTTGCCATCATTTAGTTGGGCACTCAGGTGAGACTGCCGTTG
ATAAAACGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATATTCTGGGCTACACACGTAATA
CAATGGCTACAACAGAGAGAAGCGAGAGGGCGACCCTAAGCAAATCCCCAAAAGCAGTCTCAGTTCGAAT
GGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATTGCTAGTAATGGCAGGTCAGCAAACCTTCTTGTTTTT
C

>52222198|gb|AY724741.1|BVAB3|Uncultured bacterium clone 123f 17 16S
ribosomal RNA gene, partial sequence

TGGGGAATATTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAAGTATGAAGGCCTTCGGGTT
GTAAACTTCTTTGATCAGGGAAGAAACAAATGACGGTACCTGAAAAACAAGCCACGGCTAACTACGTGCC
AGCAGCCGCGGTAATACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGTGTAAAGGGCGTGCAGGCGGG
CTGATAAGTCAGATGTGAAATCCCCGAGCTTAACTCGGGAAGTGCATCTGATACTGTTGGTCTTGAGTGC
TGGAGAGGATAGTGGAATTCCTAGTGTAGCGGTAAAATGCGCAGATATTAGGAGGAACACCAAGTGGCGAA
GGCGGCTATCTGGACAGTAACTGACGCTGAGGCGCGAAAGCGTGGGTAGCAAACAGGATTAGATAACCTG
GTAGTCCACGCCGTAAACGATGATTACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGAGTTAACAC
AATAAGTAATCCACCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAA
GCAGTGGAGTATGTGGTTTAAATTCGACGCAACGCGAAGAACCTTACCAGGGTTTGACATCCCTTGAACGA
TGTAAGATACATAATTCCTTCGGGGACAAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGT
GAGATGTTGGGTAAAGTCCCAGCAACGAGCGCAACCCCTATTGCCAGTTGCCATCATTTAGTTGGGCACTC
AGGCGAGACTGCCGTTGATAAAACGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATATCCT
GGGCTACACACGTACTACAATGGCTACAACAGAGAGCAGCGACGTCGCGAGGCGAAGCAAATCCCCAAAT
GTAGTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGCCGGAATTGCTAGTAATGGCAGGTCA
GCATACTGCCGTGAATACGTTCTCGGGCCT

>306850711|gb|GQ900635.1|BVAB3|Bacterium BVAB3-Strain 5 16S ribosomal RNA
gene, partial sequence

GATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGAGCTTTGAGGAAGTGCTTGCACAGAATT
AAAGCTTAGTGGCGGACGGGTGAGTAACGCGTGAGGAACCTGCCTTTCACAGTGAATAACAACGGGAAA
CCGTTGCTAATGGCGCATGACATCGCATTGAGGCATCTCAGAGCGATTAAAGGAGAAAATCCGGTGAAAGA
TGGACTCGCGTCCGATTAGCTAGTTGGTGAGGTAACGGCCACCAAGGCGACGATCGGTAGCCGAAGTGA
GAGGTTGATCGGCCACATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATT
GGGCAATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAAGTATGAAGGCCTTCGGGTTGTAAACTTCTT
TGATCAGGGAAGAAAACAAATGACGGTACCTGAAAAACAAGCCACGGCTAACTACGTGCCAGCAGCCGCGG
TAATACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGTGTAAAGGGCGTGCAGGCGGGCTGATAAGTCA
GATGTGAAATCCCCGAGCTTAACTCGGGAAGTGCATCTGATACTGTTGGTCTTGAGTGCTGGAGAGGATA
GTGGAATTCCTAGTGTAGCGGTAAAATGCGCAGATATTAGGAGGAACACCAAGTGGCGAAGGCGGCTATCT
GGACAGTAACTGACGCTGAGGCGCGAAAGCGTGGGTAGCAAACAGGATTAGATAACCTGGTAGTCCACGC
CGTAAACGATGATTACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGAGTTAACACAATAAGTAATC
CACCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCAGTGGAGTA
TGTGGTTTAAATTCGACGCAACGCGAAGAACCTTACCAGGGTTTGACATCCCTTGAACGATGTAGAGATAC
ATAATTCCTTCGGGGACAAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATGTTGGG
TTAAGTCCCAGCAACGAGCGCAACCCCTATTGCCAGTTGCCATCATTTAGTTGGGCACTCAGGCGAGACTG
CCGTTGATAAAACGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATATCCTGGGCTACACAC
GTACTACAATGGCTACAACAGAGAGCAGCGACGTCGCGAGGCGAAGCAAATCCCCAAATGTAGTCTCAGT
TCGGATTGCAGGCTGCAACTCGCCTGCATGAAGCCGGAATTGCTAGTAATGGCAGGTCAGCATACTGCCG
TGAATACGTTCTCGGGCCTTGTAACACCCGCCGTCACACCATGAGAGTCAGTAACACCCGAAGTCAGTA
GTCTAACCGCAAGGGGGACGCTGCCGAAGGTGGGACCGATAATTGGGGTGAAGTCGTAACAAGGTAGCCG
TATCGGAAGG

>63146139|gb|AY995274.1|BVAB3|Uncultured bacterium clone FX77B4-11 16S
ribosomal RNA gene, partial sequence

GCCGGGTGCCTTACACATGCAAGTCGAACGGAGTTAATTTGAGGAAGCAAGCTTGCTTGAAGAATTGAA
TTAACTTAGTGGCGGACGGGCGAGTAACACGTGAGCAACCTGCCTCTTACAGGGGAATAACAACGGGAAA
CCGTTGCTAATACCGCATAACATGTTGAAAGGGCATCCTTTTAAACATCAAAGGAGCAATCCGGTAAGAGA
TGGGCTCGCGTCCGATTAGTTAGTTGGTAGGGTAACGGCTACCAAGGCGACGATCGGTAGCCGACTGA
GAGTTCGAACGGCCGCATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATT

GGGCAATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAAGTATGAAGGCCTTCGGGTGTAAACTTCTT
TGATCAGGGAAGAAACAAATGACGGTACCTGAAAAACAAGCCACGGCTAACTACGTGCCAGCAGCCGCGG
TAATACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGTGTAAAGGGCGTGCAGGCGGGCTGATAAGTCA
GATGTGAAATCCCCGAGCTTAACTCGGGAAGTGCATCTGATACTGTTGGTCTTGAGTGCTGGAGAGGATA
GTGGAATTCCTAGTGTAGCGGTAAAATGCGCAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTATCT
GGACAGTAACTGACGCTGAGGCGCGAAAGCGTGGGTAGCAACCAGGATTAGATACCCTGGTAGTCCACGC
CGTAAACGATGATTACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGGAGTTAACACAATAAGTAATC
CACCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGTGGAGTA
TGTGGTTTAATTTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATATAGTTGAGTTATTGAGAAATT
GATAAGTCCCTCGGGACAACCTATACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGT
TAAGTCCCGCAACGAGCGCAACCCTTATTTTTCAGTTACCAGCATTTAAGGTGGGGACTCTGAAGAGACTG
CCGATGACAAATCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGTCTTGGGCTACACAC
GTGCTACAATGGTTCGGTACAACGAGAAGCGAGATAATGATGTTAAGCGAAACTCTAAAAGCCGATCTCAG
TTCGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAGTTGCTAGTAATCGCGAATCAGAACGTCGCG
GGA

>63146138|gb|AY995273.1|BVAB3|Uncultured bacterium clone FX93B4-11 16S
ribosomal RNA gene, partial sequence

TGCCGGGGGTGCTTAACACATGCAGTCGACGGAGCTTTGAGGAAGTGCTTGTACAGAATTAAAGCTTAGT
GGCGGACGGGTGAGTAACGCGTGAGGAACCTGCCTTTCACAGTGGAATAACAACGGGAAACCGTTGCTAA
TGGCGCATGACATCGCATTGAGGCATCTCAGAGCGATTAAAGGAGAAATCCGGTGAAAGATGGACTCGCG
TCCGATTAGCTAGTTGGTGAGGTAACGGCCACCAAGGCGACGATCGGTAGCCGAAGTGAAGGTTGATC
GGCCACATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGGCAATGGG
CGAAAGCCTGACCCAGCAACGCCGCGTGAAGTATGAAGGCCTTCGGGTGTAAACTTCTTTGATCAGGGA
AGAAACAAATGACGGTACCTGAAAAACAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAG
GTGGCGAGCGTTATCCGGATTTACTGGGTGTAAAGGGCGTGCAGGCGGGCTGATAAGTCAGATGTGAAAT
CCCCGAGCTTAACTCGGGAAGTGCATCTGATACTGTTAGTCTTGAGTGCTGGAGAGGATAGTGGAATTCC
TAGTGTAGCGGTAAAATGCGCAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTATCTGGACAGTAAC
TGACGCTGAGGCGCGAAAAGCGTGGGTAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGAT
GATTACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGGAGTTAACACAATAAGTAATCCACCTGGGGA
GTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGTGGAGTATGTGGTTTAA
TTCGACGCAACGCGAAGAACCTTACCAGGGTTTGACATCCCTTGAACGATGTAGAGATACATAATTCCTT
TCGGGGACAAGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCG
CAACGAGCGCAACCCCTATTGCCAGTTGCCATCATTTAGTTGGGCACTCAGGCGAGACTGCCGTTGATAA
AACGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATATCCTGGGCTACACACGTACTACAAT
GGCTACAACAGAGAGCAGCGACGTCGCGAGGCGAAGCAATCCCCAAATGTAGTCTCAGTTCGGATTGCA
GGCTGCAACTCGCCTGCATGAAGCCGGAATTGCTAGTAATGGCAGGTCAGCATATTGCCGGAC

>5222194|gb|AY738705.1|Veillonella|Uncultured Veillonella sp. clone
7BVA-4 16S ribosomal RNA gene, partial sequence

TGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGATGACGGTCTTCGGATT
GTAAAGCTCTGTAAATCGGGACGAATGGTTTGTGTGCAAAATAGTGCATAGACATGACGGTACCGGAATAG
AAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTG
GGCGTAAAGCGCGCGCAGGCGGACTAGCCAGTCAGTCTTAAAAGTTCGGGGCTTAACCCCGTGATGGGAT
TGAAACTACTAGTCTAGAGTATCGGAGAGGAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGATAT
TAGGAAGAACACCAGTGGCGAAGGCGACTTTCTGGACGAACACTGACGCTGAGGCGCGAAAAGCCAGGGGA
GCGAACGGGATTAGATACCCCGGTAGTCCTGGCCGTAAACGATGGGTACTAAGTGTGGGAGGTATCGACC
CCTTCCGTGCTGCAGTTAACGCAATAAGTACCCCGCCTGGGGAGTACGGTCGCAAGACTGAAACTCAAAG
GAATTGACGGGGGCCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACCA
GGTCTTGACATTGATGGACAGAACTAGAGATAGTTTTTCTTCTTCGGAAGCCAGAAAACAGGTGGTGCAC
GGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTATGTT
GCCAGCACGTAATGGTGGGAACCTCATGAGAGACTGCCGAGACAATGCGGAGGAAGGCGGGGATGACGTC
AAATCATCATGCCCTTATGACCTGGGCTACACACGTACTACAATGGGAGTTAATAAAGAGAAGCGAAAC
CGCGAGGTGGAGCGAACCTCACAAACACTCTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAG
TCGGAATCGCTAGTAATCGCAGGTCAGCATACTGCGGTGAATACGTTCCCGGGCCT

>63146101|gb|AY995236.1|Veillonella|Uncultured Veillonella sp. clone
FX50B4-3 16S ribosomal RNA gene, partial sequence

AGGGGGTGCTTTACACATGCAAGTCGAACGAAGAGACATGGGAGCTTGCTCCTATGAATCTTAGTGGCGA
ACGGGTGAGTAACGCGTAATCAACCTGCCCTACAATGGGGGACAACAGTTGGAAACGACTGCTAATACCG
CATACGACCTACGATTGGCATCAATCGTAGGTGAAAGGTGGCCTCTGCATGTAAGCTATCGTTGTAGGAG
GGGATTGCGTCTGATTAGCTAGTTGGAGGGGTAACGGCCCACCAAGGCGATGATCAGTAGCCGGTCTGAG
AGGATGAACGGCCACATTGGGACTGAGACACGGCCCCAACTCCTACGGGAGGCAGCAGTGGGGAATCTTC
CGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGATGACGGTCTTCGGATTGTAAAGCTCTGT
TAATCGGGACGAATGGTTTGTGTGCAAATAGTGCATAGACATGACGGTACCGGAATAGAAAGCCACGGCT
AACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGCGC
GCGCAGGCGGACTAGCCAGTCAGTCTTAAAAGTTCGGGGCTTAACCCCGTGATGGGATTGAAACTACTAG
TCTAGAGTATCGGAGAGGAAAAGTGGAAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAAGAACAC
CAGTGGCGAAGGCGACTTTCTGGACGAACACTGACGCTGAGGCGCGAAAGCCAGGGGAGCGAACGGGATT
AGATACCCCGGTAGTCTCGCCGTAAACGATGGGTACTAAGTGTGGGAGGTATCGACCCCTTCCGTGCTG
CAGTTAACGCAATAAGTACCCCGCCTGGGGAGTACGGTCGCAAGACTGAAACTCAAAGGAATTGACGGGG
GCCCCGACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACCAGGTCTTGACATT
GATGGACAGAAGTACGAGATAGTTTTTCTTTTTTCGGAAGCCAGAAAACAGGTGGTGCACGGTTGTCGTCAG
CTCGTGTCTGAGATATTGGGTTAAGTCCCAGCAACGAGCGCAACCCCTATCTTATGTTGCCAGCACGTAA
TGGTGGGAAGTCAATGAGAGACTGCCGCGAGACAATGCGGAGGAAGGCGGGGATGACGTCAAATCATCATGC
CCCTTATGACCTGGGCTACACACGTACTACAATGGGAGTTAATAAAGAGAAGCGAAACCGCGAGGTGGAG
CGAGCCTCACAACACTCTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATCGCTA
GTAATCGCAGGTCAGCATACTGCGGGAC

>239923965|gb|GQ179687.1|Veillonella|Uncultured Veillonella sp. clone
VE28C02 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAAGAGACATGGGAGCTTGCTCCTATGAAT
CTTAGTGGCGAACGGGTGAGTAACGCGTAATCAACCTGCCCTACAATGGGGGGACAACAGTTGGAAACGA
CTGCTAATACCGCATACGACCTACGATTGACATCAATCGTAGGTGAAAGGTGGCCTCTACATGTAAGCTA
TCGTTGTAGGAGGGGATTGCGTCTGATTAGCTAGTTGGAGGGGTAACGGCCCACCAAGGCGATGATCAGT
AGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGACACGGCCCCAACTCCTACGGGAGGCAGCAG
TGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGATGACGGTCTTCGGATT
GTAAAGCTCTGTTAATCGGGACGAATGGTTTGTGTGCAAATAGTGCATGGACATGACGGTACCGGAATAG
AAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTG
GGCGTAAAGCGCGCGCAGGCGGACTAGCCAGTCAGTCTTAAAAGTTTCGGGGCTTAACCCCGTGATGGGAT
TGAAACTACTAGTCTAGAGTATCGGAGAGGAAAAGTGGAAATTCCTAGTGTAGCGGTGAAATGCGTAGATAT
TAGGAAGAACACCAAGTGGCGAAGGCGACTTTCTGGACGAACACTGACGCTGAGGCGCGAAAGCCAGGGGA
GCGAACGGGATTAGATACCCCGGTAGTCTTGCCGTAAACGATGGGTACTAAGTGTGGGAGGTATCGACC
CCTTCCGTGCTGCAGTTAACGCAATAAGTACCCCGCCTGGGGAGTACGGTCGCAAGACTGAAACTCAAAG
GAATTGACGGGGGCCCCGACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACCA
GGTCTTGACATTGATGGACAGAAGTACGAGATAGTTTTTCTTCTTCGGAAGCCAGAAAACAGGTGGTGCAC
GGTTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCAGCAACGAGCGCAACCCCTATCTTATGTT
GCCAGCACGTAATGGTGGGAACTCATGAGAGACTGCCGCGAGACAATGCGGAGGAAGGCGGGGATGACGTC
AAATCATCATGCCCCCTTATGACCTGGGCTACACACGTACTACAATGGGAGTTAATAAAGAGAAGCGAAAC
CGCGAGGTGGAGCGAACCTCACAACACTCTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAG
TCGGAATCGCTAGTAATCGCAGGTCAGCATACTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCC
GTCACACCACGAAAGTCGGAAGTACCCAAAGCCGGTGGGGTAACCTTCGGGAGCCAGCCGTCTAAGGTAA
AGTCGATGATTGGGGTGAAGTCGTAACAAGGTA

>5222191|gb|AY738702.1|Ureaplasma|Uncultured Ureaplasma sp. clone 127-f
65 16S ribosomal RNA gene, partial sequence

TAGGGAATTTTTTACAATGGGCGCAAGCCTTATGAAGCAATGCCGCGTGAACGATGAAGGTCTTATAGAT
TGTAAGTTCTTTTATATGGGAAGAAACGCTAAAATAGGAAATGATTTTAGTTTACTGTACCATTTGAA
TAAGTATCGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGATGCAAGCGTTATCCGGATTTACTG
GGCGTAAACGAGCGCAGGCGGGTTTGTAAGTTTGGTATTAAATCTAGATGCTTAACGTCTAGCTGTATC
AAAACTGTAAACCTAGAGTGTAGTAGGGAGTTGGGGAACTCCATGTGGAGCGGTAAAATGCGTAGATAT
ATGGAAGAACACCGGTGGCGAAGGCGCAACTTGACTATCACTGACGCTTAGGCTCGAAAGTGTGGGGA

GCAAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATCATCATTAAATGTCGGCCCGAATGGGT
CGGTGTTGTAGCTAACGCATTAAATGATGTGCCTGGGTAGTACATTGCAAGAATGAAACTCAAACGGAA
TTGACGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTTGACAATACACGTAGAACCTTACCTAGG
TTTGACATCTATTGCGATGCTATAGAAATATAGTTGAGGTTAACAATATGACAGGTGGTGCATGGTTGTC
GTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTTTCGTTAGTTACTTTTC
TAGCGTACTGCTACCGCAAGGTAGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATATCTAG
GGCTGCAAACGTGCTACAATGGCTAATACAAACTGCTGCAAAATCGTAAGATGAAGCGAAACAGAAAAAG
TTAGTCTCAGTTCGGATAGAGGGCTGCAATTCGTCTCTTGAAGTTGGAATCACTAGTAATCGCGAATCA
GACATGTCGCGGTGAATACGTTCTCGGGTC

>4377989|gb|AF073457.1|U.parvum|Ureaplasma parvum serovar 14 16S
ribosomal RNA gene, partial sequence

ATTAACGCTGGCGGCATGCCTAATACATGCAAATCGAACGAAGCCTTTTAGGCTTAGTGGTGAACGGGTG
AGTAACACGTATCCAATCTACCCTTAAGTTGGGGATAACTAGTCGAAAGATTAGCTAATACCGAATAATA
ACATCAATATCGCATGAGAAGATGTAGAAAGTCGCTCTTTGTGGCGACGCTTTTGGATGAGGGTGCGACG
TATCAGATAGTTGGTGAGGTAATGGCTCACCAAGTCAATGACGCGTAGCTGTACTGAGAGGTAGAACAGC
CACAATGGGACTGAGACACGGCCATACTCCTACGGGAGGCAGCAGTAGGGAATTTTTTCAATGGGCGC
AAGCCTTATGAAGCAATGCCGCGTGAACGATGAAGGTCTTATAGATTGTAAAGTTCTTTTATATGGGAAG
AAACGCTAAAATAGGAAATGATTTTAGTTTGACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCCA
GCAGCCGCGGTAATACATAGGATGCAAGCGTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGGT
TTGTAAGTTTGGTATTAAATCTAGATGCTTAACGTCTAGCTGTATCAAAAAGTGTAAACCTAGAGTGTAG
TAGGGAGTTGGGGAAGTCCATGTGGAGCGGTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGG
CGCCAACTTGGACTATCACTGACGCTTAGGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGT
AGTCCACACCGTAAACGATCATCATTAAATGTCGGCCCGAATGGGTGCGTGTGTAGCTAACGCATTAAA
TGATGTGCCTGGGTAGTACATTGCAAGAATGAAACTCAAACGGAATTGACGGGGACCCGCACAAGTGGT
GGAGCATGTTGCTTAATTTGACAATACACGTAGAACCTTACCTAGGTTTGACATCTATTGCGATGCTATA
GAAATATAGTTGAGGTTAACAATATGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGCTGAGATGTTG
GGTTAAGTCCCGCAACGAGCGCAACCCCTTTTCGTTAGTTACTTTTCTAGCGTACTGCTACCGCAAGGTA
GAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATATCTAGGGCTGCAAACGTGCTACAATGGCT
AATACAAACTGCTGCAAAATCGTAAGATGAAGCGAAACAGAAAAAGTTAGTCTCAGTTCGGATAGAGGGC
TGCAATTCGTCCTCTTGAAGTTGGAATCACTAGTAATCGCGAATCAGACATGTGCGGGTGAATACGTTCT
CGGGTCTTGTACACACCGCCCGTCAAACCTATGGGAGCTGGTAATATCTAAAACCGCAAAGCTAACCTTTT
GGAGGCATGCGTCTAGGGTAGGATCGGTGACTGGAGTTA

>507369|gb|U06095.1|U.urealyticum|UUU06095 Ureaplasma urealyticum U26
(serovar 14) 16S ribosomal RNA gene

ATTAACGCTGGCGGCATGCCTAATACATGCAAATCGAACGAAGCCTTTTAGGCTTAGTGGTGAACGGGTG
AGTAACACGTATCCAATCTACCCTTAAGTTGGGGATAACTAGTCGAAAGATTAGCTAATACCGAATAATA
ACATCAATATCGCATGAGAAGATGTAGAAAGTCGCTCTTTGTGGCGACGCTTTTGGATGAGGGTGCGACG
TATCAGATAGTTGGTGAGGTAATGGCTCACCAAGTCAATGACGCGTAGCTGTACTGAGAGGTAGAACAGC
CACAATGGGACTGAGACACGGCCATACTCCTACGGGAGGCAGCAGTAGGGAATTTTTTCAATGGGCGC
AAGCCTTATGAAGCAATGCCGCGTGAACGATGAAGGTCTTATAGATTGTAAAGTTCTTTTATATGGGAAG
AAACGCTAAAATAGGAAATGATTTTAGTTTGACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCCA
GCAGCCGCGGTAATACATAGGATGCAAGCGTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGGT
TGTAAGTTTGGTATTAAATCTAGATGCTTAACGTCTAGCTGTATCAAAAAGTGTAAACCTAGAGTGTAGT
AGGGAGTTGGGGAAGTCCATGTGGAGCGGTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGC
GCCAACTTGGACTATCACTGACGCTTAGGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTA
GTCCACACCGTAAACGATCATCATTAAATGTCGGCCCGAATGGGTGCGTGTGTAGCTAACGCATTAAAT
GATGTGCCTGGGTAGTACATTGCAAGAATGAAACTCAAACGGAATTGACGGGGACCCGCACAAGTGGTG
GAGCATGTTGCTTAATTTGACAATACACGTAGAACCTTACCTAGGTTTGACATCTATTGCGATGCTATAG
AAATATAGTTGAGGTTAACAATATGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGCTGAGATGTTGG
GTTAAGTCCCGCAACGAGCGCAACCCCTTTTCGTTAGTTACTTTTCTAGCGTACTGCTACCGCAAGGTAG
AGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATATCTAGGGCTGCAAACGTGCTACAATGGCTA
ATACAAACTGCTGCAAAATCGTAAGATGAAGCGAAACAGAAAAAGTTAGTCTCAGTTCGGATAGAGGGCT
GCAATTCGTCTCTTGAAGTTGGAATCACTAGTAATCGCAAATCGGACATGTGCGGGTGAATACGTTCTC
GGTCTTGTACACACCGCCCGTCAAACCTATGGGAGCTGGTAATATCTAAAACCGCAAAGCTAACCTTTT

GAGGCATGCGTCTAGGGTAGGATCGGTGACTGGAGTTA

>239923993|gb|GQ179715.1|Ureaplasma|Uncultured Ureaplasma sp. clone
VE3B04 16S ribosomal RNA gene, partial sequence

GATTAACGCTGGCGGCATGCCTAATACATGCAAATCGAACGAAGCCTTTTAGGCTTAGTGGTGAACGGGT
GAGTAACACGTATCCAATCTACCCTTAAGTTGGGGATAACTAGTCGAAAGATTAGCTAATACCGAATAAT
AACATCAATATCGCATGAGAAGATGTAGAAAGTCGCTCTTTGTGGCGACGCTTTTGGATGAGGGTGCAC
GTATCAGATAGTTGGTGAGGTAATGGCTCACCAAGTCAATGACGCGTAGCTGTACTGAGAGGTAGAACAG
CCACAATGGGACTGAGACACGGCCCATACTCCTACGGGAGGCAGCAGTAGGGAATTTTTCACAATGGGCG
CAAGCCTTATGAAGCAATGCCGCGTGAACGATGAAGGTCTTATAGATTGTAAAGTTCTTTTATATGGGAA
GAAACGCTAAAATAGGAAATGATTTTGTAGTTTACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCC
AGCAGCCGCGGTAATACATAGGATGCAAGCGTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGG
TTTGTAAAGTTTGGTATTAAATCTAGATGCTTAACGTCTAGCTGTATCAAAAACGTAAACCTAGAGTGTA
GTAGGGAGTTGGGGAACCTCATGTGGAGCGGTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAG
GCGCCAACCTGGACTATCACTGACGCTTAGGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAG
TAGTCCACACCGCAAACGATCATCATTAAATGTGCGCCCGAATGGGCCGGTGTTCAGCTAACGCATTAA
ATGATGTGCCTGGGTAGTACATTGCAAGAATGAAACTCAAACGGAATTGACGGGGACCCGCACAAGTGG
TGGAGCATGTTGCTTAATTTGACAATACACGTAGAACCTTACCTAGGTTTGACATCTATTGCGATGCTAT
AGAAATATAGTTGAGGTTAACAATATGACAGGTGGTGCATGGTTGTGCGTCAGCTCGTGTGCGTGAATGTT
GGGTAAAGTCCCGCAGCGAGCGCAACCCCTTTCGTTAGTTACTTTTCTAGCGATACTGCTACCGCAAGGT
AGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTGTATCTAGGGCTGCAAACGTGCTACAATGGC
TAATACAAACTGCTGCAAAATCGTAAGATGAAGCGAAACAGAAAAAGTTAGTCTCAGTTCGGATAGAGGG
CTGCAATTGCTCCTCTTGAAGTTGGAATCACTAGTAATCGCGAATCAGACATGTGCGCGTGAATACGTTT
TCGGGTCTTGTGCACACCGCCCGTCAAACCTATGGGAGCTGGTAATATCTAAAACCGCAAAGCTAACCTTT
TGGAGGCATGCGTCTAGGGTAGGATCGGTGACTGGAGTTAAGTCGTAACAAGGTA

>52222187|gb|AY738698.1|Dialister|Uncultured Dialister sp. clone BV2-33
16S ribosomal RNA gene, partial sequence

TGGGGAATCTTCCGCAATGGGCGAAAGCCTGACGGAGCAACGCCGCGTGAGTGAAGACGGCCTTCGGGTT
GTAAAACCTCTGTGATTTCGGGACGAAAGATAAGTAGACGAATAATCTGCATAAGTGACGGTACCGAAAAAG
CAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTG
GGCGTAAAGCGCGCGCAGGCGGCTACTTAAAGTCCATCTTAAAAGTGCGGGGGCTTAACCCCGTGATGGGAT
GGAAACTGAGAAGCTGGAGTGTCCGAGAGGAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGAGAT
TAGGAAGAACACCGGTGGCGAAGGCGACTTTCTGGACGACAACTGACGCTTAGGCGCGAAAGCGTGGGGA
GCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGTATCGACC
CCTTCTGTGCCGGAGTTAACGCAATAAGTATCCCGCCTGGGAAGTACGATCGCAAGATTAAAACCTCAAAG
GAATTGACGGGGGCCCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACCA
GGTCTTGACATTGATCGCTATTTTCAGAAATGAGAAGTTCTCCTTCGGGAGACGAGAAAAACAGGTGGTGC
ACGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCATTTG
TTGCCAGCACGCAAAGGTGGGAACTCAAATGAGACCGCCGACACAATGCGGAGGAAGGCGGGGACGACG
TCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTACTACAATGGGTGTCAACAAAGAGAAGCGAA
GGAGCGATCCGGAGCAAACCTCAAAAACACACCCCCAGTTCAGATCGCAGGCTGCAACTCGCCTGCGTGA
AGCAGGAATCGCTAGTAATCGCGGGTCAGCATACCGCGGTGAATACGTTCCCGGGCCT

>297038037|gb|HM344442.1|Dialister|Uncultured bacterium clone
ncd1057a03c1 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGAAGACATGAAGAGCTTGCTCTTTATGA
AATCCAGTGGCAAACGGGTGAGTAACACGTAAACAACCTGCCCTCAGGATGGGGACAACAGACGGAAACG
ACTGCTAATACCGAATACGATTCTTGAGTCGCATGACACAAGAAAGAAAGGGTGGCCTCTACTTGTAAGC
TATCGCCTGGAGAGGGGTTTGGCTCCGATTAGGTAGTTGGTGAGGTAACGGCCACCAAGCCGACGATCG
GTAGCCGGTCTGAGAGGATGAACGGCCACATTGGAACCTGAGACACGGTCCAGACTCCTACGGGAGGCAGC
AGTGGGGAATCTTCCGCAATGGGCGAAAGCCTGACGGAGCAACGCCGCGTGAGTGAAGACGGCCTTCGGG
TTGTAAAACCTCTGTGATTTCGGGACGAAAGATAAGTAGACGAATAATCTGCATAAGTGACGGTACCGAAAA
AGCAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTAT
TGGGCGTAAAGCGCGCGCAGGCGGCTACTTAAAGTCCATCTTAAAAGTGCGGGGGCTTAACCCCGTGATGGG
ATGGAAACTGAGAAGCTGGAGTGTCCGAGAGGAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGAG
ATTAGGAAGAACACCGGTGGCGAAGGCGACTTTCTGGACGACAACTGACGCTTAGGCGCGAAAGCGTGGG

GAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGTATCGA
CCCCTTCTGTGCCGGAGTTAACGCAATAAGTATCCCGCCTGGGAAGTACGATCGCAAGATTAAACTCAA
AGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTAC
CAGGTCTTGACATTGATCGCTATTTTCAGAAATGAGAAGTTCTCCTTCGGGAGACGAGAAAAACAGGTGGT
GCACGGCTGTCGTGAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCATT
TGTTGCCAGCACGCAAAGGTGGGAACCAAATGAGACCGCCGCAGACAATGCGGAGGAAGGCGGGGACGA
CGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTACTACAATGGGTGTCAACAAAGAGAAGCG
AAGGAGCGATCCGGAGCAAACCTCAAAAACACACCCCCAGTTCAGATCGCAGGCTGCAACTCGCCTGCGT
GAAGCAGGAATCGCTAGTAATCGCGGGTCAGCATAACCGCGGTGAATACGTTCCCGGGCCT
>66878648|gb|AY958942.1|Dialister|Uncultured bacterium clone rRNA169 16S
ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGTATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTGAACGGGA
AGACATGAAGAGCTTGCTCTTTATGAAATCCAATGGCAAACGGGTGAGTAACACGTAAACAACCTGCCTT
CAGGATGGGGACAACAGACGGAAACGACTGCTAATACCGAATACGATTCTTGAGTCGCATGACACAAGAA
AGAAAGGGTGGCCTCTACTTGTAAGCTATCGCCTGAAGAGGGGTTTTCGTCCGATTAGGTAGTTGGTGAG
GTAACGGCCCACTAAGCCGACGATCGGTAGCCGGTCTGAGAGGATGAACGGCCACATTGGAAGTGAACG
CGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGGCGAAAGCCTGACGGAGCAACG
CCGCGTGAGTGAAGACGGCCTTCGGGTTGTAAAGCTCTGTGATTTCGGGACGAAAGATAAGTAGACGAATA
ATCTGCATAAGTGACGGTACCGAAAAAGCAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGT
AGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGCGCGCGCAGGCGGCTACTTAAGTCCATCTTAAA
AGTGCGGGGCTTAACCCCGTGATGGAATGGAACTGAGAAGCTGGAGTGTGCGAGAGGAAAAGTGAATTC
CTAGTGTAGCGGTGAAATGCGTAGAGATTAGGAAGAACACCGGTGGCGAAGGCGACTTTCTGGACGACAA
CTGACGCTTAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGA
TGGATACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGGAGTTAACGCAATAAGTATCCCGCCTGGGA
AGTACGATCGCAAGATTAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGTGGAGTATGTGGTTTA
ATTCGACGCAACGCGAAGAACCTTACCAGGTCTTGACATTGATCGCTATTTTCAGAAATGAGAAGTTCTC
CTTCGGGAGACGAGAAAAACAGGTGGTGCACGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTTAAGTC
CCGCAACGAGCGCAACCCCTATCATTTGTTGCCAGCACGCAAAGGTGGGAACCTCAAATGAGACCGCCGCA
GACAATGCGGAGGAAGGCGGGGACGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTACT
ACAATGGGTGTCAACAAAGAGAAGCGAAGGAGCGATCCGGAGCAAACCTCAAAAACACACCCCCAGTTCA
GATCGCAGGCTGCAACTCGCCTGCGTGAAGCAGGAATCGCTAGTAATCGCGGGTCAGCATACCGCGGTGA
ATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACTATGAGAGTCGGAACACCCGAAGCCGGTGAGG
TAACCGCAAGGAGCCAGCCGTGCAAGGTGGAGCTGATGATTGGAGTGAAGTCGTAACAAGGTAACCGTAA
AGGGC

>63146134|gb|AY995269.1|Dialister|Uncultured bacterium clone FX1B4-5 16S
ribosomal RNA gene, partial sequence

AGCGGCGTGCTTACCATGCAAGTGAACGGGAAGACATGAAGAGCTTGCTCTTTATGAAATCCAGTGGCA
AACGGGTGAGTAACACGTAAACAACCTGCCTTCAGGATGGGGACAACAGACGGAAACGACTGCTAATACC
GAGTACGATTCTTGAGTCGCATGACACAAGAAAGAAAGGGTGGCCTCTACTTGTAAGCTATCGCCTGGAG
AGGGGTTTTCGTCCGATTAGGTAGTTGGTGAGGTAACGGCCCACCAAGCCGACGATCGGTAGCCGGTCTG
AGAGGATGAACGGCCACATTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCT
TCCGCAATGGGCGAAAGCCTGACGGAGCAACGCCGCGTGAGTGAAGACGGCCTTCGGGTTGTAAACTCT
GTGATTTCGGGACGAAAGATAAGTAGACGAATAATCTGCATAAGTGACGGTACCGAAAAAGCAAGCCACGG
CTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGC
GCGCGCAGGCGGCTACTTAAGTCCATCTTAAAAGTGCGGGGCTTAACCCCGTGATGGGATGGAAACTGAG
AAGCTAGAGTGTGCGAGAGGAAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGAGATTAGGAAGAAC
ACCGGTGGCGAAGGCGACTTTCTGGACGACAACTGACGCTTAGGCGCGAAAGCGTGGGGAGCAAACAGGA
TTAGATACCCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGTATCGACCCCTTCTGTGC
CGGAGTTAACGCAATAAGTATCCCGCCTGGGAAGTACGATCGCAAGATTAAACTCAAAGGAATTGACGG
GGCCCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACCAGGTCTTGACA
TTGATCGCTATTTTCAGAAATGAGAAGTTCTCTTTTCGAGAGACGAGAAAAACAGGTGGTGCACGGCTGTG
TCAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATCATTTGTTGCCAGCAC
GCAAAGGTGGGAACCTCAAATGAGACCGCCCGCAGACAATGCGGAGGAAGGCGGGGACGACGTCAAGTCATC
ATGCCCTTATGACCTGGGCTACACACGTACTACAATGGGTGTCAACAAAGAGAAGCGAAGGAGCGATCC

GGAGCAAACCTCAAAAACACACCCCCAGTTCAGATCGCAGGCTGCAACTCGCCTGCGTGAAGCAGGAATC
GCTAGTAATCGCGGGTCAGCATACCCGCCGGTATCT

>52222185|gb|AY738696.1|Aerococcus|Uncultured Aerococcus sp. clone 141-b
19 16S ribosomal RNA gene, partial sequence

TAGGGAATCTTCCGCAATGGACGCAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTCCGGATC
GTAAACTCTGTTGTAAGAGAAGAACAATTGTAGAGTAACTGCTACAGTCTTGACGGTATCTTACCAGA
AAGCCACGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGG
GCGTAAAGGGGGCGCAGGCTGCTTCTTAAGTCTGATGTGAAAGCCACGGCTTAACCGTGGAAGTGCATT
GGAACTGGGAAGCTTGAGTACAGAAGAGGAAAGTGGAATCCATGTGTAGCGGTGGAATGCGTAGATAT
ATGGAAGAACACCAGTGGCGAAAGCGACTTTCTGGTCTGTCACTGACGCTGAGGCCCCGAAAGCGTGGGTA
GCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGCGCTAGGTGTTGGAGGGTTTTCCAC
CCTTCAGTGCCGCAGCTAACGCATTAAGCGCTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAG
GAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCA
AGTCTTGACATCCTTTGACCACTCTAGAGATAGAGCTTTCCCTTCGGGGACAAAGTGACAGGTGGTGCAT
GGTTGTCGTGAGCTCGTGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATTGTTAGTT
GCCAGCATTGAGTTGGGCACTCTAGCAAGACTGCCGGTGACAAACCGGAGGAAGGCGGGGATGACGTCAA
ATCATCATGCCCCTTATGACTTGGGCTACACACGTGCTACAATGGATGGTACAACGGGCAGCGAGCTCGC
GAGAGTCAGCGAATCCCTTAAAGCCATTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCCG
GAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGTCT

>66878879|gb|AY959173.1|Aerococcus|Uncultured bacterium clone rRNA400 16S
ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAA
CTTTGAAAGTGCTTGCGCTTTCAAAGTTAGCGGCGGACGGGTGAGTAACACGTAAGGAACCTACCGATAA
GCGGGGGACAACATCCGGAAACGGGTGCTAATACCGCATAGGAAGTTTGTTCGCATGAACAAACCTAGAA
AGATGGCTCTGCTATCACTTATCGATGGCCTTGCGGTGCATTAAGTAGTTGGCGAGGTAACGGCTCACCA
AGGTGATGATGCATAGCCGACCTGAGAGGGTAATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCCT
ACGGGAGGCAGCAGTAGGGAATCTTCCGCAATGGACGCAAGTCTGACGGAGCAACGCCGCGTGAGTGAAG
AAGGTTTTTCGGATCGTAAACTCTGTTGTAAGAGAAGAACAATTGTAGAGTAACTGCTACAGTCTTGAC
GGTATCTTACCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTG
TCCGGATTTATTGGGCGTAAAGGGGGCGCAGGCTGCTTCTTAAGTCTGATGTGAAAGCCACGGCTTAAC
CGTGGAAGTGCATTGGAAACTGGGAAGCTTGAGTACAGAAGAGGAAAGTGGAATCCATGTGTAGCGGTG
GAATGCGTAGATATATGGAAGAACACCAGTGGCGAAAGCGACTTTCTGGTCTGTCACTGACGCTGAGGCC
CGAAAGCGTGGGTAGCAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGCGCTAGGTGT
TGGAGGGTTTTCCACCCTTCAGTGCCGCAGCTAACGCATTAAGCGCTCCGCCTGGGGAGTACGACCGCAAG
GTTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGC
GAAGAACCTTACCAAGTCTTGACATCCTTTGACCACTCTAGAGATAGAGCTTTCCCTTCGGGGACAAAGT
GACAGGTGGTGCATGGTTGTCGTGAGCTCGTGTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAAC
CCCTATTGTTAGTTGCCAGCATTGAGTTGGGCACTCTAGCAAGACTGCCGGTGACAAACCGGAGGAAGGC
GGGGATGACGTCAAATCATCATGCCCCCTTATGACTTGGGCTACACACGTGCTACAATGGATGGTACAACG
GGCAGCGAGCTCGCGAGAGTCAGCGAATCCCTTAAAGCCATTCTCAGTTCGGATTGTAGTCTGCAACTCG
ACTACATGAAGCCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGTCTTGT
ACACACCGCCCGCTCACACCACGAGAGTTTGTAAACACCCGAAGTCGGTGAGGTAACCTTTTGGAGCCAGCC
GCCGAAGGTGGGACAAGTGATTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGCG

>239924009|gb|GQ179731.1|Aerococcus|Uncultured Aerococcus sp. clone
VE4G11 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAACAGAGAAAGTGCTTGCACCTTCAAAGT
TAGCGGCGGACGGGTGAGTAACACGTAAGGAACCTACCGATAAGCGGGGGACAACATCCGGAAACGGGCG
CTAATACCGCATAGGAAGTTTGTTCGCATGAACAAACTTAGAAAGATGGCTCTGCTATCACTTATCGATG
GCCTTGCGGTGCATTAAGTAGTTGGCGAGGTAACGGCTCACCAAGGTGATGATGCATAGCCGACCTGAGA
GGGTAATCGGCCACATTGGGACTGAGACACGGCCAAACTCCTACGGGAGGCAGCAGTAGGGAATCTTCC
GCAATGGACGCAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAAACTCTGTT
GTAAGAGAAGAACAATTGTAGAGTAACTGCTACAGTCTTGACGGTATCTTACCAGAAAGCCACGGCTAA
CTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGGGGGC
GCAGGCTGCTTCTTAAGTCTGATGTGAAAGCCACGGCTTAACCGTGGAAGTGCATTGGAAACTGGGAAG

CTTGAGTACAGAAGAGGAAAGTGGAAGTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACC
AGTGGCGAAAGCGACTTTCTGGTCTGTCACTGACGCTGAGGCCCGAAAGCGTGGGTAGCAAACAGGATTA
GATACCCTGGTAGTCCACGCCGTAAACGATGAGCGCTAGGTGTTGGAGGGTTTCCACCCTTCAGTGCCGC
AGCTAACGCATTAAGCGCTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGA
CCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCCTTACCAAGTCTTGACATCC
TTTGACCACTCTAGAGATAGAGCTTTCCCTTCGGGGACAAAGTGACAGGTGGTGCATGGTTGTCGTCAGC
TCGTGTCTGTAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTGTTAGTTGCCAGCATTGAGT
TGGGCACTCTAGCAAGACTGCCGGTGATAAACCGGAGGAAGGCGGGGATGACGTCAAATCATCATGCCCC
TTATGACTTGGGCTACACACGTGCTACAATGGATGGTACAACGGGCAGCGAGCTCGCGAGAGTCAGCGAA
TCCCTTAAAGCCATTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCCGGAATCGCTAGTAA
TCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGT
TTGTAACACCCGAAGTCGGTGAGGTAACCTTTTGGAGCCAACCGCCGAAGGTGGGACAAGTGATTGGGGT
GAATGTCGTAACAAGGTA

>5701789|emb|Y17318.1|Aerococcus|Aerococcus sp. CCUG28826 16S rRNA gene
GACGAACGCTGGCGGCGTGCCCTAATACATGCAAGTCGAGCGAACAGAGAAAGTGCTTGCACTTTCAAAGT
TAGCGGCGGACGGGTGAGTAACACGTAAGGAACCTACCGATAAGCGGGGGACAACATCCGGAAACGGGTG
CTAATACCGCATAGGAAGTTTGTTCGCATGAACAAACTTAGAAAGATGGCTCTGCTATCACTTATCGATG
GCCTTGCGGTGCATTAAGTAGTTGGCGAGGTAACGGCTCACCAAGGTGATGATGCATAGCCGACCTGAGA
GGGTAATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCCTACGGGAGGCAGCAGTAGGGAATCTTCC
GCAATGGACGCAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAAAACCTCTGTT
GTAAGAGAAGAACAATTTGTAGAGTAAGTCTGCTACAGTCTTGACGGTATCTTACCAGAAAGCCACGGCTAA
CTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGGGGGC
GCAGGCTGCTTCTTAAGTCTGATGTGAAAGCCACGGCTTAACCGTGGAAGTGCATTGGAAACTGGGAAG
CTTGAGTACAGAAGAGGAAAGTGGAAGTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACC
AGTGGCGAAAGCGACTTTCTGGTCTGTCACTGACGCTGAGGCCCGAAAGCGTGGGTAGCAAACAGGATTA
GATACCCTGGTAGTCCACGCCGTAAACGATGAGCGCTAGGTGTTGGAGGGTTTCCACCCTTCAGTGCCGC
AGCTAACGCATTAAGCGCTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGA
CCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCCTTACCAAGTCTTGACATCC
TTTGACCACTCTGGAGATAGAGTTTTCCCTTCGGGGACAAAGTGACAGGTGGTGCATGGTTGTCGTCAGC
TCGTGTCTGTAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTGTTAGTTGCCAGCATTGAGT
TGGGCACTCTAGCAAGACTGCCGGTGACAAACCGGAGGAAGGCGGGGATGACGTCAAATCATCATGCCCC
TTATGACTTGGGCTACACACGTGCTACAATGGATGGTACAACGGGCAGCGAGCTCGCGAGAGTCAGCGAA
TCCCTTAAAGCCATTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCCGGAATCGCTAGTAA
TCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGT
TTGTAACACCCGAAGTCGGTGAGGTAACCTTTTGGAGCCAGCCGCCGAAGGTGGGACAAGTGATTGGGGT
GAAGTCGTAACAAGGTAGCCGTAGGAGAACC

>63146102|gb|AY995237.1|Aerococcus|Uncultured Aerococcus sp. clone
FX44W16 16S ribosomal RNA gene, partial sequence
AGTGGCGGCTTACTTATAATGCAAGTCGAGCGACAGAGAAAGTGCTTGCACTTTCAAAGTTAGCGGCGGA
CGGGTGAGTAACACGTAAGGAACCTACCGATAAGCGGGGGACAACATCCGGAAACGGGTGCTAATACCGC
ATAGGAAGTTTGTTCGCATGAACAAACTTAAAAAGATGGGTCTGCTATCACTTATCGATGGCCTTGCGGT
GCATTAAGTAGTTGGCGAGGTAACGGCTCACCAAGGTGATGATGCATAGCCGACCTGAGAGGGTAATCGG
CCACATTGGGACTGAGACACGGCCCAAACCTCCTACGGGAGGCAGCAGTAGGGAATCTTCCGCAATGGACG
CAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAAAACCTCTGTTGTAAGAGAAG
AACAAATTGTAGAGTAAGTCTACAGTCTTGACGGTATCTTACCAGAAAGCCACGGCTAACTACGTGCCA
GCAGCCGCGGTAATACGTATGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGGGGGCGCAGGCTGCT
TCTTAAGTCTGATGTGAAAGCCACGGCTTAACCCGTGGAAGTGCATTGGAAACTGGGAAGCTTGAGTAC
AGAAGAGGAAAGTGGAAGTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACCAGTGGCGAA
AGCGACTTTCTGGTCTGTCACTGACGCTGAGGCCTGAAAGCGTGGGTAGCAAACAGGATTAGATACCCTG
GTAGTCCACGCCGTAAACGATGAGCGCTAGGTGTTGGAGGGTTTCCACCCTTCAGTGCCGCAGCTAACGC
ATTAAGCGCTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGACCCGCACAA
GCGGTGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCCTTACCAAGTCTTGACATCCTTTGACCAC
TCTAGAGATAGAGCTTTCCCTTCGGGGACAAAGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGT
GAGGTGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTGTTAGTTGCCAGCATTGAGTTGGGCACTC

TAGCAAGACTGCCGGTGACAAACCGGAGGAAGGCGGGGATGACGTCAAATCATCATGCCCCTTATGACTT
GGGCTACACACGTGCTACAATGGATGGTACAACGGGCAGCGAGCTCGCGAGAGTCAGCGAATCCCTTAAA
GCCATTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCCGAATCGCTAGTAATCGCGATCA
GCACGAAAACCGTATTTCCCCG

>5222183|gb|AY738694.1|Anaerococcus|Uncultured Anaerococcus sp. clone
123-f2 5 16S ribosomal RNA gene, partial sequence

TGGGGAATTTTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGATTTAGAAGGCCTTCGGGTTG
TAAAAATCTTTTGTATGGGAAGAAAATGACAGTACCATAACGAATAAGGACCGGCTAATTACGTGCCAGCA
GCCGCGGTAATACGTAAGGTCCGAGCGTTGTCCGGAATCATTGGGCGTAAAGGGTACGTAGGCGGATAAG
CAAGTTAGAAGTGAAATCCTATAGCTCAACTATAGTAAGCTTTTAAACTGCTCATCTTGAGGTATGGAA
GGGAAAGTGGAATTCCTAGTGTAGCGGTGAAATGCGCAGATATTAGGAGGAATACCGGTGGCGAAGGCCA
CTTTCTGGCCATAAACTGACGCTGAGGTACGAAAGCGTGGGTAGCAAACAGGATTAGATACCCTGGTAGT
CCACGCCGTAAACGATGAGTGTTAGGTGTCTGGAATAATCTGGGTGCCGAGCTAACGCAATAAACACTC
CGCCTGGGGAGTACGCACGCAAGTGTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCA
TGTGGTTTAATTTCGACGCAACGCGAAGAACCTTACCAAGTCTTGACATATTACGGAGGGAATTAGAGATA
GTTCCCTTACTTCTTCGGAAGACTGTAATACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCGTGAGATGT
TGGGTTAAGTCCCATAACGAGCGCAACCCCTATATTTAGTTACCATCATTAAGTTGGGGACTCTAGATAT
ACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGACTTGGGCTAC
ACACGTGCTACAATGGCAGGTACACAGGGAAGCGAGACTGCGAAGTTAAGCAAAACTCAAAAAGCCTGTC
CCAGTTCGGATTGCACTCTGCAACTCGAGTGCATGAAGTTGGAGTTGCTAGTAATCGTGGATCAGAATGC
CGCGGTGAATGCGTTCCCGGGTCT

>257480662|gb|GQ422749.1|Anaerococcus|Anaerococcus tetradius strain F0127
16S ribosomal RNA gene, partial sequence

AGAGTTTGATCCTGGCTCAGGATTAACGCTGGCGGCGTGCATAACACATGCAAGTCGAACGATGAAGATA
TTTAGATTCTTTCGGGATGAAAAATATTGGATTAGTGGCGGACGGGTGAGTAACGCGTGAGTAACCTGCC
TTACACAAGGGGATAGCCGTTGGAAACGACGAATAATACCCTATGACATAAACTCTTCGCATGAGGAGCT
TATCAAAGATTTATCGGTGTAAGATGGACTCGCGTCTGATTAGCTAGTTGGTGAGGTAACGGCCACCAA
GGCAACGATCAGTAGCCGGCTTGAGAGAGTGTACGGCCACATTGGGACTGAGACACGGCCCAGACTCCTA
CGGGAGGCAGCAGTGGGGAATTTTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGATTTAGAA
GGCCTTCGGGTTGTAAAAATCTTTTGTATGGGAAGAAAATGACAGTACCATAACGAATAAGGACCGGCTAA
TTACGTGCCAGCAGCCGCGGTAATACGTAAGGTCCGAGCGTTGTCCGGAATCATTGGGCGTAAAGGGTAC
GTAGGCGGATAAGCAAGTTAGAAGTGAAATCCTATAGCTCAACTATAGTAAGCTTTTAAACTGCTCATC
TTGAGGTATGGAAGGGAAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGCAGATATTAGGAGGAATACCG
GTGGCGAAGGCGACTTTCTGGCCATAAACTGACGCTGAGGTACGAAAGCGTGGGTAGCAAACAGGATTAG
ATACCCTGGTAGTCCACGCCGTAAACGATGAGTGTTAGGTGTCTGGAATAATCTGGGTGCCGAGCTAAC
GCAATAAACACTCCGCTGGGGAGTACGCACGCAAGTGTGAAACTCAAAGGAATTGACGGGGACCCGCAC
AAGCAGCGGAGCATGTGGTTTAATTTCGACGCAACGCGAAGAACCTTACCAAGTCTTGACATATTACGGAG
GGAATTAGAGATAGTTCTTACTTCTTCGGAAGACTGTAATACAGGTGGTGCATGGTTGTCGTCAGCTCG
TGTGTCGTGAGATGTTGGGTTAAGTCCCATAACGAGCGCAACCCCTATATTTAGTTACCATCATTAAGTTGG
GGACTCTAGATATACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTA
TGACTTGGGCTACACACGTGCTACAATGGCAGGTACACAGGGAAGCGAGACTGCGAAGTTAAGCAAAACT
CAAAAAGCCTGTCCCAGTTCGGATTGCACTCTGCAACTCGAGTGCATGAAGTTGGAGTTGCTAGTAATCG
TGGATCAGAATGCCGCGGTGAATGCGTTCCCGGGTCTTGTTACACACCGCCCGTCACACCATGGAAGTTGG
CAATACCCGAAGCCTGTGAGCTAACCATTAGGAAGCAGCAGTCAAGGTAGGGTCAGTAAC TGGGGTGAA
GTCGTAACAAGGTAGCCGTATCGGAAGGTGC

>66878532|gb|AY958826.1|Anaerococcus|Uncultured bacterium clone rRNA053
16S ribosomal RNA gene, partial sequence

CCTTAGAGTTTGATCCTGGCTCAGGATAAACGCTGGCGGCGTGCATAACACATGCAAGTCGAACGATGAA
ACTTAACTGATTTCTTCGGAATGATTTTAAAGTGGATTAGTGGCGGACGGGTGAGTAACGCGTGAGTAACC
TGCCTTGACAAGGGGATAGCCGTTGGAAACGACGAATAATACCCTATGATATAAACTCTTCGCATGAAG
GGCTTATCAAAGATTTATCGGTGTAAGATGGACTCGCGTCTGATTAGCTAGTTGGTGGGATAAAAGCCTA
CCAAGGCAACGATCAGTAGCCGGCTTGAGAGAGTGTACGGCCACATTGGGACTGAGACACGGCCCAGACT
CCTACGGGAGGCAGCAGTGGGGAATTTTGCACAATGGGGGCAACCCTGATGCAGCGACGCCGCGTGATTT
AGAAGGCCTTCGGGTTGTAAAAATCTTTTGTATGGGAAGAAAATGACAGTACCATAACGAATAAGGACCGG

CTAATTACGTGCCAGCAGCCGCGGTAATACGTAAGGTCCGAGCGTTGTCCGGAATCATTGGGCGTAAAGG
GTACGTAGGCGGATAAGCAAGTTAGAAGTGAAATCCTATAGCTCAACTATAGTAAGCTTTTAAAAGTCT
CATCTTGAGGTATGGAAGGGAAAGTGAATTCTAGTGAGCGGTGAAATGCGCAGATATTAGGAGGAAT
ACCGGTGGCGAAGGCGACTTTCTGGCCATAAACTGACGCTGAGGTACGAAAGCGTGGGTAGCAAACAGGA
TTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGTTAGGTGTCTGGAATAATCTGGGTGCCGAGC
TAACGCAATAAACTACTCCGCTGGGGAGTACGCACGCAAGTGTGAACTCAAAGGAATTGACGGGGACCC
GCACAAGCAGCGGAGCATGTGGTTTAATTCGACGCAACGCGAAGAACCCTTACCAAGTCTTGACATATTAC
GGAGGGAATTAGAGATAGTTCCTTACTTCTTCGGAAGACTGTAATACAGGTGGTGCATGGTTGTCGTCAG
CTCGTGTCGTGAGATGTTGGGTTAAGTCCCATAACGAGCGCAACCCCTATATTTAGTTACCATCATTAAG
TTGGGGACTCTAGATATACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCC
TTTATGACTTGGGCTACACACGTGCTACAATGGCAGGTACACAGGGAAGCGAGACTGCGAAGTTAAGCAA
AACTCAAAAAGCCTGTCCCAGTTCGGATTGCACTCTGCAACTCGAGTGCATGAAGTTGGAGTTGCTAGTA
ATCGTGGATCAGAATGCCGCGGTGAATGCGTTCCCGGGTCTTGTAACACACCGCCCGTCACACCATGGAAG
TTGGCAATACCCGAAGCCTGTGAGCTAACCATTAGGAAGCAGCAGTCAAGGT

>52222181|gb|AY738692.1|Peptoniphilus|Uncultured Peptoniphilus sp. clone
123-b 35 16S ribosomal RNA gene, partial sequence

TGGGGAATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGGCCTTCGGGTC
GTAAAGCTCTTTTATATGGGAAGATAATGACGGTACCATAAGAAAAAGCCCCGGCTAACTACGTGCCAGC
AGCCGCGGTAATACGTAGGGGGCTAGCGTTGTCCGGAATCACTGGGCGTAAAGGGTTCGCAGGCGGCAAT
GCAAGTCAGATGTAAAAGGCAAAGGCTCAACCTTTGTAAGCATCTGAACTGTATAGCTTGAGAAGTGTA
GAGGCAAGTGAATTTTTAGTGTAGCGGTGAAATGCGTAGATATTAAGAAAGAAATACCGGTGGCGAAGGCG
ACTTGCTGGGCACAATCTGACGCTGAGGAACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAG
TCCACGCCGTAAACGATGAGTGCTAGGTGTGCGGTATAAATCGGTGCCGAGTTAACACAATAAGCACTCC
GCCTGGGGAGTACGTGCGCAAGCATGAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCAT
GTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCAGGGCTTGACATATAAGAGACGAACTTAGAGATAA
GTTTTCTTCTTCGGAAGCCCTTATACAGGTGGTGCATGGTTGTCGTCAGCTCGTGCTGAGATGTTGGG
TTAAGTCCCGCAACGAGCGCAACCCTTATTACTAGTTACCAGCATTTTCGGATGGGGACTCTAGAAAGACT
GCCGATGATAAATCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTATATGCCCTGGGCAACACA
CGTGCTACAATGGCCGTAAACAAAGAGAAGCGAAATCGCAAGGTCAAGCAAACCTCAAAAAGACGGTCTCA
GTTTCGATTGTTCTCTGCAACTCGAGAACATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGAATGCTGC
GGTGAATGCGTTCCCGGGTCT

>257480663|gb|GQ422750.1|Peptoniphilus|Peptoniphilus sp. oral taxon 836
strain F0141 16S ribosomal RNA gene, partial sequence

GAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGCGCTTAACACATGCAAGTCGAGCGATGAAATCTT
AACAGAACCCTTCGGGGCGAAGATAAGACGGATTAGCGGCGGACGGGTGAGTAACACGTGAGTAACCTGC
CTTTTACACAGGGATAGCCTCGGGAAACCGGGATTAAAACCTGATGAACTATCAAATCACATGATTAAG
AAAGTTAAAACCTCCGGTGGTAAAAGATGGACTCGCGTCCCATTAGCTAGTTGGTGAAGGTAACGGCCAC
CAAGGCAACGATGGGTAGCCGGCCTGAGAGGGTGAACGGCCACATTGGAAGTGAAGAAACGGTCCAACTC
CTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAGCGA
AGAAGGCCTTCGGGTGCTAAAGCTCTTTTATATGGGAAGATAATGACGGTACCATAAGAAAAAGCCCCGG
CTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGGGCTAGCGTTGTCCGGAATCACTGGGCGTAAAGG
GTTTCGAGGCGGCAATGCAAGTCAGATGTAAAAGGCAAAGGCTCAACCTTTGTAAGCATCTGAACTGTA
TAGCTTGAGAAGTGTAGAGGCAAGTGAATTTTTAGTGTAGCGGTGAAATGCGTAGATATTAAGAAAGT
ACCGGTGGCGAAGGCGACTTGCTGGGCACAATCTGACGCTGAGGAACGAAAGCGTGGGGAGCAAACAGGA
TTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGTGCGGTATAAATCGGTGCCGAGTTA
ACACAATAAGCACTCCGCTGGGGAGTACGTGCGCAAGCATGAACTCAAAGGAATTGACGGGGACCCGC
ACAAGCAGCGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCAGGGCTTGACATATAAGAG
ACGAACCTTAGAGATAAGTTTTCTTCTTCGGAAGCCCTTATACAGGTGGTGCATGGTTGTCGTCAGCTCGT
GTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTATTACTAGTTACCAGCATTTTCGGATGG
GGACTCTAGAAAGACTGCCGATGATAAATCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTATA
TGCCCTGGGCAACACACGTGCTACAATGGCCGTAAACAAAGAGAAGCGAAATCGCAAGGTCAAGCAAACCT
CAAAAAGACGGTCTCAGTTCGGATTGTTCTCTGCAACTCGAGAACATGAAGTCGGAGTTGCTAGTAATCG
CAGATCAGAATGCTGCGGTGAATGCGTTCCCGGGTCTTGTAACACACCGCCCGTCACACCATGGGAGCTTG
TAATACCCGAAGCCTGTGAGCTAACC GCAAGGAAGCAGCAGTCAAGGTAGGACAAGTGACTGGGGTGAA

GTCGTAACAAGGTAGCCGTATCGGAAGGTGCGG

>29825720|gb|AF542230.1|Peptoniphilus|Peptoniphilus lacrimalis strain CCUG 31350 16S ribosomal RNA gene, partial sequence

TGCAAGTCGAGCGATGAAATCTTAACAGAACCCTTCGGGGTGAAGATAAGACGGATTAGCGGCGGACGGG
TGAGTAACACGTGAGTAACCTGCCTTTTACACAGGGATAGCCTCGGGAAACCGGGATTAAAACCTGATGA
AACTATCAAATCACATGATTAAGAAAGTTAAAACCTCCGGTGGTAAAAGATGGACTCGCGTCCCATTAGCT
AGTTGGTGAAGGTAACGGCCACCAAGGCAACGATGGGTAGCCGGCCTGAGAGGGTGAACGGCCACATTG
GAACTGAGAAACGGTCCAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCCTG
ATGCAGCGACGCCGCGTGAGCGAAGAAGGCCTTCGGGTGCTAAAGCTCTTTTATATGGGAAGATAATGAC
GGTACCATAAGAAAAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGGGCTAGCGTTG
TCCGGAATCACTGGGCGTAAAGGGTTCGCAGGCGGCAATGCAAGTCAGATGTAAAAGGCAAAGGCTCAAC
CTTTGTAAGCATCTGAACTGTATAGCTTGAGAAGTGTAGAGGCAAGTGAATTTTTAGTGTAGCGGTGA
AATGCGTAGATATTAAAAAGAATACCGGTGGCGAAGGCGACTTGCTGGGCACAATCTGACGCTGAGGAAC
GAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGTC
GGTATAAATCGGTGCCGCAGTTAACACAATAAGCACTCCGCCTGGGGAGTACGTGCGCAAGCATGAACT
CAAAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCATGTGGTTTAATTGCAAGCAACGCGAAGAACCT
TACCAGGGCTTGACATATAAGAGACGAACCTTAGAGATAAGTTTTCTTCTTCGGAAGCCCTTATACAGGTG
GTGCATGGTTGTCGTGACCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATTA
CTAGTTACCAGCATTTTCGGATGGGGACTCTAGAAAGACTGCCGATGATAAATCGGAGGAAGGTGGGGATG
ACGTCAAATCATCATGCCCTATATGCCCTGGGCAACACACGTGCTACAATGGCCGTAACAAAGAGAAGCG
AAATCGCAAGGTCAAGCAAACCTCAAAAAGACGGTCTCAGTTCGGATTGTTCTCTGCAACTCGAGAACAT
GAAGTCGGAGTTGCTAGTAATCGCAGATCAGAATGCTGCGGTGAATGCGTTCCCGGGTCTTGTACACACC
GCCCCGTACACCATGGGAGCTTGTAAATACCCGAAGGCCTGTGAGCTAACCGBAAGGAAGCAGCAGTCGAA
GGTAGG

>52222173|gb|AY738684.1|M.mulieris|Uncultured Mobiluncus sp. clone 123-f 85 16S ribosomal RNA gene, partial sequence

TGGGGAATATTGCACAATGGACGGAAGTTTGATGCAGCGACGCCGCTGGAGGGTGTAGGCCTTCGGGTT
GTGAACTCCTTTTTTCTCGTGAAAAAGGCATGCTTTTTGGGTGTGTTGATGGTAGCGGGGGAAGAAGCGCCG
GCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCGAGCGTTGTCCGGATTTATTGGGCGTAAAG
AGCTCGTAGGTGGTTTCGTGCGCTCTGTGCTGAAAGCCAGCAGCTTAACTGTTGGTCTGCGGTGGGTACGG
GCGGGCTTGAGTGCGGTAGGGGTGACTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGA
ACACCGATGGCGAAGGCAGGTCACTGGGCCGTTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAG
GATTAGATACCCTGGTAGTCCACGCTGTAAACGTTGGGAACTAGGTGTGGGGATGCTATCCTGTGTTTTCT
GCGCCGTAGCTAACGCATTAAGTTCCTCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTG
ACGGGGGCCCCGCACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTT
GACATACACTGCGACATGCCAGAGATGGTGTGGCCTTCGGGGTGGTGTACAGGTGGTGCATGGTTGTGCT
CAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGCCTCATGTTGCCAGCAG
TTATGGTGGGGACTCGTGAGGGACTGCCGGGGTTAACTCGGAGGAGGGTGGGGATGACGTCAAATCATCA
TGCCCCCTTATGTCTTGGGCTTCACGCATGCTACAATGGCCAGTACAGAGGGTTGCGATACCGTGAGGTGG
GGCTAATCTCTTAAAGCTGGTCTCGGTTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTTGGAGTCGC
TAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCTCGGGCCT

>34787157|emb|AJ576087.1|M.mulieris|Mobiluncus mulieris 16S rRNA gene, strain CCUG 30101

GGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCCGCAGCTTGCTGTGGTGGATT
AGTGGCGAACGGGCGAGTAACACGTGAGTAACCTGTCTTTTCTTTGGGATAACGGCTGGAAACGGCTGC
TAATACTGGATATTACAGGCTGCATCGCATGGTGTGGTTTGGAAGGTTTTTTCTGGAATGGGGTGGGCTC
GCGGCCTATCAGCTTGTTGGTGGGGTGATGGCTTACCAAGGCTTTGACGGGTAGCCGGCCTGAGAGGGTG
GTCGGTGCCTGACTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAAT
GGACGGAAGTTTGATGCAGCGACGCCGCGTGGAGGGTGTAGGCCTTCGGGTGTGAACTCCTTTTTCTCG
TGAAAAAGGCATGCTTTTGGGTGTGTTGATGGTAGCGGGGGAAGAAGCGCCGGCTAACTACGTGCCAGCA
GCCGCGGTAATACGTAGGGCGCGAGCGTTGTCCGGATTATTGGGCGTAAAGAGCTCGTAGGTGGTTTCGT
CGGTCTGTGCTGAAAGCCAGCAGCTTAACTGTTGGTCTGCGGTGGGTACGGGCGGGCTTGAGTGCGGTA
GGGGTGACTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAACACCGATGGCGAAGGCA
GGTCACTGGGCCGTTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAG

TCCACGCTGTAAACGTTGGGAAGTACGGTGTGGGGATGCTATCCTGTGTTTCTGCGCCGTAGCTAACGCAT
TAAGTTCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGCCCGCACAAAGC
GGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCCTTACCAAGGCTTGACATACACTGCGACATG
CCAGAGATGGTGTGGCCTTCGGGGTGGTGTACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGAT
GTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGCCCTCATGTTGCCAGCACGTTATGGTGGGGACTCGTG
AGGGACTGCCGGGGTTAACTCGGAGGAGGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGTCTTGGG
CTTCACGCATGCTACAATGGCCAGTACAGAGGGTTGCGATACCGTGAGGTGGGGCTAATCTCTTAAAGCT
GGTCTCGGTTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTTGGAGTCGCTAGTAATCGCAGATCAGC
ATTGCTGCGGTGAATACGTTCTCGGGCCTTGTAACACACCGCCCGTCACGTCACGAAAGTTGGTAACACCC
GAAGCCCGTGGCCTAGCCTTTTTGGGGG

>34787158|emb|AJ576088.1|M.curtisii|Mobiluncus curtisii 16S rRNA gene,
strain CCUG 44166B

GGATTAGTGGCGAACGGGCGAGTAACACGTGAGTAACCTGTCCTTTTCTTTGGGATAACGGCTGGAAACG
GCTGCTAATACTGGATATTCAGGCGTCACCGCATGGTGGTGTGTTGGAAAGGTTTTTCTGGGATTGGGTG
GGCTCGCGGCCTATCAGCTTGTGGTGGGGTGATGGCTTACCAAGGCTTTGACGGGTAGCCGGCCTGAGA
GGGTGGTCGGTCGCACTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGC
ACAATGGACGGAAGTTTGTATGCAGCGACGCCGCTGGAGGGTGTAGGCCTTCGGGTTGTGAACTCCTTTT
TCTCGCGAAAAAGGCACAGTTTTGGCTGTGTTGATGGTAGTGGGGGAAGAAGCGCCGGCTAACTACGTGC
CAGCAGCCGCGTAATACGTAGGGCGCGAGCGTTGTCCGATTTATTGGGCGTAAAGAGCTCGTAGGTGG
TTCGTGCGCTCTGTGCTGAAAGCCAGCAGCTTAAGTGTGGTCTGCGGTGGGTACGGGCGGGCTTGAGTG
CGGTAGGGGTGACTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAACACCGATGGCGA
AGGCAGGTCACTGGGCCGTTACTGACACTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCT
GGTAGTCCACGCTGTAAACGTTGGGAAGTACGGTGTGGGGATGCTATCCTGTGTTTCTGCGCCGTAGCTAA
CGCATTAAGTTCCCCGCCTGGGGAGTACGGTGCAGAGGCTAAAACCTCAAAGGAATTGACGGGGGCCCGCA
CAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCCTTACCAAGGCTTGACATACACTGCG
ATGGTTCCAGAGATGGGCCAGCCTTCGGGGTGGTGTACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTG
TGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGCCCTCATGTTGCCAGCGGTTTCGGCCGGGGAC
TCGTGGGGGACTGCCGGGGTTAACTCGGAGGAGGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGTC
TTGGGCTTCACGCATGCTACAATGGCCAGTACAGAGGGTTGCGATACCGTGAGGTGGGGCTAATCTCTTA
AAGCTGGTCTCGGTTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTTGGAGTCGCTAGTAATCGCAGA
TCAGCATTGCTGCGGTGAATACGTTCTCGGGCCTTGTAACACACCGCCCGTCACGTCACGAAAGTTGGTAA
CACCCGAAGCCCGTGGCCTAGCCTTTTTGGGGGGAGCGGTGCAAGGTGGGATTGGCGATTGGGACGAAGT
CGTAACAAGGTAGCCGTACC

>52222169|gb|AY738680.1|L.helveticus|Uncultured Lactobacillus sp. clone
vag1-89 16S ribosomal RNA gene, partial sequence

TAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATC
GTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAATCAACCAGA
AAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGG
GCGTAAAGCGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAAGCCCTCGGCTTAACCGAGGAACTGCATC
GGAAACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTGGAATCCATGTGTAGCGGTGGAATGCGTAGATAT
ATGGAAGAACACCAAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGTA
GCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAGGTTTTCCGC
CTCTCAGTGTGTCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAG
GAATTGACGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCA
GGTCTTGACATCCATAGCCAGTCTAAGAGATTAGATGTTCCCTTCGGGGACTATGAGACAGGTGGTGCAT
GGCTGTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCATTAGTT
GCCAGCATTAAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAA
GTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGACGGTACAACGAGAAGCGACCCTGT
GAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGCTG
GAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTGAATACGTTCCCGGGCCT

>66878916|gb|AY959210.1|L.helveticus|Uncultured bacterium clone rRNA437
16S ribosomal RNA gene, partial sequence

CCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTCT
GCCTTGAAGATCGGAGTGCTTGCCTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACAC

GTGGGTAACCTGCCCCAAGAGATCGGGATAACACCTGGAAACAGATGCTAATACCGGATAAGAAAGCAGAT
CGCATGATCAGCTTTTAAAAGGCGGCGTAAGCTGTGCTATGGGATGGCCCCGCGGTGCATTAGCTAGTT
GGTAAGGTAAAGGCTTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACT
GAGACACGGCCCAAACCTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGA
GCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGATCGTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTA
GTAAGTGGCCTTTATTTGACGGTAATCAACCAGTAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAA
TACGTAGGTGGCAAGCGTTGTCCGAATTTATTGGGCGTAAAGCGAGCGCAGGCGGAAGAATAAGTCTGAT
GTGAAAGCCCTCGGCTTAACCGAGGAAGTGCATCGGAAACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTG
GAACTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACCAGTGGCGAAGGCGGCTCTCTGGT
CTGCAACTGACGCTGAGGCTCGAGAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGT
AAACGATGAGTGCTAAGTGTGAGGTTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGC
CTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGT
GGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATTAGAT
GTTCCCTTCGGGGACTATGAGACAGGTGGTGCATGGCTGTGCTCAGCTCGTGTGAGATGTTGGGTTA
AGTCCCGCAACGAGCGCAACCCTTGTCTATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCG
GTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTG
CTACAATGGACGGTACAACGAGAAGCGACCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTC
GGATTGCAGGCTGCAACTCGCCTGCATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTG
AATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTCTGTAACGCCCGAAGCCGGCGGG
ATAACCGAAAGGAGTCAGCCGTCTAAGGCGGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAGCCGTA
AAGGGC

>50080125|dbj|AB158767.1|L.vaginalis|Lactobacillus vaginalis gene for 16S
ribosomal RNA, strain:MF2123

CGGTGTGCCTAATACATGCAAGTCGAGCGCACTGGCCNAACTGATATGACGTGCTTGCACTGAATTGACG
TTGGATTCCNAGTGAGCGGCGGACGGGTGAGTAACACGTGGGCAACCTGCCCTGAAGCGGGGGATAACAT
CTGGAAACAGGTGCTAATACCGCATAACAACGAAAACCATGGTTTTCTGTTTCAAAGATGGTTTTCGGCT
ATCACTTCAGGATGGGCCCCGCGGTGCATTAGCTAGTTGGTAAGGTAACGGCTTACCAAGGCGATGATGCA
TAGCCGAGTTGAGAGACTGATCGGCCACAATGGAAGTGAAGACACGGTCCATACTCCTACGGGAGGCAGCA
GTAGGGAATCTTCCACAATGGGCGCAAGCCTGATGGAGCAACACCGCGTGAGTGAAGAAGGTTTTCGGCT
CGTAAAGCTCTGTTGTTGGAGAAGAAGCTGCGTGAGAGTAAGTGTTCACGCAGTGACGGTATCCAACCAG
AAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTATCCGGATTTATTG
GGCGTAAAGCGAGCGCAGGCGGTTGCTTAGGTCTGATGTGAAAGCCTTCGGCTTAACCGAAGAAGTGCAT
CGGAAACCGGGCGACTTGAGTGCAGAAGAGGACAGTGGAAGTCCATGTGTAGCGGTGGAATGCGTAGATA
TATGGAAGAACACCAGTGGCGAAGGCGGCTGTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGT
AGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAGGTGTTGGAGGGTTTTCCG
CCCTTCAGTGCCCGGAGCTAACGCATTAAGCACTCCGCTGGGGAGTACGACCGCAAGGTTGAAACTCAAA
GGAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGGTTTTAATTCGAAGCTACGCGAAGAACCTTACC
AGGTCTTGACATCTTGCGCTAACCTAAGAGATTAGGCGTTCCCTTCGGGGACGCAATGACAGGTGGTGCA
TGGTGTGCTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTTACTAGT
TGCCAGCATTTAGTTGGGCACTCTAGTGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGACGACGTCA
GATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGACGGTACAACGAGTTGCGAACTCG
CGAGAGTAAGCTAATCTCTTAAAGCCGTTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACACGAAGTC
GGAATCGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGT
CACACCATGGAAGTTTGCAATGCCCAAAGTCGGTGGCCTAACCATTTGGAGGGAACCGCCTAAGGCAGGG
CAGATGACTGGGGTGAAGTCGTAACAAGGTAG

>66878761|gb|AY959055.1|L.vaginalis|Uncultured bacterium clone rRNA282
16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCCGGCGGTGTGCCTAATACATGCAAGTCGAGCGCACT
GGCCCAACTGATATGATGTGCTTGCACTGAATTGACGTGGATTCCCAGTGAGCGGCGGACGGGTGAGTA
ACACGTGGGCAACCTGCCCTGAAGCAGGGGATAACATCTGGAACAGGTGCTAATACCGCATAACAACGA
AAACCACATGGTTTTTCGTTTTAAAGATGGTTTTCGGCTATCACTTCAGGATGGGCCCCGCGGTGCATTAGCT
AGTTGGTAAGGTAACGGCTTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACAATGG
AACTGAGACACGGTCCATACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCACAATGGGCGCAAGCCTGA
TGGAACAACACCGCGTGAGTGAAGAAGGTTTTCGGCTCGTAAAGCTCTGTTGTTGGAGAAGAAGCTGCGT

GAGAGTAACTGTTACGCGAGTGACGGTATCCAACCAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCG
GTAATACGTAGGTGGCAAGCGTTATCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTGCTTAGGTC
TGATGTGAAAGCCTTCGGCTTAACCGAAGAAGTGCATCGGAAACCGGGCGACTTGAGTGCAGAAGAGGAC
AGTGGAACTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACCAGTGGCGAAGGCGGCTGTC
TGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATG
CCGTAAACGATGAGTGCTAGGTGTTGGAGGGTTTCCGCCCTTCAGTGCCGGAGCTAACGCATTAAGCACT
CCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAAC
ATGTGGTTTAATTCGAAGCTACGCGAAGAACCTTACCAGGTCTTGACATCTTGCGCTAACCTAAGAGATT
AGGCGTTCCTTCGGGGACGCAATGACAGGTGGTGCATGGTCGTCGTCAGCTCGTGTGAGATGTTGG
GTTAAGTCCCGCAACGAGCGCAACCCTTGTTACTAGTTGCCAGCATTTAGTTGGGCACTCTAGTGAGACT
GCCGGTGACAAACCGGAGGAAGGTGGGGACGACGTCAGATCATCATGCCCTTATGACCTGGGCTACACA
CGTGCTACAATGGACGGTACAACGAGTTGCGAACTCGCGAGAGTAAGCTAATCTCTTAAAGCCGTTCTCA
GTTCCGACTGTAGGTTGCAACTCGCCTACACGAAGTCGGAATCGCTAGTAATCGCGGATCAGCATGCCGC
GGTGAATACGTTCCCGGGCCTTGTACACACCGCCGTCACACCATGGAAGTTTGCAATGCCCAAAGTCGG
TGGTCTAACCATTGAGGGAACCGCCTAAGGCAGGGCAGATGACTGGGGTGAA

>52222172|gb|AY738683.1|Gemella|Uncultured Gemella sp. clone BV7-73 16S
ribosomal RNA gene, partial sequence

TAGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGATTTCCGGTTC
GTAAAACTCTGTTGTTAGGGAAGAAAAATGTATAGTAACTATATACAAAAGAGACGGTACCTAACCAGA
AAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGG
GCGTAAAGCGCGCGCAGGTGGTTTAGAAAGTCTGATGTGAAAGCCACGGCTCAACCGTGGAGGGTCATT
GGAACTAATAAACTTGAGTGCAGGAGAGAAAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGAGAT
TAGGAGGAACACCGGTGGCGAAAGCGGCTTTTTGGCCTGCAACTGACACTGAGGCGCGAAAGCGTGGGGA
GCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTGAGTCAAAGAC
TTCAGTGCTGCAGCAAACGCATTAAGCACTCCGCCTGGGGAGTACGATCGCAAGATTGAAACTCAAAGGA
ATTGACGGGGACCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAAG
TCTTGACATACAGTGAAGATATAAGAAATTATATTGTTTTAATGTTTACATTAAACACTGATACAGGTGG
TGCATGGTTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATATC
TAGTTACCAGCAGTAAGATGGGGACTCTAGATAGACTGCCAGTGACAACTGGAGGAAGGTGGGGATGAC
GTCAAATCATCATGCCCTTATGACTTGGGCTACACACGTACTACAATGGATAGGAACAAAGAGAAGCGA
CCTCGCAAGAGCAAGCCAACCTCAGAAAATATTCTCAGTTCCGATTGTAGGCTGCAACTCGCCTACATG
AAGCTGGAATCGCTAGTAATCGCGAATCAGAATGTGCGGGTGAATACGTTCCCGGGTCT

>167599469|gb|EU427463.1|Gemella|Gemella sp. WAL 1945J 16S ribosomal RNA
gene, partial sequence

CGAACTTTAAGAGTGCTTGACACTTAAAGTTAGCGGCGAACGGGTGAGTAACACGTAAAGAACCTACCT
TATAGACAGGGACAACCTATTGGAACGATAGCTAATACCTGATAAGAAAGAAACTCGCATGAGAGAAGTT
CGAAAGTCGGAGCAATCTGACACTATAAGATGGCTTTGCGGTGCATTAGCTAGTTGGTAGGGTAAAAGCC
TACCAAGGCGACGATGCATAGCCGACCTGAGAGGGTGATCGGCCACATTGGGACTGAGACACGGCCCAGA
CTCCTACGGGAGGCAGCAGTAGGGAATCTTCCGCAATGGACGCAAGTCTGACGGAGCAACGCCGCGTGAG
TGAAGAAGGATTTCCGGTTCGTAAAACTCTGTTGTTAGGGAAGAAAAATGTATAATAACTATATACAAA
GAGACGGTACCTAACCAGAAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAG
CGTTGTCCGGAATTATTGGGCGTAAAGCGCGCGCAGGTGGTTTAGAAAGTCTGATGTGAAAGCCACGGC
TCAACCGTGGAGGGTCATTGGAACTAATAAACTTGAGTGCAGGAGAGAAAAAGTGAATTCCTAGTGTAG
CGGTGAAATGCGTAGAGATTAGGAGGAACACCGGTGGCGAAAGCGGCTTTTTGGCCTGCAACTGACACTG
AGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTA
AGTGTGAGTCAAAGACTTCAGTGCTGCCAGCAAACGCATTAAGCACTCCGCCTGGGGAGTACGATCG
CAAGATTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGAAGCA
ACGCGAAGAACCTTACCAAGTCTTGACATACAGTGAAGATATAAGAAATTATATTGTTTTAATGTTTACA
TTAAACACTGATACAGGTGGTGCATGGTTGTGTCGTAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCA
ACGAGCGCAACCCTTATATCTAGTTACCAGCAGTAAGATGGGGACTCTAGATAGACTGCCAGTGACAAAC
TGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGACTTGGGCTACACACGTACTACAATGG
ATAGGAACAAAGAGAAGCGACCTCGCAAGAGCAAGCCAACCTCAGAAAATATTCTCAGTTCCGATTGTA
GGCTGCAACTCGCCTACATGAAGCTGGAATCGCTAGTAATCGCGAATCAGAATGTGCGGGTGAATACGTT
CCCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGTTTGTAACACCTGAAGACGGTGGCCTAACCCT

AAG

>63146109|gb|AY995244.1|Gemella|Uncultured Gemella sp. clone FX80W16 16S ribosomal RNA gene, partial sequence

AGCCGGCGTGCCTATACATGCAGTCGAGCGAACTTTAAGAGTGCTTGCACACTTAAAGTTAGCGGCGAAA
GGGTGAGTAACACGTAAAGAACCTACCTTATAGACAGGGACAACCTATTGGAAACGATAGCTAATACCTGA
TAAGAAAGAACTCGCATGAGAGAAGTTCGAAAGTCGGAGCAATCTGACACTATAAGATGGCTTTGCGGT
GCATTAGCTAGTTGGTAGGGTAAAAGCCTACCAAGGCGACGATGCATAGCCGACCTGAGAGGGTGATCGG
CCACATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCGCAATGGACG
AAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGAAGGATTTCCGGTTCGTAAAACACTGTTGTTAGGGAAG
AAAAAATGTATAGTAACTATATACAAAAGAGACGGTACCTAACCAGAAAGCCACGGCTAACTACGTGCCA
GCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGCGCGCGCAGGTGGTT
TAGAAAGTCTGATGTGAAAGCCACGGCTCAACCGTGGAGGGTCATTGGAACTAATAAACTTGAGTGCA
GGAGAGTAAAGTGAATTCCTAGTGTAGCGGTGAAATGCGTAGAGATTAGGAGGAACACCGGTGGCGAAA
GCGGCTTTTTTGGCCTGCAACTGACACTGAGGCGCGAAAGCGTGGGGAGCAAACAGGGTTAGATACCCTGG
TAGTCCACGCCGTAAACGATGAGTGCTAAGTGTGGAGTCAAAGACTTCAGTGCTGCAGCAAACGCATT
AAGCACTCCGCCTGGGGAGTACGATCGCAAGATTGAACTCAAAGGAATTGACGGGGACCCGCACAAGCG
GTGGAGTATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATACAGTGAAGATATA
AGAAATTATATTGTTTTAATGTTTACATTAAACACTGATACAGGTGGTGCATGGTTGTCTCAGCTCGTG
TCGTGAGATGTTGGGTAAAGTCCCAGCAACGAGCGCAACCCCTTATATCTAGTTACCAGCAGTAAGATGGGG
ACTCTAGATAGACTGCCAGTGACAACTGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATG
ACTTGGGCTACACACGTACTACAATGGATAGGAACAAAGAGAAGCGACCTCGCAAGAGCAAGCCAACCTC
AGAAAACCTATTCTCAGTTTCGATTGTAGGCTGCAACTCGCCTACATGAAGCTGGAATCGCTAGTAATCGC
GAATCAGAATTCGCGGTAATT

>52222163|gb|AY738674.1|Porphyromonas|Uncultured Porphyromonas sp. clone 123-f 45 16S ribosomal RNA gene, partial sequence

TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTCGCGTGAAGGAAGACTGCCCCGAAGGG
TTGTAAACTTCTTTTGTATGGGATTAAAGTCACCTACGTGTAGGTGTTTGCAGTTACCATACGAATAAGC
ATCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGATGCGAGCGTTATCCGGAATTATTGGGTTT
AAAGGGTGCGTAGGTTGCAAGGGAAGTCAGGGGTGAAAAGCTATAGCTCAACTATGGTCTTGCCTTTGAA
ACTCTCTAGCTAGAGTGTACTGGAGGTACGTGGAACGTGTGGTGTAGCGGTGAAATGCATAGATATCACA
CAGAACTCCGATTGCGCAGGCAGCGTACTACATTACAACCTGACACTGAAGCACGAAAGCGTGGGTATCAA
ACAGGATTAGATACCCTGGTAGTCCACGCAGTAAACGATGAATACTAGATCTATGCGATATGACAGTATG
GGTCTAAGCGAAAGCGATAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGAGATTGG
CGGGGGTCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGATTG
AAATGTAGATGCATGAGGCTGAGAGGTCTCTTCCCTTCGGGGCTTCTATGTAGGTGCTGCATGGTTGTCTG
TCAGCTCGTGCCGTGAGGTGTCTGGCTTAAGTGCCATAACGAGCGCAACCCGCGTCGATAGTTACTAACGA
GTTAAGTCGAGGACTCTATCGAGACAGCCGTCTGTAAGACGAGAGGAAGGAGCGGATGACGTCAAATCAGC
ACGGCCCTTACATCCGGGGCGACACACGTGTTACAATGGTAGGGACAGCGAGCAGCCATCTGGCGACAGA
GAGCTAATCTATAAACCTATCCCAGTTCGGATCGGAGTCTGCAACTCGACTCTGTGAAGCTGGATTTCGC
TAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGTCCT

>257480659|gb|GQ422746.1|Porphyromonas|Porphyromonas uenonis strain F0120 16S ribosomal RNA gene, partial sequence

AAATGAGTTTGAAGTCTGGCTCAGGATGAACGCTAGCGATAGGCTTAACACATGCAAGTCGAGGGGCAGCG
AGATGTAGCAATACGTGCTCGGCGACCGGCGAATGGGTGAGTAACACGTATGCAACTTACCTCTTAGTGG
TGAATAACTCGATGAAAGTCGGACTAATACACCATACTCTCCTTAGATCACATGAGAAGAGGAGGAAAGA
TTAATCGCTAAGAGATAGGCCGTGCGTTCCATTAGCTAGTTGGTAAGGTAACGGCTTACCAAGGCAACGAT
GGATAGGGGGACTGAGAGGTTGACCCCCACATTGACACTGAGATACGGGTCAAACCTCTACGGGAGGCA
GCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTCGCGTGAAGGAAGACTGCCCCGA
AGGGTTGTAAACTTCTTTTGTATGGGATTAAAGTCACCTACGTGTAGACGTTTGCAGTTACCATACGAAT
AAGCATCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGATGCGAGCGTTATCCGGAATTATTGG
GTTTAAAGGGTGCGTAGGTTGCAAGGGAAGTCAGGGGTGAAAAGCTATAGCTCAACTATGGTCTTGCCCTT
TGAAACTCTCTAGCTAGAGTGTACTGGAGGTACGTGGAACGTGTGGTGTAGCGGTGAAATGCATAGATAT
CACACAGAACTCCGATTGCGCAGGCAGCGTACTACATTACAACCTGACACTGAAGCACGAAAGCGTGGGTA
TCAAACAGGATTAGATACCCTGGTAGTCCACGCAGTAAACGATGAATACTAGATCTATGCGATATGACAG

TATGGGTCTAAGCGAAAGCGATAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGAGA
TTGGCGGGGGTCCGCACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGG
ATTGAAATGTAGATGCATGAGGCTGAGAGGTCTCTTCCCTTCGGGGCTTCTATGTAGGTGCTGCATGGTT
GTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCGCGTCGATAGTTACTA
ACGAGTCAAGTCGAGGACTCTATCGAGACAGCCGTGCTAAGACGAGAGGAAGGAGCGGATGACGTCAAAT
CAGCACGGCCCTTACATCCGGGGCGACACACGTGTTACAATGGTAGGGACAGCGAGCAGCCATCTGGCGA
CAGAGAGCTAATCTATAAACCTATCCCAGTTCGGATCGGAGTCTGCAACTCGACTCTGTGAAGCTGGAT
TCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGACCTTGCACACACCGCCCGTCAA
GCCATGGGAGTCGGGGGTACCTGAAGAGCGTGACCGTCACAGGAGCGCTTGAGGGTAAAACCTGGTGA CTG
GGGCTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGC

>302129291|dbj|AB547653.1|Porphyromonas|Porphyromonas asaccharolytica
gene for 16S ribosomal RNA, partial sequence, strain: JCM 6326

CTGGCTCAGGATGAACGCTAGCGATAGGCTTAACACATGCAAGTCGAGGGGCAGCGAGATGTAGCAATAC
GTCGTCGGCGACCGGCGAATGGGTGAGTAACACGTATGCAACTTACCTCTTAGTGGTGAATAACCCGATG
AAAGTCGGACTAATACACCATATACTCCTTAGATCCCATGAGAAGAGGAGGAAAGATTAATCGCTAAGAG
ATGGGCCTGCGTTCCATTAGCTAGTTGGTAAGGTAACGGCTTACCAAGGCAACGATGGATAGGGGGACTG
AGAGGTTGACCCCCACATTGACACTGAGATACGGGTCAAACCTCTACGGGAGGCAGCAGTGAGGAATAT
TGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTCGCGTGAAGGAAGACTGCCC GCAAGGGTTGTAAACTT
CTTTTGTATGGGATTAAGTCACTACGTGTAGGTGTTTGCAGTTACCATAACGAATAAGCATCGGCTAAC
TCCGTGCCAGCAGCCGCGTAATACGGAGGATGCGAGCGTTATCCGGAATTATTGGGTTTAAAGGGTGCG
TAGGTTGCAAGGGAAGTCAGGGGTGAAAAGCTGTAGCTCAACTATGGTCTTGCCTTTGAAACTCTCTAGC
TAGAGTGTACTGGAGGTACGTGGAACGTGTGGTGTAGCGGTGAAATGCATAGATATCACACAGAACTCCG
ATTGCGCAGGCAGCGTACTACATTACAACGTGACACTGAAGCACGAAAGCGTGGGTATCCAACAGGATTAG
ATACCCTGGTAGTCCACGCAGTAAACGATGAATACTAGATCTATGCGATATACAGTATGGGTCTAAGCGA
AAGCGATAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGAGATTGGCGGGGGTCCGC
ACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGGATTGAAATGTAGATG
CATGAGGCTGAGAGGTCTCTTCCCTTCGGGGCTTCTATGTAGGTGCTGCATGGTTGTGCTCAGCTCGTGC
CGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCGCGTCGATAGTTACTAACGAGTCAAGTCGAG
GACTCTATCGAGACAGCCGTGCTAAGACGTGAGGAAGGAGCGGATGACGTCAAATCAGCACGGCCCTTAC
ATCCGGGGCGACACACGTGTTACAATGGTAGGGACAGCGAGCAGCCATCTGGTGACAGAGAGCTAATCTA
TAAACCCTATCCCAGTTCGGATCGGAGTCTGCAACTCGACTCTGTGAAGCTGGATTTCGCTAGTAATCGCG
CATCAGCCATGGCGCGGTGAATACGTTCCCGGACCTTGCACACACCGCCCGTCAAGCCATGGGAGTCGGG
GGTACCTGAAGAGCGTGACCGTCACAGGAGCGCTTGAGGGTAAAACCTGGTGA CTG
AAGGTAACC

>52222160|gb|AY738671.1|L.gasseri|Uncultured Lactobacillus sp. clone
vag2-24 16S ribosomal RNA gene, partial sequence

TAGGGAATCTTCCACAATGGACACAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGGTTTCGGCTC
GTAAAGCTCTGTTGGTAGTGAAGAAAGATAGAGGTAGTAACTGGCCTTTATTTGACGGTAATTACTTAGA
AAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGG
GCGTAAAGCGAGTGCAGGCGGTTCAATAAGTCTGATGTGAAAGCCTTCGGCTCAACCCGAGAAATTGCATC
AGAAACTGTTGAACTTGAGTGCAGAAGAGGAGAGTGGAATCCATGTGTAGCGGTGGAATGCGTAGATAT
ATGGAAGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGTA
GCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAGGTTTCCGC
CTCTCAGTGTGTCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAG
GAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCA
GGTCTTGACATCCAGTGCAAACCTAAGAGATTAGGAGTTCCCTTCGGGGACGCTGAGACAGGTGGTGCAT
GGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTGTGCATTAGTT
GCCATCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAA
GTCATCATGCCCCTTATGACCTGGGCTACACACGTGCTACAATGGACGGTACAACGAGAAGCGAACCTGC
GAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTTCGGACTGTAGGCTGCAACTCGCCTACACGAAGCTG
GAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCT

>294438974|gb|GU454858.1|L.gasseri|Lactobacillus gasseri strain 177-3 16S
ribosomal RNA gene, partial sequence

CTATACATGCAAGTCGAGCGAGCTTGCCTAGATGAATTTGGTGCTTGCACCAAATGAAACTAGATACAAG

CGAGCGGCGGACGGGTGAGTAACACGTGGGTAACTGCCAAGAGACTGGGATAACACCTGGAAACAGAT
GCTAATACCGGATAACAACACTAGACGCATGTCTAGAGTTTAAAAGATGGTTCTGCTATCACTCTTGGAT
GGACCTGCGGTGCATTAGCTAGTTGGTAAGGTAACGGCTTACCAAGGCAATGATGCATAGCCGAGTTGAG
AGACTGATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTAGGGAATCTTC
CACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGT
TGGTAGTGAAGAAAGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAATTACTTAGAAAAGTCACGGCTA
ACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAG
TGCAGGCGGTTCAATAAGTCTGATGTGAAAGCCTTCGGCTCAACCGGAGAATTGCATCAGAAACTGTTGA
ACTTGAGTGCAGAAGAGGAGAGTGGAACTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACAC
CAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGGTAGCGAACAGGATT
AGATAACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAGGTTTCGCCCTCTCAGTGCTG
CAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGG
GCCCCGACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCAGGTCTTGACATC
CAGTGCAAACCTAAGAGATTAGGAGTTCCCTTCGGGGACGCTGAGACAGGTGGTGCATGGCTGTCGTCAG
CTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTTCATTAGTTGCCATCATTAAG
TTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCC
CTTATGACCTGGGCTACACACGTGCTACAATGGACGGTACAACGAGAAGCGAACCTGCGAAGGCAAGCGG
ATCTCTGAAAGCCGTTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACACGAAGCTGGAATCGCTAGTA
ATCGCGGATCAGCACGCCGCGGTGAATACGTTCGCCGGCCTTGACACACCGCCCGTACACCATGAGAG
TCTGTAACACCCAAAGCCGGTGGGATAACCTTTATAGGAGTCAGCCGTCTAAGGTAGA

>257074927|dbj|AB517146.1|L.gasseri|Lactobacillus gasseri gene for 16S
rRNA, complete sequence

GAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCCTAATACATGCAAGTCGAGCGAGCTTGCCTA
GATGAATTTGGTGCTTGACCAAATGAACTAGATACAAGCGAGCGGCGGACGGGTGAGTAACACGTGGG
TAACCTGCCAAGAGACTGGGATAACACCTGGAAACAGATGCTAATACCGGATAACAACACTAGACGCAT
GTCTAGAGTTTTAAAAGATGGTTCTGCTATCACTCTTGGATGGACCTGCGGTGCATTAGCTAGTTGGTAAG
GTAACGGCTTACCAAGGCAATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACA
CGGCCCAAACCTCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACG
CCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGTTGGTAGTGAAGAAAGATAGAGGTAGTAAGT
GGCCTTTATTTGACGGTAATTACTTAGAAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTA
GGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGTGCAGGCGGTTCAATAAGTCTGATGTGAAA
GCCTTCGGCTCAACCGGAGAAATTGCATCAGAAACTGTTGAACTTGAGTGCAGAAGAGGAGAGTGGAACTC
CATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACCAAGTGGCGAAGGCGGCTCTCTGGTCTGCAA
CTGACGCTGAGGCTCGAAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGA
TGAGTGCTAAGTGTGGGAGGTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGG
AGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTA
ATTCGAAGCAACGCGAAGAACCCTTACCAGGTCTTGACATCCAGTGCAAACCTAAGAGATTAGGAGTTCCC
TTCGGGGACGCTGAGACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCC
GCAACGAGCGCAACCCTTGTTCATTAGTTGCCATCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACA
AACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAA
TGGACGGTACAACGAGAAGCGAACCTGCGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTCGGACTG
TAGGCTGCAACTCGCCTACACGAAGCTGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACG
TTCCCGGGCCTTGACACACCGCCCGTACACCATGAGAGTCTGTAACACCCAAAGCCGGTGGGATAACC
TTTATAGGAGTCAGCCGTCTAAGGTAGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAGCC

>66878804|gb|AY959098.1|L.gasseri|Uncultured bacterium clone rRNA325 16S
ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCCTAATACATGCAAGTCGAGCGAGC
TTGCCCTAGATGAATTTGGTGCTTGACACAGATGAACTAGATACAAGCGAGCGGCGGACGGGTGAGTAAC
ACGTGGGTAACTGCCAAGAGACTGGGATAACACCTGGAAACAGATGCTAATACCGGATAACAACACTA
GACGCATGTCTAGAGTTTAAAAGATGGTTCTGCTATCACTCTTGGATGGACCTGCGGTGCATTAGCTAGT
TGGTAAGGTAACGGCTTACCAAGGCAATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGAC
TGAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGG
AGCAACGCCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGTTGGTAGTGAAGAAAGATAGAGGT
AGTAACTGGCCTTTATTTGACGGTAATTACTTAGAAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTA

ATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGTGCAGGCGGTTCAATAAGTCTGA
TGTGAAAGCCTTCGGCTCAACCGGAGAATTGCATCAGAACTGTTGAACTTGAGTGCAGAAAGAGGAGAGT
GGAAGTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACACCAGTGGCGAAGGCGGCTCTCTGG
TCTGCGACTGACGCTGAGGCTCGAAAGCATGGGTAGCGAACAGGATTAGATAACCCTGGTAGTCCATGCCG
TAAACGATGAGTGCTAAGTGTGGGAGGTTTCCGCCCTCTCAGTGTGCAGCTAACGCATTAAGCACTCCG
CCTGGGGAGTACGACCGCAAGGTTGAACTCAAAGGAATTGACGGGGGCCGACAAAGCGGTGGAGCATG
TGGTTTAATTCTGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCAGTGCAAACCTAAGAGATTAGG
TGTTCCCTTCGGGGACGCTGAGACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGCTGAGATGTTGGGTT
AAGTCCCGCAACGAGCGCAACCCTTGTTCATTAGTTGCCATCATTAAAGTTGGGCACTCTAATGAGACTGCC
GGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCTTATGACCTGGGCTACACACGT
GCTACAATGGACGGTACAACGAGAAGCGAACCTGCGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTT
CGGACTGTAGGCTGCAACTCGCCTACACGAAGCTGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGT
GAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTCTGTAACACCCAAAGCCGGTGG
GATAACCTTTATAGGAGTCAGCCGTCTAAGGTAGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAACC
GTAAAGGGCG

>52222149|gb|AY738660.1|L.jensenii|Uncultured Lactobacillus sp. clone
vag4-103 16S ribosomal RNA gene, partial sequence

TAGGGAAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTCCGGAT
CGTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAATCAACCAG
AAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTG
GGCGTAAAGCGAGCGCAGGCGGATTGATAAGTCTGATGTGAAAGCCTTCGGCTCAACCGAAGAAGTGCAT
CAGAACTGTCAATCTTGAGTGCAGAAGAGGAGAGTGGAAGTCCATGTGTAGCGGTGGAATGCGTAGATA
TATGGAAGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTCGAAAGCATGGGT
AGCGAACAGGATTAGATAACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAGGTTTCCG
CCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCCTGGGGAGTACGACCGCAAGGTTGAACTCAA
GGAATTGACGGGGGCCGACAAAGCGGTGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCTTACC
AGGTCTTGACATCCTTTGACCACCTAAGAGATTAGGTTTTCCCTTCGGGGACAAAGAGACAGGTGGTGCA
TGGCTGTCGTGAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTTAATAGT
TGCCAGCATTAAGTTGGGCACTCTATTGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCA
AGTCATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGCGAACCTG
TGAAGGCAAGCGGATCTCTTAAAGCTGTTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACACGAAGCT
GGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCT

>7621500|gb|AF243143.1|L.jensenii|Lactobacillus jensenii strain BLB1a 16S
ribosomal RNA gene, partial sequence

GCGTGCCTAATACATGCAAGTCGAGCGAGCTTGCCTATTGAAATTCCTTCGGAATGGACATAGATACAAGC
TAGCGGCGGATGGGTGAGTAACGCGTGGGTAACCTGCCCTTAAGTCTGGGATACCATTTGGAAACAGATG
CTAATACCGGATAAAAGCTACTTTCGCATGAAAGAAGTTTAAAAGGCGGCGTAAGCTGTCGCTAAAGGAT
GGACCTGCGATGCATTAGCTAGTTGGTAAGGCAACGGCTTACCAAGGCGATGATGCATAGCCGAGTTGAG
AGACTGATCGGCCACATTGGGACTGAGACACGGCCCAAACTCCTACGGGAGGCAGCAGTAGGGAATCTTC
CACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTCCGGATCGTAAAGCTCTGT
TGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAATCAACCAGAAAGTCACGGCTA
ACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAG
CGCAGGCGGATTGATAAGTCTGATGTGAAAGCCTTCGGCTCAACCGAAGAAGTGCATCAGAACTGTCAA
TCTTGAGTGCAGAAGAGGAGAGTGGAAGTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAACAC
CAGTGGCGAAGGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTCGAAAGCATGGGTAGCGAACAGGATT
AGATAACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAGGTTTCCGCCCTCAGTGCTG
CAGCTAACGCATTAAGCACTCCGCCCTGGGGAGTACGACCGCAAGGTTGAACTCAAAGGAATTGACGGGG
GCCCCGACAAGCGGTGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATC
CTTTGACCACCTAAGAGATTAGGTTTTCCCTTCGGGGACAAAGAGACAGGTGGTGCATGGCTGTCGTGAG
CTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTTAATAGTTGCCAGCATTAAG
TTGGGCACTCTATTGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCC
CTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGCGAACCTGTGAAGGCAAGCGG
ATCTCTTAAAGCTGTTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACACGAAGCTGGAATCGCTAGTA
ATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAG

TTTGTAAACACCCAAAGTCGGTGAGGTAACTTTTGGAGCCAGCCGCTTAAGGTGGGACAGATGATTAGGGT
GAAGTCGTAACAAGGTAGCTGTAGGAGAATA

>66878835|gb|AY959129.1|L.jensenii|Uncultured bacterium clone rRNA356 16S
ribosomal RNA gene, partial sequence

ACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTCTGCCTTGAAGATCGGAGTGCTTGCAC
TCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACACGTGGGTAACCTGCCCAAGAGATCGG
GATAACACCTGGAAACAGATGCTAATACCGGATAACAACAGATGATGCCTATCAACTGTTTAAAAGATGG
TTCTGCTATCACTCTTGATGGACCTGCGGTGCATTAGCTAGTTGGTAGGGTAACGGCCTACCAAGGCGA
TGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCCTACGGGA
GGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTT
TTCGGATCGTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAAT
CAACCAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGA
TTTATTGGGCGTAAAGCGAGCGCAGGCGGATTGATAAGTCTGATGTGAAAGCCTTCGGCTCAACCGAAGA
ACTGCATCAGAACTGTCAATCTTGAGTGCAGAAGAGGAGAGTGGAACTCCATGTGTAGCGGTGGAATGC
GTAGATATATGGAAGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTCGAAAG
CATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGGGAG
GTTTCCGCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAA
ACTCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAA
CCTTACCAGGTCTTGACATCCTTTGACCACCTAAGAGATTAGTTTTTCCCTTCGGGGACAAAGAGACAGG
TGGTGCATGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGT
TAATAGTTGCCAGCATTAAGTTGGGCACTCTATTGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGAT
GACGTCAAGTCATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGC
GAACCTGTGAAGGCAAGCGGATCTCTTAAAGCTGTTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACA
CGAAGCTGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACAC
CGCCCGTCACACCATGAGAGTTTGTAAACACCCAAAGTCGGTGAGGTAACCTTTGGAGCCAGCCGCTAAG
GTGGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGC

>52222145|gb|AY738656.1|Eggerthella|Uncultured Eggerthella sp. clone 123-
f2 68 16S ribosomal RNA gene, partial sequence

TGGGGAATATTGCGCAATGGGGGAAACCCTGACGCAGCAACGCCGCGTGCGGGATGAAGGCCTTCGGGTT
GTAAACCGCTTTTACGAGGGAAGACATCGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGCCAGC
AGCCGCGGTAATACGTAGGGGGCGAGCGTTATCCGGATTTCATTGGGCGTAAAGCGCGCGCAGGCGGTTGC
TCAAGCGGAACCTCTAATCTCGGGGCTTAACCTCGAGCCGGGTTCCGAACCTGGACGACTCGAGTGCGGTA
GAGGCAGATGGAATTTCCCGGTGTAGCGGTGGAATGCGCAGATATCGGGAAGAACACCAACGGCGAAGGCA
GTCTGCTGGGCCGTCACTGACGCTGAGGCGCGAAAGCTGGGGGAGCGAACAGGATTAGATACCCTGGTAG
TCCCAGCCGTAAACGATGAGCGCTGGGTGTGGGAGATTACATCTTCCGTGCCGAAGCTAACGCATTAAGC
GTCCTCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGCCCCGCACAAGCAGCGG
AGCATGTGGCTTAATTCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATGTAGGTGAAGCGGCGGAA
ACGTGCTGGCCGAAAGGAGCCTACACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGG
TTAAGTCCCGCAACGAGCGCAACCCCTGCCCCGTGTTACCAGCATTTAGTTGGGGACTCGCGGGGGACTG
CCGGCGTCAAGCCGGAGGAAGGCGGGGATGACGTCAAGTCATCATGCCCTTATGCCCTGGGCCGCACAC
GTGCTACAATGGCCGGCACAGCGGGCTGCAACCTAGCGATAGGAAGCGAATCCCGTAAAGCCGGTCCCAG
TTCGGATTGGAGGCTGAAACCCGCCTCCATGAAGCCGGAGTTGCTAGTAATCGCGGATCAGCACGCCGCG
GTGAATGCGTTCCCGGGCCT

>66878729|gb|AY959023.1|Eggerthella|Uncultured bacterium clone rRNA250
16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCAAGTCGAACGAT
TAAAGCACCTTCGGGTGTGTATAGAGTGGCGAACGGGTGAGTAACACGTGACCAACCTGCCTCTTACATT
GGGACAACCAAAAGAAATCTGGCTAATACCAAATACTCCGCACATATCACATGATGTATGCGGGAAAGC
TTTTGCGGTAAGAGATGGGGTCGCGGCCCATTAGGTAGACGGCGGGGTAGAAGCCACCGTGCCGATGAT
GGGTAGCCGGGTTGAGAGACCGACCGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCGCAATGGGGGAAACCCTGACGCAGCAACGCCGCGTGCGGGATGAAGGCCTTCG
GGTTGTAAACCGCTTTTACGAGGGAAGACATCGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGC
CAGCAGCCGCGGTAATACGTAGGGGGCGAGCGTTATCCGGATTTCATTGGGCGTAAAGCGCGCGCAGGCGG
TTGCTCAAGCGGAACCTCTAATCTCGGGGCTTAACCTCGAGCCGGGTTCCGAACCTGGACGACTCGAGTGC

GGTAGAGGCAGATGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCGGGAAGAACACCAACGGCGAA
GGCAGTCTGCTGGGCCGTCACTGACGCTGAGGCGCGAAAGCTGGGGGAGCGAACAGGATTAGATACCCTG
GTAGTCCCAGCCGTAAACGATGAGCGCTGGGTGTGGGAGATTACATCTTCCGTGCCGAAGCTAACGCATT
AAGCGCTCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCA
GCGGAGCATGTGGCTTAATTCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATGTAGGTGAAGCGGC
GGAAACGTCGTGGCCGAAAGGAGCCTACACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGT
TGGGTTAAGTCCCGCAACGAGCGCAACCCCTGCCCCGTGTTACCAGCATTTAGTTGGGGACTCGCGGGGG
ACTGCCGGCGTCAAGCCGAGGAAGGCGGGGATGACGTCAAGTCATCATGCCCCCTTATGCCCTGGGCCGC
ACACGTGCTACAATGGCCGGCACAGCGGGCTGCAACCTAGCGATAGGAAGCGAATCCCGTAAAGCCGGTC
CCAGTTCGGATTGGAGGCTGAAACCCGCCTCCATGAAGCCGGAGTTGCTAGTAATCGCGGATCAGCACGC
CGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCCGTACACCACCCGAGTCGTCTGCACCCGAAGC
CGCCGGCCGAACCCCTTTGGGGACGGAGGCGTCAAGGTGTGGAGGGTGAGGGGGGTGAAGTCGTAACAA
GGTAACCGTAAAGGGC

>66878619|gb|AY958913.1|Eggerthella|Uncultured bacterium clone rRNA140
16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCAAGTCGAGCGAT
TAAAGCACCTTCGGGTGTGTATAGAGTGGCGAACGGGTGAGTAACACGTGACCAACCTGCCTCTTACATT
GGGACAACCAAAAGAAATTCTGGCTAATACCAATACTCCGCACATATCACATGATGTATGCGGGAAAGC
TTTTGCGGTAAGAGATGGGGTCGCGGGCCATTAGGTAGACGGCGGGGTAGAAGCCACCGTGCCGATGAT
GGGTAGCCGGGTTGAGAGACCGACCGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCGCAATGGGGGAAACCCCTGACGCAGCAACGCCGCGTGCGGGATGAAGGCCTTCG
GGTTGTAAACCGCTTTCAGCAGGGAAGACATCGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGC
CAGCAGCCGCGTAATACGTAGGGGGCGAGCGTTATCCGGATTTCATTGGGCGTAAAGCGCGCGCAGGCGG
TTGCTCAAGCGGAACCTCTAATCTCGGGGCTTAACCTCGAGCCGGGTTCGAACTGGACGACTCGAGTGC
GGTAGAGGCAGATGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCGGGAAGAACACCAACGGCGAA
GGCAGTCTGCTGGGCCGTCACTGACGCTGAGGCGCGAAAGCTGGGGGAGCGAACAGGATTAGATACCCTG
GTAGTCCCAGCCGTAAACGATGAGCGCTGGGTGTGGGAGATTACATCTTCCGTGCCGAAGCTAACGCATT
AAGCGCTCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCA
GCGGAGCATGTGGCTTAATTCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATGTAGGTGAAGCGGC
GGAAACGTCGTGGCCGAAAGGAGCCTACACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGT
TGGGTTAAGTCCCGCAACGAGCGCAACCCCTGCCCCGTGTTACTAGCATTTAGTTGGGGACTCGCGGGGG
ACTGCCGGCGTCAAGCCGAGGAAGGCGGGGATGACGTCAAGTCATCATGCCCCCTTATGCCCTGGGCCGC
ACACGTGCTACAATGGCCGGCACAGCGGGCTGCAACCTAGCGATAGGAAGCGAATCCCGTAAAGCCGGTC
CCAGTTCGGATTGGAGGCTGAAACCCGCCTCCATGAAGCCGGAGTTGCTAGTAATCGCGGATCAGCACGC
CGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCCGTACACCACCCGAGTCGTCTGCACCCGAAGC
CGCCGGCCGAACCCCTTTGGGGACGGAGGCGTCAAGGTGTGGAGGGTGAGGGGGGTGAA

>167736297|dbj|AB379693.1|Eggerthella|Eggerthella sp. YY7918 gene for 16S
rRNA, partial sequence

GAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCAAGTCGAACGATTAAAGCGC
CTTCGGGCGTGTATAGAGTGGCGAACGGGTGAGTAACACGTGACCAACCTACCCTTCTCTTCGGGACAAC
CTTGGGAAACCGAGGCTAATACCGAATACTCCGGCGAGTGCGCATGCACTCACCAGGAAAGCTTTCGCGG
AGAAGGATGGGGTCGCGGCCCCATCAGGTAGACGGCGGGGTAGCGGCCCACCGTGCTTTTGACGGGTAGCC
GGGTTGAGAGACCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGCAGCAGTGGG
GAATTTTGCGCAATGGGGGAAACCCCTGACGCAGCAACGCCGCGTGCGGGATGAAGGCCTTCGGGTCTGTA
ACCGCTTTCAGCAGGGAAGAAATTCGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGCCAGCAGC
CGCGTAATACGTAGGGGGCGAGCGTTATCCGGATTTCATTGGGCGTAAAGCGCGCGTAGGCGGCCGCTA
AGCGGGACCTCTAACCTTGGGGCTCAACCTCAAGCCGGGTTCGAACTGGGTGGCTCGAGTTTGGTAGAG
GAAGATGGAATTCCCGGTGTAGCGGTGGAATGCGCAGATATCGGGAAGAACACCGATGGCGAAGGCAGTC
TTCTGGGCCATAACTGACGCTGAGGCGCGAAAGCTAGGGGAGCAAACAGGATTAGATACCCCTGGTAGTCC
TAGCCGTAAACGATGGGCACTAGGTGTGGGGAGATACTCTTCCGTGCCGAAGCAAACGCATTAAGTGCC
CCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCAGCGGAGC
ATGTGGCTTAATTCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATGCGCATGAAGCCGGGGAAACT
CGGTGGCCGAAAGGAGTGCGCGCAGGTGGTGCATGGCTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTA
AGTCCCGCAACGAGCGCAACCCCTGTCCTGTGTTGCCAGCATTCAGTTGGGGACTCGCAGGAGACTGCCG

CGGTCAAGCCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCCTTATGCCCTGGGCTGCACACGTG
CTACAATGGCCGGCACAACGGGCTGCTACCTGGCGACAGGAAGCGAATCCCTTAAAGCCGGTCCCAGTTC
GGATCGGAGGCTGCAACCCGCCTCCGTGAAGTCGGAGTTGCTAGTAATCGCGGATCAGCATGCCGCGGTG
AATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCACCCGAGTCGTCTGCACCCGAAGCCGCCGGC
CGAACCCATTTGGGACGGAGGCGTCGAAGGTGTGGAGGGTAAGGGGGTGAAGTCGTAACAAGGTAGCC
>145286402|gb|EF495247.1|L.rhamnosus|Lactobacillus rhamnosus strain L60
16S ribosomal RNA gene, partial sequence

GCTCAGGATGAACGCNGGCGGCGTGCNTAATACATGCAAGTCGAACGAGTTCTGATTATTGAAAGGTGCT
TGCATCTTGATTTAATTTTGAACGAGTGGCGGACGGGTGAGTAACACGTGGGTAACCTGCCCTTAAGTGG
GGGATAACATTTGGAAACAGATGCTAATACCGCATAAATCCAAGAACCGCATGGTTCTTGGCTGAAAGAT
GGCGTAAGCTATCGCTTTTGGATGGACCCGCGGCGTATTAGCTAGTTGGTGAGGTAACGGCTCACCAAGG
CAATGATACGTAGCCGAACGTAGAGGTTGATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCTACG
GGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAG
GCTTTTCGGGTGCTAAAACTCTGTTGTTGGAGAAGAATGGTCGGCAGAGTAACGTGTTGTCGGCGTGACGGT
ATCCAACCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGGTGGCAAGCGTTATCC
GGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTTTTTAAGTCTGATGTGAAAGCCCTCGGCTTAACCGA
GGAAGTGCATCGGAAACTGGGAACTTGAGTGCAGAAGAGGACAGTGGAACTCCATGTGTAGCGGTGAAA
TGCGTAGATATATGGAAGAACACCAAGTGGCGAAGGCGGCTGTCTGGTCTGTAACGTGACGCTGAGGCTCGA
AAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAATGCTAGGTGTTGG
AGGGTTTTCCGCCCTTCAGTGCCGCAGCTAACGCATTAAGCATTCGCGCTGGGGAGTACGACCGCAAGGTT
GAAACTCAAAGGAATTGACGGGGGCGCCGACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAA
GAACCTTACCAGGTCTTGACATCTTTTGATCACCTGAGAGATCAGGTTTCCCCTTCGGGGGCAAAATGAC
AGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCT
TATGACTAGTTGCCAGCATTTAGTTGGGCACTCTAGTAAGACTGCCGGTGACAAACCGGAGGAAGGTGGG
GATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGATGGTACAACGAGT
TGCGAGACCGCGAGGTCAAGCTAATCTCTTAAAGCCATTCTCAGTTCGGACTGTANGCTGCAACTCGCCT
ACACGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACA
CA

>63146108|gb|AY995243.1|Finegoldia|Uncultured Finegoldia sp. clone
FX50B4-14 16S ribosomal RNA gene, partial sequence

ACCGGGGATGCTTACCATGCAAGTCGAACGGGAATTAGTAGACAGAAACCTCGGTGGAAGACTACTAATG
AGAGTGGCGAACGGGTGAGTAACGCGTGAGCAACCTGCCTATGACAGAGGGATAGCCTCGGGAAACCGGG
ATTAATACCGCATAAAATCGTAGAAACGCATGTTTCAACGGTCAAAGATTTATCGGTCATAGATGGGCTC
GCGTCTGATTAGCTAGTTGGTGAGATAACAGCCCCACCAAGGCGACGATCAGTAGCCGGTCTGAGAGGATG
AACGGCCACATTGGAACGTGAGACACGGTCCAAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAAT
GGGGGAAACCTGATGCAGCGACGCCGCGTGAACGAAGAAGGTATTTCGTATCGTAAAGTTCTGTCTCTATG
GGAAGATAATGACAGTACCATAGAAGAAAGCTCCGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTAT
GGAGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGTACGCAGGCGGTTTAGAGAGTCTAATGTTAAAA
ATCGGGGCTCAACCCCGTAAAGCATTAGAACTATTAACTTGAGTAGTGGAGAGAAAAAGTGGAAATTCCT
AGTGTAGTGGTGAAATACGTAGATATTAGGAGGAATACCAGTAGCGAAGGCGACTTTCTGGACACAACT
GACGCTGAGGTACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATG
AATGCTAGGTGTTGGGTGTCAAAGCTCAGTGCCGAAGTTAACACATTAAGCATTCCGCTGGGGAGTACG
CACGCAAGTGTGAAACTCAAAGGAATTGACGGGGACCCGCAAGCAGCGGAGCATGTGGTTTAAATTCGA
TGCAACGCGAAGAACCTTACCAGGGCTTGACATGTGGGTGAAAGGTATAGAGATATACCCCTCTCTTTAT
GAGACATCCATACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAA
CGAGCGCAACCCCTATACTTAGTTACCAGCGAGTAAAGTCGGGGACTCTAAGTAGACTGCCGATGACAAA
TCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGTCCTGGGCTACACACGTGCTACAATG
GTTGGTACAGAGGGCAGCTATATAGTGATATAATGCAAACTCGAAAGCCAATCCCAGTTCGGATTGTAG
GCTGCAACTCGCCTACATGAAGTCGGAGTTGCTAGTAATCGCGAATCAGAATGACCGCCGGTTTA

>66878758|gb|AY959052.1|Finegoldia|Uncultured bacterium clone rRNA279 16S
ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGG
ATTTAGTAAACAGAAGCCTCGGTGGAAGATTACTAATGAGAGTGGCGAACGGGTGAGTAACGCGTGAGCA
ACCTGCCTATGACAGTGGGATAGCCTCGGGAAACCGGGATTAATACCGCATAAAATCGTAGAAACACATG

TTTCAACGGTCAAAGATTTATCGGTCATAGATGGGCTCGCGTCTGATTAGCTAGTTGGTGAGATAACAGC
CCACCAAGGCGACGATCAGTAGCCGGTCTGAGAGGATGAACGGCCACATTGGAAGTACAGACACGGTCCAA
ACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGA
ACGAAGAAGGTATTCGTATCGTAAAGTTCTGTCTATGGGAAGATAATGACAGTACCATAGAAGAAAGCT
CCGGCTAAATACGAGCCAGCAGCCGCGTAATACGTATGGAGCGAGCGTTGTCCGGAATTATTGGGCGTA
AAGGGTACGCAGGCGGTTTAATAAGTCGAATGTTAAAGATCGGGGCTCAACCCCGTAAAGCATTGGAAAC
TGATAAACTTGAGTAGTGGAGAGGAAAGTGAATTCTAGTGTAGTGGTGAAATACGTAGATATTAGGAG
GAATACCAGTAGCGAAGGCGACTTTCTGGACACAACTGACGCTGAGGTACGAAAGCGTGGGGAGCAAAC
AGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAATGCTAGGTGTTGGGGGTCAAACCTCGGTGC
CGAAGTTAACACATTAAGCATTCCGCCTGGGGAGTACGCACGCAAGTGTGAAACTCAAAGGAATTGACGG
GGACCCGCACAAGCAGCGGAGCATGTGGTTTAATTTCGATGCAACGCGAAGAACCCTTACCAGGGCTTGACA
TGTGGGTGAAAGGTATAGAGATATACCCCTCTCTTTATGAGACATCCATACAGGTGGTGCATGGTTGTCG
TCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATACTTAGTTACCAGCGA
ATAATGTCGGGGACTCTAAGTAGACTGCCGATGACAAATCGGAGGAAGGTGGGGATGACGTCAAATCATC
ATGCCCTTTATGTCTGGGCTACACACGTGCTACAATGGTTGGTACAGAGGGCAGCTATATAGTGATATA
ATGCAAACTCGAAAGCCAATCCCAGTTCGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAGTTGC
TAGTAATCGCGGATCAGAATGTGCGGGTGAATGCGTTCCCGGGTCTTGTACACACCGCCCGTCACACCAT
GGGAGTTGATAATACCCGAAGCCTGTGACCTAATTGAGGAGCAGTCGAAGGTAGGATTGATGACTGGGGT
GAAGTCGTAACAAGGTAGCCGTAAAGGGCGAATTTCG

>183398314|gb|AY958908.2|Finegoldia|Uncultured bacterium clone rRNA135
16S ribosomal RNA gene, partial sequence

TTGAACGCTGGCGGCGTGCTTAACACATACAAGTCGAACGGGATTTAGTAGACAGAAGCCTCGGTGGAAG
ATTACTAATGAGAGTGGCGAACGGGTGAGTAACGCGTGAGCAACCTGCCTATGACAGTGGGATAGCCTCG
GGAAACCGGGATTAATACCGCATAAAATCGTAAAAACACATGTTTCAACGGTCAAAGATTTATCGGTCAT
AGATGGGCTCGCGTCTGATTAGCTAGTTGGTGAGATAACAGCCACCAAGGCGACGATCAGTAGCCGGTC
TGAGAGGATGAACGGCCACATTGGAAGTACGACACGGTCCAAACTCCTACGGGAGGCAGCAGTGGGGAAT
ATTGCACAATGGGGGAAACCCCTGATGCAGCGACGCCGCGTGAACGAAGAAGGTATTCGTATCGTAAAGTT
CTGTCTATGGGAAGATAATGACAGTACCATAGAAGAAAGCTCCGGCTAAGTACGTGCCAGCAGCCGCGG
TAATACGTATGGAGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGTACGCAGGCGGTTTAATAAGTCG
AATGTTAAAGATCGGGGCTCAACCCCGTAAAGCATTGGAAACTGATAAACTTGAGTAGTGGAGAGGAAAG
TGGAATTCCTAGTATAGTGGTGAAATACGTAGATATTAGGAGGAATACCAGTAGCGAAGGCGACTTTCTG
GACACAACTGACGCTGAGGTACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCC
GTAAACGATGAATGCTAGGTGTTGGGGGTCAAACCTCGGTGCCGAAGTTAACACATTAAGCATTCCGCCT
GGGGAGTACGCACGCAAGTGTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCATGTGG
TTTAATTCGATGCAACGCGAAGAACCCTTACCAGGGCTTGACATGTGGGTGAAAGGTATAGAGATATACCC
CTCTCTTTATGAGACATCCATACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTA
AGTCCCGCAACGAGCGCAACCCCTATACTTAGTTACCAGCGAGTAATGTCGGGGACTCTAAGTAGACTGC
CGATGACAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGTCTGGGCTACACACG
TGCTACAATGGTTGGTACAGAGGGCAGCTATATAGTGATATAATGCAAACTCGAAAGCCAATCCCAGTT
CGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAGTTGCTAGTAATCGCGGATCAGAATGTGCGGGT
GAATGCGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTTGATAATACCCGAAGCCTGTGA
CCTAATTGAGGAGCAGTCGAAGGTAGGATTGATGACTGGGGTGAAGTCGTAACAAGGTAAACCGTA

>63146127|gb|AY995262.1|Moryella|Uncultured bacterium clone FX28B4-3 16S
ribosomal RNA gene, partial sequence

GGGGGGTGCTTACCATGCAAGTCGACGAGAGATTCGAGCGGAAGTTTTTCGGACGGAAGAGCGCCATTTTCG
AGTGGCGGACGGGTGAGTAACGCGTGGGGAACCTGCCTCATACAGGGGGATACCAGCCGGAAACGGCTGT
TAAACCGCATAAGACCACAGAGCCGCGTGGCTCAGGGGTAAAACTCCGGTGGTATGAGATGGACCCGC
GTTTCGATTAGCCAGTTGGCGGGGTAAACGGCCCAACAAAGCGACGATCGATAGCCGATCTGAGAGGATGAC
CGGCCACATTGGGACTGAGACACGGCCCAAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
AGGGAACCTCTGATGCAGCGACGCCGCGTGAGTGAAGAAGTATTTTCGGTATGTAAAGCTCTATCAGCAGGG
AGAAGATGACGGTACCTGAATAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGG
GGCAAGCGTTATCCGGATTACTGGGTGTAAAGGGAGCGCAGACGGCTGTGCAAGTCTGAAGTGAAGGCC
CGCGGCTCAACTGCGGGATTGCTTTGGAAACTGTGCGGCTTGAGTATCGGAGAGGTAAGCGGAATTCCAA
GTGTAGCGGTGAAATGCGTAGATATTTGGAGGAACACCGGTGGCGAAGGCGGCTTACTGGACGAAAACCTG

ACGTTGAGGCTCGAAGGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCGGTAAACGATGA
ATACTAGGTGTCTGGTGCCCAAAGGGTATCGGTGCCGTGCGAAACGCAATAAGTATTCCACCTGGGGAGTA
CGTTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGTGGAGCATGTGGTTTAATTC
GAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCGATGACCGGCTCGTAACGGAGCCTTCTCTACG
GAGCAGCGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAA
CGAGCGCAACCCCTATTGCCAGTAGCCAGCAGGAGAGCTGGGCACTCTGGCGAGACTGCCCGGGATAACC
GGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTATGATCTGGGCTACACACGTGCTACAATGG
CGTGAACAAAGGGAAGCGAAGCCGTGAGGTGAAGCAAATCTCAGAAAACACGTCTCAGTTCGGACTGTAG
TCTGCAACTCGACTACACGAAGCTGGAATCGCTAGTAATCGTGGATCAGAATGCCAGCGGAT
>63146123|gb|AY995258.1|Moryella|Uncultured bacterium clone FX2B4-3 16S
ribosomal RNA gene, partial sequence

CGGCGGGGGGCTTACACATGCAAGTCGAACGAGAGATCCGGACGGAAGTTTTTCGGACGGAAGAGCGGATT
TCGAGTGGCGGACGGGTGAGTAACGCGTGGGGAACCTGCCTCATACAGGGGGATACCAGCCGGAACGGC
TGTTAAAACCGCATAAGACCACAGAGCCGCATGGCTCAGGGGTAAAACTCCGGTGGTATGAGATGGACC
CGCGTTTCGATTAGCCAGTTGGCGGGGTAAACGGCCACCAAAGCGACGATCGATAGCCGATCTGAGAGGAT
GACCGGCCACATTGGGACTGAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTGGGGAATATTGCACAA
TGGAGGGAACCTCTGATGCAGCGACGCCGCGTGAGTGAAGAAGTATTTTCGGTATGTAAAGCTCTATCAGCA
GGGAAGAAGATGACGGTACCTGAATAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTA
GGGGGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGCGCAGACGGCTGTGCAAGTCTGAAGTGAAG
GCCCCGCGGCTCAACTGCGGGATTGCTTTGGAACTGTGCGGCTTGAGTATCGGAGAGGTAAGCGGAATTC
CAAGTGTAGCGGTGAAATGCGTAGATATTTGGGGGAACACCGGTGGCGAAGGCGGCTTACTGGACGAAAA
CTGACGTTGAGGCTCGAAGGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCGGTAAACGA
TGAATACTAGGTGTCTGGTGCCCAAAGGGTATCGGTGCCGTGCGAAACGCAATAAGTATTCCACCTGGGGA
GTACGTTTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGTGGAGCATGTGGTTTAA
TTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCGATGACCGGCTCGTAACGGAGCCTTCTCT
ACGGAGCAGCGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCG
CAACGAGCGCAACCCCTATTGCCAGTAGCCAGCAGGAGAGCTGGGCACTCTGGCGAGACTGCCCGGGATA
ACCGGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTATGATTTGGGCAACACACGTGCTACAA
TGGCGTAAACAGAGGGAAGCAAAGGAGTGATCCGGAGCGAATCCCAAAAATAACGTCTCAGTTTCGGACTG
TAGTCTGCAACCCGACTACACGAAGCTGGAATTGCTAGTAATCGCGAATCAGCATGCGCGGTG
>22094834|gb|AF527773.1|Moryella|Moryella indoligenes strain MDA2477 16S
ribosomal RNA gene, partial sequence (93%)

GCGTGCTTAACACATGCAAGTCGAACGAGAGATACAGGAGGAAGTTTTTCGGATGGAATCCGGTAGATCGA
GTGGCGGACGGGTGAGTAACGCGTGGGGAACCTGCCTCATACAGGGGGATAACAGTTGGAAACGACTGTT
AATACCGCATAAGACCACAGAGTCGCATGACTCAGGGGTAAAACTCCGGTGGTATGAGATGGACCCGCG
TTCGATTAGCCAGTTGGCGGGGTAAACGGCCACCAAAGCGACGATCGATAGCCGATTTGAGAGAATGACC
GGCCACATTGGGACTGAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGG
GGGAACCCCTGATGCAGCGACGCCGCGTGAGTGAAGAAGTATTTTCGGTATGTAAAGCTCTATCAGCAGGGA
AGAAGATGACGGTACCTGAGTAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGG
GCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGCGCAGACGGCTATGCAAGTCTGAAGTGAAAGCCC
GGGGCTCAACCCCGGGACTGCTTTGGAACTGTGTAGCTAGAGTGTCTGAGAGGTAAGCAGAATTCCCAG
TGTAGCGGTGAAATGCGTAGATATTGGGAAGAATACCGGTGGCGAAGGCGGCTTACTGGACGATAACTGA
CGTTCAGGCTCGAAGGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCGGTAAACGATGAA
TACTAGGTGTTGGCATCCAAAGGATGTCTGGTGCCGTGCGAAACGCAATAAGTATTCCACCTGGGGAGTAC
GTTTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCAGTGGAGCATGTGGTTTAATTCG
AAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCGATGACCGGCCTGTAAAGAGGCCTTCTCTTCGG
AGCATTTGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAAC
GAGCGCAACCCCTATTGCCAGTAGCCAGCAGGTAAAGCTGGGCACTCTGGCGAGACTGCCTGGGATAACC
AGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTATGATTTGGGCAACACACGTGCTACAATGG
CGTAAACAGAGAGAAGCGAAGGAGCGATCCGGAGCGAATCTAAAAATAACGTCTCAGTTCGGACTGCAGT
CTGCAACTCGACTGCACGAAGCTGGAATTGCTAGTAATCGCGAATCAGCATGTCTGCGGTGAATACGTTCC
CGGGTCTTGTACACACCGCCCCGTACACCATGGGAGTCAGCAACGCCCCGAAGTCAGTGACCCAACCTTAA
GGAGGGAGCTGCCGAAGGCGGGGCGGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTG
CGGTTGGATCACCTCCTAA

>63146124|gb|AY995259.1|Roseburia|Uncultured bacterium clone FX5B4-3 16S ribosomal RNA gene, partial sequence (87%)

GCCGGCGTCTTACCATGCAAGTCGAACGAAGCACCCGTGTTTTAATTCCTTCGGGAAAGCGAGCAGGGTGA
CTGAGTGGCGGACGGGTGATTAACACGGGGATAACCTGCCTCTTGGTGGGGGATAACAGTGGGAAACGGC
TGCTATTACCGCATAACACCACAGAGCCGCATGGCTCGGGGGGAAAACTCCGGTGGTATGAGATGGACC
CGCGTTTCGATTAGCCAGTTGGCGGGGTAACGGCCACCACAGCCACAATCGATAGCCGATCTGATAGGGC
CACCGGCCCCATTGGGACTGATACACGGCCAGACTCCTACGGGAGGGAGCAGTGGGGAATATTGCACAA
TGGGGGAAACCCTGATGCAGCGACGCCCCGCGAGCGAAAAACTATTTTCGGTTTGTAAAGCTCTATCAGCA
GGGAAGATAATGACGGTACCTGGCTAAGAAGCTCCGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTA
TGGAGCAAGCATTATCCGATTTACTGAGTGTGAAGGGAGCGCATGCGGCATGGCGAGACTGATGTGCAA
TCCCGGGGCTCACCGCCGGCACTGCATTGGAAGCTGTCCGGCTAGAGTATCGACAGGGGTACGCGGAGTC
CTAGTGAATGTGTGAAATGCGTAGATATTAGGACGAACACCGGCGGCGAAGGCGGCTTACTGGTCGATA
ACTGACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACTATTGTAGTCCACACCGTAAACG
ATGAATACTAGGTGTTTCGCATGCAAGCATGTCAGTGCCGAAGCAAACGCATTAAGTATTCCACCTGGGGA
GTACGTTTCGAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAA
TTCGAAGCAACGCGAAGAACCTTACCAGGCCTTGACATCCCGATGACCGGTTGGTAACGGGACTTTCTTT
TCGGAGCAGCGGAGACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGTCTGTGAGATGTTGGTTTAAAGTCCCG
CAACGAGCGCAACCCCTTGTCCTTAGTAGCCAGCAGTAAGATGGGCACTCTAGGGAGACTCCCGGGGATAA
TCCGGAGGAAGGTGGGGATGACGTCAAATCGTCATGCCCTTATGGTATGGGCTACACCCGTGTTCCAAT
GGCGTAAACAAAGAGAGGCAAAGCTGTGAAGTGGAGCGAATCTCAAAAATAACGTCCAGTTTCGGATGGT
AGTCTGCAATTCGATTACATGAAGCGGAATCGCTAGTAATCGCGAATCAGAATGCGCAGATT

>219846801|ref|NR_026393.1|Flackamia|Facklamia hominis strain ATCC 700628 16S ribosomal RNA, partial sequence

CGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAACGAACGGAGCTAGGAAGTGAACCCGGCAAAGTT
AGTGGCGCACGGGTGAGTAACACGTGGAGAACCTACCCTTTTGCGGGGGATAACCATTGGAAACGATGAC
TAATACCGCATAGAATCGCAGATCGCATGATCAACGAAGGAAAGACGGCTTCGGCTGTTCGAAAAGGATG
GCTCCGCGGTGCATTAGCTAGATGGTGGGGTAACGGCTACCATGGCAATGATGCATAGCCGACCTGAGA
GGGTGATCGGCCACATTGGGACTGAGACACGGCCAAACTCCTACGGGAGGCAGCAGTAGGGANTCTTCC
GCAATGGGCGCAANNCTGACGGAGCAACGCCGCGTGTGTGAAGAAGGTCTTCGGATCGTAAAGCACTGTT
GTTAGAGAAGAACGACCGCTAGAGTAACTGTTAGCGGAGTGACGGTATCTAACCAGAAAAGCCACGGCTAA
CTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGATTTATTGGGCGTAAAGGGAGC
GCAGGCGGTGACTTAAGTCTGATGTGAAAGCCACGGCTCAACCGTGGAGGGTCATTGGAAACTGGGTCA
CTTGAGTNCAGAAGAGGAAAGNGGAATTCATGTGTAGCGGTGAAATGCGTAGATATATGGAGGAACACC
AGTGGCGAAGGCGACTTTCTGGTCTGTAAGTACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTA
GATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTGGAGGGTTTTCCACCCCTCAGTGCTGG
AGTTAACGCAATAAGCACTCCGCCTGGGGAGTACGGCCGCAAGGCTGAAACTCAAAGGAATTGACGGGGA
CCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCT
CTTGCATAGCCTAGAGATAGGTGAAGCCCTTCGGGGCAAGAAGACAGGTGGTGCATGGTTGTCTGTCAGCT
CGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTATCACTAGTTGCCAGCATTAGAT
GGGACTCTAGTGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTT
TATGACCTGGGCTACACACGTGCTACAATGGATGGTACAACGAGCAGCGAACTCGCAAGGGCAAGCGAAT
CTCTTAAAGCCATTCTCAGTTCGGATTGTTCTCTGCAACTCGAGAACATGAAGCCGGAATCGCTAGTAAT
CGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGTCTTGTTACACACCGCCCGTACACCACGAGAGTT
TGTAACACCCGAAGCCGGTGGCCTAAGTTTATGAAGCCGTCGAAGGTGGGACAGATGATTGGGGTGAAGT
CGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGG

>66878569|gb|AY958863.1|Flackamia|Uncultured bacterium clone rRNA090 16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGCCGAACGAACG
GAGCTAGGAAGTTGTTCCCGGCAAAGTTAGTGGCGCACGGGTGAGTAACACGTGGAGAACCTACCCTTTT
GCGGGGGATAACCATTGGAAACGATGACTAATACCGCATAGAATCGCAGATCGCATGATCAACGAAGGAA
AGACGGCTTCGGCTGTTCGAAAAGGATGGCTCCGCGGTGCATTAGCTAGATGGTGGGGTAACGGCCTACC
ATGGCAATGATGCATAGCCGACCTGAGAGGGTGATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCC
TACGGGAGGCAGCAGTAGGGAATCTTCCGCAATGGGCGCAAGCCTGACGGAGCAACGCCGCGTGTGTGAA
GAAGGTCTTCGGATCGTAAAGCACTGTTGTTAGAGAAGAACGACCGCTAGAGTAACTGTTAGCGGAGTGA

CGGTATCTAACCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTT
GTCCGGATTTATTGGGCGTAAAGGGAGCGCAGGCGGTGACTTAAGTCTGATGTGAAAGCCCACGGCTCAA
CCGTGGAGGGTCATTGGAAACTGGGTCACTTGAGTGCAGAAGAGGAAAGTGGAATTCATGTGTAGCGGT
GAAATGCGTAGATATATGGAGGAACACCAGTGGCGAAGGCGACTTTCTGGTCTGTAAGTACGCTGAGGC
TCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTG
TTGGAGGGTTTCCACCCTTCAGTGCTGGAGTTAACGCAATAAGCACTCCGCCTGGGGAGTACGGCCGCAA
GGCTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACG
CGAAGAACCTTACCAGGTCTTGACATCTCTTGATAGCCTAGAGATAGGTGAAGCCCTTCGGGGCAAGAA
GACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAAC
CCTTATCACTAGTTGCCAGCATTGAGATGGGGACTCTAGTGAGACTGCCGGTGACAAACCGGAGGAAGGT
GGGGATGACGTCAAATCATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGATGGTACAACG
AGCAGCGAACTCGCAAGGGCAAGCGAATCTCTTAAAGCCATTCTCAGTTCGGATTGTTCTCTGCAACTCG
AGAACATGAAGCCGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGTCTTGT
ACACACCGCCCGTACACACCAGAGAGTTTGTAAACACCCGAAGCCGGTGGCCTAACTTTATGAGGGAGCCG
TCGAAGGTGGGACAGATGATTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGC

>66878725|gb|AY959019.1|Flackamia|Uncultured bacterium clone rRNA246 16S
ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAACGAACC
GACGGAGAATTGTTCTCTTGACGTGAGTGGCGGACGGGTGAGTAACACGTGGGAAACCTACCCTTCAGC
GGGGGATAACGGTTGCAAGAATCGCTAATACCGCATAAGAGGATCAGTCGCCTGACTGATTTCGTAAAAG
ATGGCTCTGCTATCACTGAAGGATGGGCCCCGCGGCGCATTAGCTAGTTGGTAAGGTAACGGCTTACCAAG
GCGATGATGCGTAGCCGACCTGAGAGGGTAATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCCTAC
GGGAGGCAGCAGTAGGGAATCTTCCGCAATGGACGCAAGTCTGACGGAGCAACGCCGCGTGTGTGAAGAA
GGTTTTCGGATCGTAAAGCACTGTTATTGGCCAAGAACACCCCAAGTAGTAAGTGGCTTGGGATTGACGG
TAACCAATCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACATAGGTGGCAAGCGTTGTC
CGGATTTATTGGGCGTAAAGGGAGCGCAGGCGGTGACTTAAGTCTGATGTGAAAGCCCACGGCTTAACCG
TGGAGGGTCATTGGAAACTGGGTCACTTGAGTGCAGAAGAGGAAAGCGGAATTCATGTGTAGCGGTGAA
ATGCGTAGATATATGGAGGAACACCAGTGGCGAAGGCGGCTTTCTGGTCTGTAAGTACGCTGAGGCTCG
AAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTTG
GGGGGCTTCCACCCCTCAGTGCTGGCGTTAACGCAATAAGCACTCCGCCTGGGGAGTACGGTCGCAAGAC
TGAAACTCAAAGGAATTGACGGGGACCCACACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGG
AGAACCTTACCAGGTCTTGACATAGGATGCATAGGCTAGAGATAGCTGAAGTCCTTCGGGACATCCATAC
AGGTGGTGCATGGTTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCT
TATACTAGTTGCCAGCATTGAGATGGGGACTCTAGTTAGACTGCCGGTGACAAACCGGAGGAAGGTGGG
GATGACGTCAAATCATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGACGATAACAACGAGC
AGCGAACTCGCGAGGGCAAGCGAATCTCTGAAAGTCGTTCTCAGTTCGGATTGCAGGCTGCAACTCGCCT
GCATGAAGCCGGAATCGCTAGTAATCGTGGATCAGCACGCCACGGTGAATCCGTTCCCGGGTCTTGTACA
CACCGCCCGTCACACCACGAGAGTTTGTAAACACCCGAAGCCGGTGGCCTAACACTGAGGGAGCCGTCGAA
GGTGGGACAGATGATTGGGGTGAA

>157907331|dbj|AB362599.1|E.faecalis|Enterococcus faecalis gene for 16S
rRNA, partial sequence, strain: NRIC 0110

TAGAGTTTGATCATGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAACGCTTCTTTC
CTCCCGAGTGCTTGCGCTCAATTGGAAAGAGGAGTGGCGGACGGGTGAGTAACACGTGGGTAACCTACCC
ATCAGAGGGGGATAACACTTGGAACAGGTGCTAATACCGCATAACAGTTTATGCCGCATGGCATAAGAG
TGAAAGGCGCTTTCGGGTGTCGCTGATGGATGGACCCGCGGTGCATTAGCTAGTTGGTGAGGTAACGGCT
CACCAAGGCCACGATGCATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCGAGA
CTCCTACGGGAGGCAGCAGTAGGGAATCTTCGGCAATGGACGAAAGTCTGACCGAGCAACGCCGCGTGAG
TGAAGAAGGTTTTTCGGATCGTAAACTCTGTTGTTAGAGAAGAACAAGGACGTTAGTAAGTGAACGTCCC
CTGACGGTATCTAACCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAG
CGTTGTCCGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTTCTTAAGTCTGATGTGAAAGCCCCCGGC
TCAACCGGGGAGGGTCATTGGAAACTGGGAGACTTGAGTGCAGAAGAGGAGAGTGGAATTCATGTGTAG
CGGTGAAATGCGTAGATATATGGAGGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGTAAGTACGCTG
AGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTA
AGTGTGGAGGGTTTCCGCCCTTCAGTGCTGCAGCAAACGCATTAAGCACTCCGCCTGGGGAGTACGACC

GCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGC
AACGCGAAGAACCTTACCAGGTCTTGACATCCTTTGACCACTCTAGAGATAGAGCTTTCCTTTCGGGGAC
AAAGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTTAAGTCCCGCAACGAGC
GCAACCCTTATTGTTAGTTGCCATCATTTAGTTGGGCACTCTAGCGAGACTGCCGGTGACAAACCGGAGG
AAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGGAAGTA
CAACGAGTCGCTAGACCGCGAGGTCATGCAAATCTCTTAAAGCTTCTCTCAGTTTCGGATTGCAGGCTGCA
ACTCGCCTGCATGAAGCCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGC
CTTGTACACACCGCCCGTCACACCACGAGAGTTTGTAAACACCCGAAGTCGGTGAGGTAACCTTTTTTGGAG
CCAGCCGCCTAAGGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGT
TGGATCACCTCCTTA

>66878696|gb|AY958990.1|Enterococcus|Uncultured bacterium clone rRNA217
16S ribosomal RNA gene, partial sequence

ACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAACGCTTCTTTCTCCCGAGTGCTTGCGCTCAAT
TGGAAGAGGAGTGGCGGACGGGTGAGTAACACGTGGGTAACTACCCATCAGAGGGGGATAAACTTGG
AAACAGGTGCTAATACCGCATAACAGTTTATGCCGCATGGCATAAGAGTGAAAGGCGCTTTCGGGTGTCG
CTGATGGATGGACCCGCGGTGCATTAGCTAGTTGGTGAGGTAACGGCTCACCAAGGCCACGATGCATAGC
CGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTAG
GGAATCTTCGGCAATGGACGAAAGTCTGACCGAGCAACGCCGCGTGAGTGAAGAAGGTTTTCGGATCGTA
AAACTCTGTTGTTAGAGAAGAACAAGGACGTTAGTAACGTAACGTCCTTGACGGTATCTAACAGAAAG
CCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTATTTGGGCG
TAAAGCGAGCGCAGGCGGTTTCTTAAGTCTGATGTGAAAGCCCCGGCTCAACCGGGGAGGTCATTGGA
AACTGGGAGACTTGAGTGCAGAAGAGGAGAGTGAATTCATGTGTAGCGGTGAAATGCGTAGATATATG
GAGGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGTAACGACGCTGAGGCTCGAAAGCGTGGGGAGCA
AACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTTGGAGGGTTTCCGCCCT
TCAGTGCTGCAGCAAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAA
TTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGT
CTTGACATCCTTTGACCACTCTAGAGATAGAGCTTTCCTTTCGGGGACAAAGTGACAGGTGGTGCATGGT
TGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCTTATTGTTAGTTGCC
ATCATTTAGTTGGGCACTCTAGCGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAATC
ATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGGAAGTACAACGAGTCGCTAGACCGCGAG
GTCATGCAAATCTCTTAAAGCTTCTCTCAGTTTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGCCGGAA
TCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACA
CCACGAGAGTTGTAACACCCGAAGTCGGTGAGGTAACCTTTTTTGGAGCCAGCCGCCTAAGGTGGGATAGA
TGATTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGC

>28274377|gb|AY188353.1|S.vestibularis|Streptococcus vestibularis strain
ATCC 49124 16S ribosomal RNA gene, complete sequence

ATGGGAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTAGAACGCTGA
AGAGAGGAGCTTGCTCTTCTTGATGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTGCCTTGTAGC
GGGGGATAACTATTGGAAACGATAGCTAATACCGCATAACAATAGGTGACACATGTCATTTATTTGAAAG
GGGCAATTGCTCCACTACAAGATGGACCTGCGTTGTATTAGCTAGTAGGTGAGGTAACGGCTCACCTAGG
CGACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACG
GGAGGCAGCAGTAGGGAATCTTCGGCAATGGGGGCAACCTGACCGAGCAACGCCGCGTGAGTGAAGAAG
GTTTTTCGGATCGTAAAGCTCTGTTGTAAGTCAAGAACGAGTGTGAGAGTGGAAGTTACACTGTGACGG
TAGCTTACCAGAAGGGACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTCCCGAGCGTTGTCC
GGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTTGATAAGTCTGAAGTTAAAGGCTGTGGCTCAACCAT
AGTTCGCTTTGGAAACTGTCAAACCTTGAGTGCAGAAGGGGAGAGTGAATTCATGTGTAGCGGTGAAAT
GCGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAACGACGCTGAGGCTCGAA
AGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGTTGGA
TCCTTTCCGGGATTAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTG
AACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAG
AACCTTACCAGGTCTTGACATCCCGATGCTATTTCTAGAGATAGAAAGTTACTTCGGTACATCGGTGACA
GGTGGTGCATGGTTGTCTGTGAGTCTGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCT
ATTGTTAGTTGCCATCATTCAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCGGAGGAAGGTGGGG
ATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGTTGGTACAACGAGTT

CGGAGTCGGTGACGGCAAGCTAATCTCTTAAAGCCAATCTCAGTTCGGATTGTAGGCTGCAACTCGCCTA
CATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACAC
ACCGCCCGTCACACCACGAGAGTTTGTAAACCCGAAGTCGGTGAGGTAACCTTTTGGAGCCAGCCGCCT
AAGGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCAC
>66878674|gb|AY958968.1|Streptococcus|Uncultured bacterium clone rRNA195

16S ribosomal RNA gene, partial sequence

TCGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTAGAACGC
TGAAGAGAGGAGCTTGCTCTTCTTGAATGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTGCCTTGT
AGCGGGGGGATAACTATTGGAAACGATAGCTAATACCGCATAACAATGGGTGACACATGTCATTTATTTG
AAAGGGGCAATTGCTCCACTACAAGATGGACCTGCGTTGTATTAGCTAGTAGGTGAGGTAACGGCTCACC
TAGGCGACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAGACTCC
TACGGGAGGCAGCAGTAGGGAATCTTCGGCAATGGGGGCAACCCTGACCGAGCAACGCCGCGTGAGTGAA
GAAGGTTTTTCGGATCGTAAAGCTCTGTTGTAAGTCAAGAACGAGTGTGAGAGTGGAAGTTCACACTGTG
ACGGTAGCTTACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTCCCAGCGT
TGTCGGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTTGATAAGTCTGAAGTTAAAGGCTGTGGCTCA
ACCATAGTTCGCTTTGGAAACTGTCAAACCTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTAGCGGT
GAAATGCGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAAGTACGCTGAGGC
TCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTG
TTGGATCCTTTCCGGGACTCAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAA
GGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTGGAAGCAACG
CGAAGAACCTTACCAGGTCTTGACATCCCGATGCTATTTCTAGAGATAGGAAGTTTCTTCGGAACATCGG
TGACAGGTGGTGCATGGTTGTGCTCAGCTCGTGTGAGATGTTGGGTTAAGTCCCGCAGCGAGCGCAA
CCCTTATTGTTAGTTGCCATCATTGAGTTGGGCACCTCTAGCGAGACTGCCGGAATAAACCGGAGGAAGG
TGGGGATGACGTGCAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGCTGGTACAAC
GAGTCGCAAGCCGGTGACGGCAAGCTAATCTCTGAAAGCCAGTCTCAGTTCGGATTGTAGGCTGCAACTC
GCCTACATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTG
TACACACCGCCCGTCACACCACGAGAGTTTGTAAACCCGAAGTCGGTGAGGTAACCGTAAGGAGCCAGC
CGCCTAAGGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCAAG

>23477252|gb|AF459432.1|Streptococcus|Streptococcus agalactiae 16S

ribosomal RNA gene, partial sequence

TAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTAGAACGCTGAGGTT
TGGTGTTTACACTAGACTGATGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTGCCTCATAGCGGGG
GATAACTATTGGAAACGATAGCTAATACCGCATAAGAGTAATTAACACATGTTAGTTATTTAAAAGGAGC
AATTGCTTCACTGTGAGATGGACCTGCGTTGTATTAGCTAGTTGGTGAGGTAAAGGCTCACCAAGGCGAC
GATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAG
GCAGCAGTAGGGAATCTTCGGCAATGGACGGAAGTCTGACCGAGCAACGCCGCGTGAGTGAAGAAGGTTT
TCGGATCGTAAAGCTCTGTTGTTAGAGAAGAACGTTGGTAGGAGTGGAATCTACCAAGTGAGGGTAAC
TAACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTCCCAGCGGTTGTCCGGA
TTTATTGGGCGTAAAGCGAGCGCAGGCGGTTCTTTAAGTCTGAAGTTAAAGGCAGTGCGTTAACCATTGT
ACGCTTTGGAAACTGGAGGACTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTAGCGGTGAAATGCG
TAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTCGAAAGC
GTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGTTAGGCCC
TTTCCGGGGCTTAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAA
CTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTGGAAGCAACGCGAAGAAC
CTTACCAGGTCTTGACATCCTTCTGACCGGCCTAGAGATAGGCTTTCTCTTCGGAGCAGAAAGTGACAGGT
GGTGCATGGTTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATT
GTTAGTTGCCATCATTAAAGTTGGGCACTCTAGCGAGACTGCCGGAATAAACCGGAGGAAGGTGGGGATG
ACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGTTGGTACAACGAGTCGCA
AGCCGGTGACGGCAAGCTAATCTCTTAAAGCCAATCTCAGTTCGGATTGTAGGCTGCAACTCGCCTACAT
GAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACC
GCCCCGTCACACCACGAGAGTTTGTAAACCCGAAGTCGGTGAGGTAACCTTTTAGGAGCCAGCCGCCTAA
GGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCT

>66878711|gb|AY959005.1|Streptococcus|Uncultured bacterium clone rRNA232
16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTAGAACGCT
GAGGTTTTGGTGTTTACACTAGACTGATGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTGCCTCATA
GCGGGGGATAACTATTGGAAACGATAGCTAATACCGCATAAGAGTAATTAACACATGTTAGTTATTTAAA
AGGAGCAATTGCTTCACTGTGAGATGGACCTGCGTTGTATTAGCTAGTTGGTGAGGTAAAGGCTCACCAA
GGCGACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTA
CGGGAGGCAGCAGTAGGGAATCTTCGGCAATGGACGGAAGTCTGACCGAGCAACGCCGCGTGAGTGAAGA
AGGTTTTTCGGATCGTAAAGCTCTGTTGTTAGAGAAGAACGTTGGTAGGAGTGGAATCTACCAAGTGAC
GGTAACTAACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGGTCCCAGCGTTG
TCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTCTTTAAGTCTGAAGTTAAAGGCAGTGGCTTAAC
CATTGTACGCTTTGGAACTGGAGGACTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTAGCGGTGA
AATGCGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTC
GAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTT
AGGCCCTTTCCGGGGCTTAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGG
TTGAACTCAAAGGAATTGACGGGGGGCCGCACAAGCGGTGGAGTATGTGGTTTAATTGCAAGCAACGCG
AAGAACCTTACCAGGTCTTGACATCCTTCTGACCGGCCCTAGAGATAGGCTTTCTCTTCGGAGCAGAAGTG
ACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACC
CCTATTGTTAGTTGCCATCATTAAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCGGAGGAAGGTG
GGGATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGTTGGTACAACGA
GTCGCAAGCCGGTGACGGCAAGCTAATCTCTTAAAGCCAATCTCAGTCCGGATTGTAGGCTGCAACTCGC
CTACATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTA
CACACCGCCCGTCACACCACGAGAGTTTGTAAACCCGAAGTCGGTGAGGTAACCTTTTAGGAGCCAGCC
GCCTAAGGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGC

>62530458|gb|AY986764.1|S.anginosus|Streptococcus anginosus strain ChDC
YA12 16S ribosomal RNA gene gene, partial sequence

AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTAGGACGCACAGTTTA
TACCGTAGCTTGCTACACCATAGACTGTGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTACCTATT
AGAGGGGGATAACTATTGGAAACGATAGCTAATACCGCATAACAGTATGTAACACATGTTAGATGCTTGA
AAGATGCAATTGCATCGCTAGTAGATGGACCTGCGTTGTATTAGCTAGTAGGTAGGGTAAAGGCCTACCT
AGGCAACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAGACTCCT
ACGGGAGGCAGCAGTAGGGAATCTTCGGCAATGGGGGGAACCCTGACCGAGCAACGCCGCGTGAGTGAAG
AAGGTTTTTCGGATCGTAAAGCTCTGTTGTTAAGGAAGAACGAGTGTGAGAATGGAAAGTTTCATGCTGTGA
CGGTACTTAACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGGTCCCAGCGGTT
GTCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTAGAAAAGTCTGAAGTGAAAGGCAGTGGCTCAA
CCATTGTAGGCTTTGGAACTGTTTAACTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTAGCGGTG
AAATGCGTAGATATATGGGGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCT
CGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGT
TAGGTCCTTTCCGGGACTTAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAG
GTTGAACTCAAAGGAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGC
GAAGAACCTTACCAGGTCTTGACATCCCAGTGACCGCCCTAGAGATAGGGTTTTCCCTTCGGGGCACTGGT
GACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAAC
CCTTATTGTTAGTTGCCATCATTAAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCGGAGGAAGGT
GGGGATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGCTGGTACAACG
AGTCGCAAGCCGGTGACGGCAAGCTAATCTCTGAAAGCCAGTCTCAGTTCGGATTGTAGGCTGCAACTCG
CCTACATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGT
ACACACCGCCCGTCACACCACGAGAGTTTGTAAACCCGAAGTCGGTGAGGTAACCGTAAGGAGCCAGCC
GCCTAAGGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAACCGTA

>66878700|gb|AY958994.1|Streptococcus|Uncultured bacterium clone rRNA221
16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTAGGACGCAC
AGTTTATACCGTAGCTTGCTACACCATAGACTGTGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTA
CCTATTAGAGGGGGATAACTATTGGAAACGATAGCTAATACCGCATAACAGTATGTAACACATGTTAGAT
GCTTGAAAGATGCAATTGCATCGCTAGTAGATGGACCTGCGTTGTATTAGCTAGTAGGTAGGGTAATGGC
CTACCTAGGCAACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCCAG
ACTCCTACGGGAGGCAGCAGTAGGGAATCTTCGGCAATGGGGGGAACCCTGACCGAGCAACGCCGCGTGA

GTGAAGAAGGTTTTTCGGATCGTAAAGCTCTGTTGTTAAGGAAGAACGAGTGTGAGAATGGAAAGTTCATG
CTGTGACGGTACTTAACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTCCCG
AGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTAGAAAAGTCTGAAGTGAAAGGCAGTG
GCTCAACCATTGTAGGCTTTGGAACTGTTTAACTTGAGTGCAGAAGGGGAGAGTGGAATTCCATGTGTA
GCGGTGAAATGCGTAGATATATGGGGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAAGTACGCT
GAGGCTCGAAAGCGTGGGGAGCGAACAGGATTAGATACCTGGTAGTCCACGCCGTAAACGATGAGTGCT
AGGTGTTAGGTCTTTCCGGGACTTAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGAC
CGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGCGGTGGAGCATGTGGTTTAATTCAAG
CAACGCGAAGAACCTTACCAGGTCTTGACATCCCAGTGACTGCCCTAGAGATAGGGTTTCCCTTCGGGGC
ACTGGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAG
CGCAACCCTTATTGTTAGTTGCCATCATTGAGTTGGGCACTCTAGCGAGACTGCCGGTAATAAACCGGAG
GAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGACCTGGGCTACACACGTGCTACAATGGCTGGT
ACAACGAGTCGCAAGCCGGTGACGGCAAGCTAATCTCTGAAAGCCAGTCTCAGTTCGGATTGTAGGCTGC
AACTCGCCTACATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGG
CCTTGTAACACACCGCCCGTCACACCACGAGAGTTTGTAACACCCGAAGTCGGTGAGGTAACCGTAAGGAG
CCAGCCGCCTAAGGTGGGATAGATGATTGGGGTGAA

>325651809|dbj|AB618791.1|B.fragilis|Bacteroides fragilis gene for 16S
ribosomal RNA, partial cds, strain: JCM 17585

AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGCATCAGGA
AGAAAGCTTGCTTTCTTTGCTGGCGACCGGCGCACGGGTGAGTAACACGTATCCAACCTGCCCTTTACTC
GGGGATAGCCTTTGAAAGAAAGATTAATACCCGATAGCATAATGATTCCGCATGGTTTTCATTATTAAAG
GATTCCGGTAAAGGATGGGGATGCGTTCCATTAGGTTGTTGGTGAGGTAACGGCTCACCAAGNCTTCGAT
GGATAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAAGACACGGTCCAAACTCCTACGGGAGGCA
GCAGTGAGGAATATTGGTCAATGGGCGCTAGCCTGAACCAGCCAAGTAGCGTGAAGGATGAAGGCTCTAT
GGGTGCTAAACTTCTTTTATATAAGAATAAAGTGCAGTATGTATACTGTTTTGTATGTATTATATGAATA
AGGATCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGATCCGAGCGTTATCCGGATTTATTGGG
TTTAAAGGGAGCGTAGGTGGACTGGTAAGTCAGTTGTGAAAGTTTGCGGCTCAACCGTAAAATTGCAGTT
GATACTGTCAGTCTTGAGTACAGTAGAGGTGGGCGGAATTCGTGGTGTAGCGGTGAAATGCTTAGATATC
ACGAAGAACTCCGATTGCGAAGGCAGCTCACTGGACTGCAACTGACACTGATGCTCGAAAGTGTGGGTAT
CAAACAGGATTAGATACCTGGTAGTCCACACAGTAAACGATGAATACTCGCTGTTTTCGATATACAGTA
AGCGGCCAAGCGAAAGCATTAAGTATTCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATT
GACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCT
TAAATTGCAGTGGAATGATGTGGAACATGTGAGTGAGCAATCACCGCTGTGAAGGTGCTGCATGGTTGT
CGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCTTATCTTTAGTTACTAAC
AGGTTATGCTGAGGACTCTAGAGAGACTGCCGTCGTAAGATGTGAGGAAGGTGGGGATGACGTCAAATCA
GCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGTACAGAAGGCAGCTAGCGGGTGACC
GTATGCTAATCCCAAAAGCCTCTCTCAGTTCGGATCGAAGTCTGCAACCCGACTTCGTGAAGCTGGATTC
GCTAGTAATCGCGCATCAGCCACGGCGCGGTGAATACGTTCCCGGGCCTTGTAACACACCGCCCGTCAAGC
CATGGGAGCCGGGGGTACCTGAAGTACGTAACCGCAAGGATCGTCCTAGGGTAAAAGTGGTGAAGTGGGGC
TAAGTCGTAACAAGGTAACC

>66878591|gb|AY958885.1|Bacteroides|Uncultured bacterium clone rRNA112
16S ribosomal RNA gene, partial sequence

AGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGCATCAGGAAG
AAAGCTTGCTTTCTTTGCTGGCGACCGGCGCACGGGTGAGTAACACGTATCCAACCTGCCCTTTACTCGG
GGATAGCCTTTGAAAGAAAGATTAATACCCGATAGCATAATGATTCCGCATGGTTTTCATTATTAAAGGA
TTCCGGTAAAGGATGGGGATGCGTTCCATTAGGTTGTTGGTGAGGTAACGGCCACCAAGCCTTCGATGG
ATAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAAGACACGGTCCAAACTCCTACGGGAGGCAGC
AGTGAGGAATATTGGTCAATGGGCGTTAGCCTGAACCAGCCAAGTAGCGTGAAGGATGAAGGCTCTATGG
GTCGTAAACTTCTTTTATATAAGAATAAAGTGCAGTATGTATACTGTTTTGTATGTATTATATGAATAAG
GATCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGATCCGAGCGTTATCCGGATTTATTGGGTT
TAAAGGGAGCGTAGGTGGACTGGTAAGTCAGTTGTGAAAGTTTGCGGCTCAACCGTAAAATTGCAGTTGA
TACTGTCAGTCTTGAGTACAGTAGAGGTGGGCGGAATTCGTGGTGTAGCGGTGAAATGCTTAGATATCAC
GAAGAACTCCGATTGCGAAGGCAGCTCACTGGACTGCAACTGACACTGATGCTCGAAAGTGTGGGTATCA
AACAGGATTAGATACCTGGTAGTCCACACAGTAAACGATGAATACTCGCTGTTTTCGATATACAGTAAG

CGGCCAAGCGAAAGCATTAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGA
CGGGGGCCCCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTA
AATTGCAGTGGAATGATGTGGAAACATGTCAGTGAGCAATCACCCTGTGAAGGTGCTGCATGGTTGTCG
TCAGCTCGTGCCGTGAGGTGTGGCTTAAGTGCCATAACGAGCGCAACCCTTATCTTTAGTTACTAACAG
GTTATGCTGAGGACTCTGGAGAGACTGCCGTGTAAGATGTGAGGAAGGTAGGGATGACGTCAAATCAGC
ACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGTACAGAAGGCAGCTAGCGGGTGACCGT
ATGCTAATCCCAAAGCCTCTCTCAGTTCGGATCGAAGTCTGCAACCCGACTTCGTGAAGCTGGATTTCGC
TAGTAATCGCGCATCAGCCACGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCA
TGGGAGCCGGGGGTACCTGAAGTACGTAACCGCAAGGATCGTCCTAGGGTAAAACCTGGTGACTGGGGCTA
AGTCGTAACAAGGTAACCGTAAAGGGCG

>66878483|gb|AY958777.1|Bergeyella|Uncultured bacterium clone rRNA004 16S
ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCGGGAGGCCTAACACATGCAAGCCGAGCGGGAT
TTATTGGTTAGCTTGCTAACAGATAATGAGAGCGGCGTACGGGTGCGTAACATGTGTGCAATCTGCCCTT
ATCAAGGGGATAGCCCGGAGAAATCCGGATTAATACCCTATAATATATGGGATGGCATCATTTTCATATTG
AAAGCATTAGCGGATAAGGATGAGCACGCACAAGATTAGCTAGTTGGTAAGGTAACGGCTTACCAAGGCG
ATGATCTTTAGGGGTCTTGAGAGGGAGATCCCCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGG
AGGCAGCAGTGAGGAATATTGGACAATGGGTGTAAGCCTGATCCAGCCATCCCGCGTGAAGGAAGACGGT
TCTATGGATTGTAAACTTCTTTTATACAGGGATAAACCTACCCTCGTGAGGGTAGCTGAAGGTACTGTAT
GAATAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTATCCGGATTTA
TTGGGTTTAAAGGGTCCGTAGGCGGGCTGATAAGTCAGTGGTGAATCCTGCAGCTTAACTGTAGAACTG
CCATTGATACTGTTAGTCTTGAGTATATTTGAAGTAGCTGGAATAAGTAGTGTAGCGGTGAAATGCATAG
ATATTACTTAGAACACCAATTGCGAAGGCAGGTTACTAAGATAAGACTGACGCTGAGGGACGAAAGCGTG
GGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGCTGACTCGTTTTTGGTTTTTAG
GGATCAGAGACTAAGCGAAAGTGATAAGTCGGCCACCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAG
GAATTGACGGGGGGCCGCACAAGCGGTGGATTATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCA
AGACTTAAATGGGAATTGACAGCTGTAGAAATACGGTTTTCTTCGGACAATTTTCAAGGTGCTGCATGGT
TGTGCTCAGCTCGTGCCGTGAGGTGTTAGGTTAAGTCTGCAACGAGCGCAACCCCTGTCACTAGTTGCC
ATCATTAAGTTGGGGACTCTAGTGAGACTGCCTGCGCAAGCAGAGAGGAAGGTGGGGATGACGTCAAATC
ATCACGGCCCTTACGTCTTGGGCCACACACGTAATACAATGGCCGGTACAGAGGGCAGCTACTATGTGAA
TAGATGCGAATCTCGAAAGCCGGTCTCAGTTCGGATTGGAGTCTGCAACTCGACTCTATGAAGCTGGAAT
CGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAG
CCATGGAAGTTCGGGGTACCTGAAGTCGGTGACCGTAAAAGGAGCTGCCTAGGGTAAAACGAGTAAGTAG
GGCTAAGTCGTAACAAGGTAGCCGTAAAGGGCG

>307816497|gb|HQ154560.1|Elizabethkingia|Elizabethkingia meningoseptica
strain R3-4A 16S ribosomal RNA gene, partial sequence

CCTGGTTTGATCCTGGCTCAGGATGAACGCTAGCGGGAGGCCTAACACATGCAAGCCGAGCGGTAGAGAT
TCTTCGGGATCTTGAGAGCGGCGTACGGGTGCGGAACACGTGTGCAACCTGCCTTTATCAAGGGGATAGC
CTTTCGAAAGGAAGATTAATACCCTATAATATATGATTCCGGCATCGGATTATATTGAAAACCTACGGTGGA
TAAAGATGGGCACGCGCAAGATTAGCTAGTTGGTGAGGTAACGGCTCACCAAGGCGACGATCTTTAGGGG
GCCTGAGAGGGTGATCCCCCACACTGGTACTGAGACACGGACCAGACTCCTACGGGAGGCAGCAGTGAGG
AATATTGGACAATGGGTGGAAGCCTGATCCAGCCATCCCGCGTGTAGGAAGACGGCCCTATGGGTGTAA
ACTACTTTTATCTGGGGATAAACCTACTTACGTGTAAGTAGCTGAAGGTACCAGATGAATAAGCACCGGC
TAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTATCCGGATTTATTGGGTTTAAAGGG
TCCGTAGGCGGACTGATAAGTCAGTGGTGAATCCGACAGCTTAACTGTCGAACTGCCATTGATACTGTT
AGTCTTGAGTAAGGTTGAAGTGGCTGGAATAAGTAGTGTAGCGGTGAAATGCATAGATATTACTTAGAAC
ACCAATTGCGAAGGCAGGTCACTAAGTCTTAACTGACGCTGATGGACGAAAGCGTGGGGAGCGAACAGGA
TTAGATACCCTGGTAGTCCACGCCGTAAACGATGATTACTCGTTTTTGGGTTTTAGGATTCAGAGACTAA
GCGAAAGTGATAAGTAATCCACCTGGGGAGTACGTTGCAAGAATGAAACTCAAAGGAATTGACGGGGGC
CCGCACAAGCGGTGGAGCATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCAAGACTTAAATGGGA
AATGACAGATTTAGAAATAGATCCTTCTTCGGACATTTTTCAAGGTGCTGCATGGTTGTGCTCAGCTCGT
GCCGTGAGGTGTTAGGTTAAGTCTGCAACGAGCGCAACCCCTGTCAGTGTGCTAACATTAAGTTGAG
GACTCTAGTGAGACTGCCTACGCAAGTAGAGAGGAAGGTGGGGATGACGTCAAATCATCACGGCCCTTAC
GTCTTGGGCCACACACGTGCTACAATGGCCGGTACAGAGGGCAGCTACCTAGTGATAGGATGCAAATCTC

GAAAGCCGGTCTCAGTTCGGATTGGAGTCTGCAACTCGACTCTATGAAGCTGGAATCGCTAGTAATCGCG
CATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCGTCAAGCCATGGAAGCTGGG
GGTACCTGAAGTCGGTGACCGTAAAAGGAGCTGCCTAGGGTAAAAGTAACTAGTAAGTGGGCTAAGTCGTACA
GGGTAGCCGTACA

>66878795|gb|AY959089.1|Elizabethkingia|Uncultured bacterium clone

rRNA316 16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCGGGAGGCCTAACACATGCAAGCCGAGCGGTAG
AGATTCTTCGAATCTTGAGAGCGGCTACGGGTGCGGAACACGTGTGCAACCTGCCTTTATCAAGGGGA
TAGCCTTTTCGAAAGGAAGATTAATACCCTATAATATATGATTCCGCATCGGATTATATTGAAAAGTACGG
TGGATAAAGATGGGCACGCGCAAGATTAGCTAGTTGGTGAGGTAACGGCTCACCAAGGCGACGATCTTTA
GGGGGCCTGAGAGGGTGATCCCCACACTGGTACTGAGACACGGACCAGACTCCTACGGGAGGCAGCAGT
GAGGAATATTGGACAATGGGTGGAAGCCTGATCCAGCCATCCCGCGTGTAGGAAGACGGCCCTATGGGTT
GTAAACTACTTTTATCTGGGGATAAACCTACTTACGTGTAAGTAGCTGAAGGTACCAGATGAATAAGCAC
CGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTATCCGGATTTATTGGGTTTAA
AGGGTCCGTAGGCGGGCTTATAAGTCAGTGGTGAAATCCGACAGCTTAACTGTGCAACTGCCATTGATAC
TGTGAGCCTTGAGTAAGGTTGAAGTGGCTGGAATAAGTAGTGTAGCGGTGAAATGCATAGATATTACTTA
GAACACCAATTGCGAAGGCAGGTCACTAAGTCTTAACTGACGCTGATGGACGAAAGCGTGGGGAGCGAAC
AGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGATTACTCGTTTTTGGGTTTTAGGATTTCAGAGA
CTAAGCGAAAGTGATAAGTAATCCACCTGGGGAGTACGTTTCGCAAGAATGAAACTCAAAGGAATTGACGG
GGGCGGCACAAAGCGGTGGAGCATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCAAGACTTAAAT
GGGAAATGACAGATTTAGAAATAGATCCTTCTTCGGACATTTTTCAAGGTGCTGCATGGTTGTGCTCAGC
TCGTGCCGTGAGGTGTTAGGTTAAGTCTGCAACGAGCGCAACCCCTGTCACTAGTTGCTAACATTAAGT
TGAGGACTCTAGTGAGACTGCCTACGCAAGTAGAGAGGAAGGTGGGGATGACGTCAAATCATCACGGCCC
TTACGTCTTGGGCCACACACGTGCTACAATGGCCGGTACAGAGGGCAGCTACCTAGTGATAGGATGCAAA
TCTCGAAAGCCGGTCTCAGTTCGGATTGGAGTCTGCAACTCGACTCTATGAAGCTGGAATCGCTAGTAAT
CGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTAACACACCGCCCGTCAAGCCATGGAAGC
TGGGGGTACCTGAAGTCGGTGACCGTAAAAGGAGCTGCCTAGGGTAAAAGTAACTAGTAAGTGGGCTAAGTCG
TAACAAGGTAGCCGTAAAGGGC

>66878561|gb|AY958855.1|Sphingobacteria|Uncultured bacterium clone

rRNA082 16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCGGCAGGCTTAATACATGCAAGTCGAGGGGCA
TCAGCTTATAGCAATATAGGGCTGGCGACCGGCAAACGGGTGCGGAACACGTACACAACCTTCCTTTAAG
AGGGGGATAGCCCATAGAAATGTGGATTAATACCCCGTAAGATAGTGGGATGGCATCATACTACTATTAT
AGTTACGACGCTTGAAGATGGGTGTGCGTCTGATTAGGTAGTTGGCGGGGTAAAGGCCACCAAGCCTTC
GATCAGTAGCTGATGTGAGAGCATGATCAGCCACACGGGCACTGAGACACGGGCCCCGACTCCTACGGGAG
GCAGCAGTAAGGAATATTGGTCAATGGACGCAAGTCTGAACCAGCCATGCCGCGTGAAGGATGAAGGTCC
TCTGGATTGTAAACTTCTTTTATAGGGGGCGAAAAAAGGGAAATCTTTCTCACTTGACAGTACCCTATGA
ATAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTATCCGGATTCACT
GGGTTTAAAGGGTGCGTAGGCGGGCGTATAAGTCAGTGGTGAAATCCTGGAGCTTAACTCCAGAACTGCC
ATTGATACTATATGTCTTGAATATGGTGGAGGTAAGCGGAATATGTCATGTAGCGGTGAAATGCATAGAT
ATGACATAGAACACCTATTGCGAAGGCAGCTTACTACGCCTATATTGACGCTGAGGCACGAAAGCGTGGG
GATCAAACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGATTACTCGACGTGTGCGATAAACG
GTACGCGTCTGAGCGAAAGCATTAAGTAATCCACCTGGGAAGTACGACCGCAAGGTTGAAACTCAAAGGA
ATTGGCGGGGTCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCTGG
GCTAGAATGCAGTCTGACCGTGGGTGAAAGCTCATTTTGTAGCAATACACAGATTGTAAGGTGCTGCATG
GCTGTGCTCAGCTCGTGCCGTGAGGTGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCATTAGTTG
CCAACAGGTAAAGCTGGGAACCTAGTGAAACTGCCGTCGTAAGACGCGAGGAAGGAGGGGGATGATGTCA
AGTCATCATGGCCTTTATGCCCAGGGCTACACACGTGCTACAATGGGGTGGACAAAGGGCTGCGACACAG
TGATGTGAAGCGAATCCCAAAAACCACTTCTCAGTTCAGATCGGAGTCTGCAACTCGACTCCGTGAAGCT
GGAATCGCTAGTAATCGTATATCAGCAATGATACGGTGAATACGTTCCCGGACCTTGACACACCGCCCG
TCAAGCCATGGGAGCCGGGTGTACCTAAAGTCGGTAACCGCAAGGATCTGCCTAGGGTAAAATCGGTGAC
TGGGGCTAAGTCGTAACAAGGTAACCGTAAAGGGCG

>433525|emb|X71862.1|Actinomyces|Actinomyces neuui subsp. anitratus 16S

rRNA gene, strain 50/90

CGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGATCCATTAGCGCTTTTGTGTTTTTGGTGA
GAGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGCCCTTTTCTTTGGGATAAGCCTGGGAACTGGGT
CTAATACTGGATGTTCCGNCTTCCTCGCATGGGGTTGTTGGGAAAGGTTTTTTCTGGATTGGGATGGGCT
CGCGGCTTATCAGCTTGTGGTGGGGTGATGGCTTACCAAGGCTTTGACGGGTAGCCGGCCTGAGAGGGT
GGTCGGTCACACTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGGATATTGCACAA
TGGACGGAAGTCTGATGCACCGACGTCGTGTGGGGGATGAAGGCCTTCGGGTTGTAAACTCCTTTGCCCC
GCGGAAAAGGCAGGGTTTTGGCCTTGTGTGATGGTAGTGGGTAAAGAAGCGCCGGCTCACTACGTGCCAGC
AGCCGCGGTAATACGTAGGGCGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCTCGTAGGCGGTTTTG
TCGCGTCTAGCGTTTAAGGCTCGGGCTTAACCCGGGTTTGCCTTGGGTACGGGCAGGCTTGAGTGC GGTA
GGGGTAACTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCG
GGTTACTGGGCCGTTACTGACGCTGAGGAGCGAGAGCGTGGGGAGCGAACAGGATTAGATAACCCTGGTAG
TCCATGCTGTAAACGTTGGGCAC TAGGTGTGGGGCTGTTTTATGGTTCCGCGCCGTAGCTAACGCATT
AAGTCCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCG
GCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATGCACCGCGAGACTG
CAGAGATGTGGTTGCCTTCGGGGTGGTGTGCAGGTGGTGCATGGTTGTCGTGAGCTCGTGTGTCGTGAGATG
TTGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCTCATGTTGCCAGCACGTTATGGTGGGGACTCGTGAG
AGACTGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAAATCATGATGCCCCATATGTCTTGGGCT
TCACGCATGCTACAGTGGTGTCTACAGAGGGTTGCTATTCCGTGAGGTTGAGCGAATCTCTTAAAGGGCA
TCTTGGTTTCGGATCGCAGTCTGCAACTCGACTGCGTGAAGGTGGAGTCGCTAGTAATCGCAGATGAGCAT
TGCTGCGGTGAATACGTTCTCGGGCCTTGTACACACCGCCCGTCACGTACGAAAGTTGGTAACACCCGA
AGCCTGTGGCCTAACCTTTTTTGGGGGGAGTGGTGAAGGTGGGGCTAGCGATTGGGACGAAGTCGTAACA
AGGTAGCCGTACCGGAAGG

>66878786|gb|AY959080.1|Actinomyces|Uncultured bacterium clone rRNA307
16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGACGGCGTGCTTAACACATGCAAGTCGAACGGGA
TCCATTAGCGCTTTTGTGTTTTTGGTGAGAGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGCCCTTT
TCTTTGGGATAAGCCTGGGAACTGGGTCTAATACTGGATGTTCCGGCTTCCTCGCATGGGGTTGTTGGG
AAAGGTTTTTTCTGGATTGGGATGGGCTCGCGGCTTATCAGCTTGTGGTGGGGTGATGGCTTACCAAGG
CTTTGACGGGTAGCCGGCCTGAGAGGGTGGTGGTGCAGTGGGACTGAGATACGGCCCAGACTCCTACG
GGAGGCAGCAGTGGGGGATATTGCACAATGGACGGAAGTCTGATGCAGCGACGTCGTGTGGGGGATGAAG
GCCTTCGGGTTGTAAACTCCTTTGCCCCGCGGAAAAGGCAGGGTTTTTGGCCTTGTGATGGTAGTGGGTA
AGAAGCGCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCGAGCGTTGTCCGGAATTAT
TGGGCGTAAAGGGCTCGTAGGCGGTTTTGTGCGCTCTAGCGTTTAAGGCTCGGGCTTAACCCGGGTTTTGCG
TTGGGTACGGGCAGGCTTGAGTGCGGTAGGGGTAAGTGGAAATTCCTGGTGTAGCGGTGGAATGCGCAGAT
ATCAGGAGGAACACCGGTGGCGAAGGCGGGTTACTGGGCCGTTACTGACGCTGAGGAGCGAGAGCGTGGG
GAGCGAACAGGATTAGATAACCCTGGTAGTCCATGCTGTAAACGTTGGGCACTAGGTGTGGGGGCTGGTTT
CATGGTTTTCCGCGCCGTAGCTAACGCATTAAGTCCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTC
AAAGGAATTGACGGGGGCCCCGACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTT
ACCAAGGCTTGACATGCACCGCGAGACTGCAGAGATGTGGTTGCCTTCGGGGTGGTGTGCAGGTGGTGCA
TGGTTGTGTCGTGAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCTCATGT
TGCCAGCACGTTATGGTGGGGACTCGTGAGAGACTGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGT
CAAATCATCATGCCCCCTTATGTCTTGGGCTTCACGCATGCTACATTGGTGTCTACAGAGGGTTGCTATTC
CGTGAGGTTGAGCGAATCTCTTAAAGGGCATCTTGGTTCGGATCGCAGTCTGCAACTCGACTGCGTGAAG
GTGGAGTCGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCTCGGGCCTTGTACACACCGCC
CGTCACGTACGAAAGTTGGTAACACCCGAAGCCTGTGGCCTAACCTTTTTTGGGGGGAGTGGTGAAGGT
GGGGCTAGCGATTGGGACGAA

>27803995|emb|AJ428402.1|Varibaculum|Varibaculum cambriensis partial 16S
rRNA gene, strain CCUG 44998

TCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGATCCAAGAAGTGCTTGCACTTTT
TGGTGAGAGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGTCCTTTTCTTTGGGATAAGCATCCGAAA
GGGTGTTTTAATACCTTATGTTCTGTCTGCCTCGCATGGGGTGGGTGGGAAAGATTTTTTCGGTAAAGGGT
GGGCTCGCGGTCTATCAGCTTGTGGTGGGGTGATGGCCTACCAAGGCTTTGACGGGTAGCCGGCCTGAG
AGGGTGGTGGTGCATTGGGACTGAGATACGGCCCAGACTCCTGCGGGAGGCAGCAGTGGGGGATATTG
CACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGGGGGATGAAGGCCTTCGGGTGTAAACTTCTTT

TGCTCTGAACAAGGCGCACCGTGGGGTGTGTTGAGTGTAGGGGTTGATTAGCGCCGGCTAACTACGTGCC
AGCAGCCGCGGTAATACGTAGGGCGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGGGCTTGTAGGTGGC
TGGTTGCGTCTGTCTGTGAAAGCTCATGGCTTAACTGTGGGTTTTCGGGTGGGTACGGGCTGGCTTGAGTGC
AGTAGGGGAGGCTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAATACCGGTGGCGAA
GGCGGGTCTCTGGGCTGTTACTGACACTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGATAACCTG
GTAGTCCATGCTGTAAACGGTGGGAACCTGGGTGTGGGGGGCTTTTTTGTCTTCTGCGTCGTAGCTAACGC
GTTAAGTTCCCCGCCTGGGGAGTACGGTCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGCCCCGACAA
GCGGCGGAGCATGCGGATTAATTTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATGCACTGGACCG
ATCCAGAGATGGGTTTTCTTTTTGGCTGGTGTGCAGGTGGTGCATGGTTGTTCGTACGTCGTGTCTGTA
GATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCTTATGTTGCCAGCAAGTTGTGTTGGGGACTC
GTGGGAGACTGCCGGGGTAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGTCTT
GGGCTTCACGCATGCTACATTGGCGTCTACAGAGGGTTGCGATACCGTAAGGTGGGGCGAATCTCTTAAA
GGGCGTCTTGGTTCGGATCGGGGTCTGCAACTCGGCCCCGTGAAGGTGGAGTCGCTAGTAATCGCAGATC
AGCAACGCTGCGGTGAATACGTTCTCGGGCCTTGTACACACCGCCCGTCACGTCACGAAAGTTGGTAACA
CTCGAAGCTTGTGGCCTAACTCTTTTTGAGGGGGAGCGGGTGAAGGTGGGGCTAGCGATTGGGACGAAGT
CGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCAC

>66878754|gb|AY959048.1|Varibaculum|Uncultured bacterium clone rRNA275
16S ribosomal RNA gene, partial sequence

CCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGATC
CAAGGGGTGCTTGCACTTTTTGGTGAGAGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGTCCTTTTC
TTTGGGATAAGCATTCGAAAGGGTGTCTAATACCTTATGTTCTGTCTGCCTCGCATGGGGTGGGTGGGAA
AGGCTTTGGCCGGATTTGGGTGGGCTCGCGGTCTATCAGCTTGTGGTGGGGTGATGGCTTACCAAGGCT
TTGACGGGTAGCCGGCCTGAGAGGGTGGTTCGGTCACATTGGGACTGAGATACGGCCCAGACTCCTGCGGG
AGGCAGCAGTGGGGGATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGGGGGATGAAGGC
CTTCGGGTGTGAAACTTCTTTTGTCTGAACAAGGCGCACTAATGGGTGTGTTGAGTGTAGGGGTTGATT
AGCGCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCGAGCGTTGTCCGGAATTATTGGG
CGTAAAGGGCTTGTAGGTGGCTGGTTGCGTCTGTCTGTGAAAGCTCATGGCTTAACTGTGGGTTTTCGGTG
GGTACGGGCTGGCTTGAGTGCAGTAGGGGAGGCTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATC
AGGAGGAATACCGGTGGCGAAGGCGGGTCTCTGGGCTGTTACTGACACTGAGGAGCGAAAGCATGGGGAG
CGAACAGGATTAGATAACCTGGTAGTCCATGCTGTAAACGTTGGGAACCTGGGTGTGGGGGGCTTTTTTGT
CTTCTGCGTCGTAGCTAACGCGTTAAGTTCCCCGCCTGGGGAGTACGGTCGCAAGGCTAAAACCTCAAAGG
AATTGACGGGGGCCCCGACAAAGCGGCGGAGCATGCGGATTAATTTCGATGCAACGCGAAGAACCTTACCAA
GGCTTGACATGCACTGGACCGATCCAGAGATGGGTTTTCTTTTTGGCTGGTGTGCAGGTGGTGCATGGT
TGTTCGTACGTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCTTATGTTGCC
AGCAAGTTGTGTTGGGGACTCGTGGGAGACTGCCGGGGTAACTCGGAGGAAGGTGGGGATGACGTCAA
TCATCATGCCCTTATGTCTTGGGCTTCACGCATGCTACATTGGCGTCTACAAAGGGTTGCGATACCGTA
AGGTGGTGCATCTCTTAAAGGGCGTCTTGGTTCGGATCGGGGTCTGCAACTCGGCCCCGTGAAGGTGG
AGTCGCTAGTAGTCGCAGATCAGCAACGCTGCGGTGAATACGTTCTCGGGCCTTGTACACACCGCCCGTC
ACGTCACGAAAGTTGGTAACACTCGAAGCTTGTGGCCTAACTCTTTTTGAGGGGGAGCGGGTGAAGGTGG
GGCTAGCGATTGGGACGAA

>52429823|gb|AY725812.1|Corynebacterium|Corynebacterium sp. C18 16S
ribosomal RNA gene, partial sequence

TTATGGAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGTA
AGGCCCCAGCTTGCTGGGGTACACGAGTGGCGAACGGGTGAGTAACACGTGGGTGACCTGCCCTGCACTT
CGGGATAAGCCTGGGAACTGGGTCTAATACCGGATAGGACCTCAGCGTAGGGTTGGGGTGGAAGTTTT
TTCGGTGCAGGATGGGCCCCGCGCCTATCAGCTTGTGGTGGGGTAATGGCCTACCAAGGCGGCGACGGG
TAGCCGGCCTGAGAGGGTGGACGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATATTGCACAATGGGCGGAAGCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTCGGGT
GTAAACTCCTTTACCATCGACGAAGGGTTTCTGACGGTAGATGGAGAAGAAGCACCGGCTAACTACGT
GCCAGCAGCCGCGGTAATACGTAGGGTGCAGCGCTTGTCCGGAATTACTGGGCGTAAAGAGCTCGTAGGT
GGTTTGTCTGCGTCTGTGAAATTCCGGGGCTTAACTCCGGGCGTGCAGGCGATACGGGCATAACTTGA
GTACTGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGG
CGAAGGCGGGTCTCTGGGCAGTAACTGACGCTGAGGAGCGAAAGCATGGGTAGCGAACAGGATTAGATAC
CCTGGTAGTCCATGCCGTAAACGGTGGGCGCTAGGTGTGGTTTTCTTCCACGGGATCCGTGCCGTAGCT

AACGCATTAAGCGCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGGCCCG
CACAAGCGGCGGAGCATGTGGATTAATTCGATGCAACGCGAAGAACCCTTACCTGGGCTTGACATGTACGG
GATCGGGCCAGAGATGGTCTTTCCCTTGTGGCTCGTATACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGT
CGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCTCATGTTGCCAGCACGTTGTGGTGGG
GACTCGTGAGAGACTGCCGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTAT
GTCCAGGGCTTCACACATGCTACAATGGCCGGTACAGTGGGTGCGATGCCGTGAGGTGGAGCTAATCCC
TTAAAGCCGGTCTCAGTTCGGATCGGGGTCTGCAACTCGACCCCGTGAAGTCGGAGTCGCTAGTAATCGC
AGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCATGAAAGTCGG
TAACACCCGAAGCCAGTGGCCCAACCTTTTGTGGGGGGAGCTGTCTGAAGGTGGGATCGGCGATTGGGACG
AAGTCGAACAAGGAGCCGA

>56480628|gb|AY831726.1|Corynebacterium|Corynebacterium amycolatum 16S
ribosomal RNA gene, partial sequence

GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGTAAGGCTCCAGCTTGCTGGGGTACACGAGTGGCGA
ACGGGTGAGTAACACGTGGGTGACCTGCCCTGCACTTCGGGATAAGCCTGGGAAACTGGGTCTAATACCG
GATAGGACCGCACCGTGAGGGTGTGGTGGAAAGTTTTTTCGGTGTGGGATGGGCCCCGCGCCTATCAGCT
TGTTGGTGGGGTAATGGCCTACCAAGGCGGCGACGGGTAGCCGGCCTGAGAGGGTGGACGGCCACATTGG
GACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGGAAGCCTGA
TGCAGCGACGCCGCGTGGGGGATGACGGCCTTCGGGTGTAAACTCCTTTACCATCGACGAAGGGTTTC
TGACGGTAGATGGAGAAGAAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCGAGC
GTTGTCCGGAATTACTGGGCGTAAAGAGCTCGTAGGTGTTTTGTCTCGCTCGTCTGTGAAATTCGGGGGCT
TAACTCCGGGCGTGACGGCGATACGGGCATAAATTGAGTACTGTAGGGGAGACTGGAATTCCTGGTGTAG
CGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGGTCTCTGGGCAGTAACTGACGCTG
AGGAGCGAAAGCATGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGGTGGGCGCTA
GGTGTGGGTTTTCTTCCACGGGATCCGTGCCGTAGCTAACGCATTAAGCGCCCCGCTGGGGAGTACGGC
CGCAAGGCTAAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCGGCGGAGCATGTGGATTAATTTCGATG
CAACGCGAAGAACCCTTACCTGGGCTTGACATATACAGGATCGCGCCAGAGATGGTGTTTTCCCTTGTGGCT
TGTATACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCG
CAACCCTTGTCTTATGTTGCCAGCACGTTGTGGTGGGGACTCGTAAGAAACTGCCGGGGTTAACTCGGAG
GAAGGTGGGGATGACGTCAAAATCATCATGCCCCCTTATGTCCAGGGCTTCACACATGCTACAATGGTCGGT
ACAGTGGGTTGCCAGTCCGTGAGGGCGAGCTAATCCCGCAAAGCCGGTCTCAGTTCGGATCGGGGTCTGC
AACTCGACCCCGTGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCAACGCTGCGGTGAATACGTTCCCGG
GCCTTGTACACACCGCCCGTCACGTCATGAAAGTCGGTAACACCCGAAGCCAGGGCCTAACACATTTTGT
GGGGGAGCTGTGAAGGTGGG

>66878616|gb|AY958910.1|Corynebacterium|Uncultured bacterium clone
rRNA137 16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGT
AAGGCTCCAGCTTGCTGGGGTACACGAGTGGCGAACGGGTGAGTAACACGTGGGTGACCTGCCCTGCACT
TCGGGATAAGCCTGGGAAACTGGGTCTAATACCGGATAGGACCGCACCGTGAGGGTGTGGTGGAAAGTTT
TTTCGGTGTGGGATGGGCCCCGCGCCTATCAGCTTGTGTTGGTGGGGTAATGGCCTACCAAGGCGGCGACGG
GTAGCCGGCCTGAGAGGGTGGACGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGC
AGTGGGGAATATTGCACAATGGGCGGAAGCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTCGGG
TTGTAAACTCCTTTACCATCGACGAAGGGTTTCTGACGGTAGATGGAGAAGAAGCACCGGCTAACTACG
TGCCAGCAGCCGCGGTAATACGTAGGGTGCGAGCGTTGTCCGGAATTACTGGGCGTAAAGAGCTCGTAGG
TGGTTTGTCTCGCTCGTCTGTGAAATTCGGGGGCTTAACTCCGGGCGTGACGGCGATACGGGCATAAATTG
AGTACTGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTG
GCGAAGGCGGGTCTCTGGGCAGTAACTGACGCTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGATA
CCCTGGTAGTCCATGCCGTAAACGGTGGGCGCTAGGTGTGGGTTTTCTTCCACGGGATCCGTGCCGTAGC
TAACGCATTAAGCGCCCCGTCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGGCCC
GCACAAGCGGCGGAGCATGTGGATTAATTTCGATGCAACGCGAAGAACCCTTACCTGGGCTTGACATATACA
GGATCGCGCCAGAGATGGTGTTTTCCCTTGTGGCTTGTATACAGGTGGTGCATGGTTGTCTGTCAGCTCGTG
TCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCTTATGTTGCCAGCACGTTGTGGTGG
GGACTCGTAAGAAACTGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTA
TGTCAGGGCTTCACACATGCTACAATGGTCGGTACAGTGGGTTGCCGGTCCGTGAGGGCGAGCTAATCC
CGCAAAGCCGGTCTCAGTTCGGATCGGGGTCTGCAACTCGACCCCGTGAAGTCGGAGTCGCTAGTAATCG

CAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCATGAAAGTCG
GTAACACCCGAAGCCAGTGGCCTAACACATTTTGTGGGGGAGCTGTCTGAAGGTGGGATTGGCGATTGGGA
CGAA

>66878644|gb|AY958938.1|Corynebacterium|Uncultured bacterium clone
rRNA165 16S ribosomal RNA gene, partial sequence

TCGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCTGAACGG
AAAGGCCCTTGCTTGCAAGGGTGCTCGAGTGGCGAACGGGTGAGTAACACGTAGGTGATCTGCCTTTCAC
TTCGGGATAAGCTTGGGAACTGGGTCTAATACCGGATATTCACGGCACCGTGGTTGGTGTGGTGGAAAG
CTTTTGCAGTGGGAGATGAGCTTGCAGGCTATCAGCTTGTGGTGGGGTAATGGCCTACCAAGGCGGCGA
CGGGTAGCCGGCCTGAGAGGGTGTGCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGC
AGCAGTGGGGAATTTTGCACAATGGGCGGAAGCCTGATGCAGCGACGCCGTGTGGGGGATGAAGGCCTTC
GGGTTGTAAACTCCTTTTCGTACAGGACGAAGTTTGTGTTGACGGTACCTGGATAAGAAGCACCGGCTAACT
ACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAGCGCTTGTCCGGATTTACTGGGCGTAAAGGGCTCGT
AGGTGGTGTGTTGCGTCGTCTGTGTAATCCAGGGGCTTAACCTTTTGGTTGGCAGGCGATACGGGCATTGC
TTGAGTGTCTGATGGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCG
ATGGCGAAGGCAGGTCTCTGGGCAGTCACTGACGCTGAGGAGCGAGAGCATGGGTAGCGAACAGGATTAG
ATACCCTGGTAGTCTATGCTGTAAACGGTGGGCGCTAGGTGTGAGCCTCTTCCACGGGGTTTGTGCCGTA
GCTAACGCTTTAAGCGCCCCGCCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGC
CCGCACAAGCGGCGGAGCATGTGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATAGG
CAGGATGGGCGCAGAGATGTGTCGTCCCTTTGTGGTCTGTTTACAGGTGGTGCATGGTTGTGTCGTAGCTC
GTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCTTATGTTGCCAGCACGTTGTGG
TGGGGACTCGTGAGAGACTGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCC
TTATGTCCAGGGCTTCACACATGCTACAATGGTTGGTACAGTGCCTGAGCAACACCGTGAGGTGGAGCTA
ATCGCTAAAGCCAGTCTCAGTTCGGATTGGGGTCTGCAACTCGACCTCATGAAGTCGGAGTCGCTAGTAA
TCGCAGATCAGCAGTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCATGAAAG
TTGGTAACACCCGAAGCCCATGGCCTAACCGGTTTTTGTCCGGGGGAGTGGTCTGAAGGTGGGATTGGCGA
TTGGGACGAAGTCGTAACAAGGTAACCGTAAAGGGC

>66878649|gb|AY958943.1|Corynebacterium|Uncultured bacterium clone
rRNA170 16S ribosomal RNA gene, partial sequence

ATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCTGAACGGAAAGGCTCCTGCTTGCAGGGGTACTCGAG
TGGCGAACGGGTGAGTAACACGTGGGTGATCTGCCCTGTACTTCGGGATAAGCTTGGGAACTGGGTCTA
ATACCGGATAGGACAACCTTTTTGGATATTGTTGTGGAAAGCTTTTGCAGTATGGGATGAGCTCGCGGCCT
ATCAGCTTGTGGTGGGGTAATGGCCTACCAAGGCGTCGACGGGTAGCCGGCCTGAGAGGGTGTACGGCC
ACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCA
AGCCTGATGCAGCGACGCCGCGTGGGGGATGAAGGCCTTCGGGTGTAAACTCCTTTTCGCTAGGGACGAA
GCTTTTTTGTGACGGTACCTGGAGAAGAAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAG
GGTGCGAGCGTTGTCCGGAATTACTGGGCGTAAAGAGCTCGTAGGTGGTTTGTGCGCTCGTTTGTGTAAG
TCCACAGCTTAACTGTGGGACTGCAGGCGATACGGGCATAACTTGAGTGTCTGATGGGGGAGACTGGAATTC
CTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAACACCGATGGCGAAGGCAGGTCTCTGGGCAGTAA
CTGACGCTGAGGAGCGAAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGG
TGGGCGCTAGGTGTGAGTCCCTTCCACGGGGTTTCGTGCCGTAGCTAACGCATTAAGCGCCCCGCCCTGGGG
AGTACGGCCGCAAGGCTAAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGCGGAGCATGTGGATTA
ATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGTAGCGGATCGCCGAGAGATGTGGTTTCCC
TTGTGGTCTGCTATACAGGTGGTGCATGGTTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGC
AACGAGCGCAACCCTTGTCTTATGTTGCCAGCACGTGATGGTGGGGACTCATGAGAGACTGCCGGGGTTA
ACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGTCCAGGGCTTCACACATGCTACAA
TGGTCCGTACAGCGCGTTTGTACCTTGTGAGGGGATGCTAATCGCACAAAGCCGGCCTTAGTTCCGATT
GGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCAACGCTGCGGTGAATA
CGTTCCCGGGCCTTGTACACACCGCCCGTCGCGTCATGAAAGTTGGTAACACCCGAAGCCAGTGGCCTGT
CATGGGAGCTGTCTGAAGGTGGGATCGGCGATTGGGACGAAGTCGTAACAAGGTAGCCGTAAAGGGC

>66878672|gb|AY958966.1|Corynebacterium|Uncultured bacterium clone
rRNA193 16S ribosomal RNA gene, partial sequence

TCGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCTGAACGG
AAAGGCCCTGCTTGCAGGGTGCTCGAGTGGCGAACGGGTGAGTAACACGTGGGTGATCTGCCCTTACTT

TGGGATAAGCCTGGGAAACTGGGTCTAATACTGGATAGGACCATGCTGTAGGTGGTGTGGTGGAAAGATT
AGTTTCGGTAAGGGATGAGCTCGCGGCCTATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGTCGAC
GGGTAGCCGGCCTGAGAGGGTGGACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTCG
GGTTGTAAACTCCTTTCAGCCATGACGAAGCCCGTGTGGTGACGGTAGTGGTAGAAGAAGCACCGGCTAA
CTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAGCGTGTGCCGGAATTACTGGGCGTAAAGAGCTC
GTAGGTGGTCTGTGCGCTCATTTGTGAAAGCCCGGGCTTAACCTCCGGGTGGCAGGTGATACGGGCATG
ACTGGAGTACTGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACAC
CGGTGGCGAAGGCGGGTCTCTGGGCAGTAACGTGACGCTGAGGAGCGAAAGCATGGGTAGCGAACAGGATT
AGATAACCCTGGTAGTCCATGCCGTAAACGGTGGGCGCTAGGTGTGGGTTTCCTTCCACGGGATCCGTGCC
GTAGCTAACGCATTAAGCGCCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGG
GGCCCGCACAGGCGGCGGAGCATGTGGATTAATTCGATGCAACGCGAAGAACCTTACCCGGGCTTGACAT
GCACTGGATGCGGCCAGAGATGGTTGTTCCCTTTGTGGCTGGTGTGCAGGTGGTGCATGGTTGTCGTCAG
CTCGTGTCTGTGAGATGTTGGGTTAAGTCCCAGAACGAGCGCAACCCTTGTCTCGTGTGCCAGCATTG
TTGGGGACTCGCGGGAGACTGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCC
CTTATGTCCAGGGCTTCACACATGCTACAATGGCTGGTACAGAGAGTTGCGATACCGTGAGGTGGGGCTA
ATCTCGTAAAGCCAGTCTCAGTTCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGAGTCGCTAGTA
ATCGCAGATCAGCAATGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCATGAAA
GTTGGTAACACCCGAAGCCGGTGGCCTAAACTCGTTAGGGAGCCGTCGAAGGTGGGATTGGCGATTGGGA
CGAA

>66878673|gb|AY958967.1|Corynebacterium|Uncultured bacterium clone

rRNA194 16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGA
AAGGCCCTGCTTGCAAGGTACTCGAGTGGCGAACGGGTGAGTAACACGTGGGTGATCTGCCCTGCACTTC
GGGATAAGCCTGGGAAACTGGGTCTAATACCGGATAGGAGCCATTTTTAGTGTGATGGTTGGAAAGTTTT
TTCGGTGTAGGATGAGCTCGCGGCCTATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGCGACGGG
TAGCCGGCCTGAGAGGGTGGACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTCGGGT
TGTAAACTCCTTTTCGCTAGGGACGAAGCTTTTTGTGACGGTACCTAGATAAGAAGCACCGGCTAACTACG
TGCCAGCAGCCGCGGTAATACGTAGGGTGCAGCGTTGTCCGGAATTACTGGGCGTAAAGGGCTCGTAGG
TGGTTTGTGCGCTCGTCTGTGAAATTCGGGGCTTAACCTCCGGGCGTGCAGGCGATACGGGCATAACTTG
AGTACTGTAGGGGTAACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGATG
GCGAAGGCAGGTTACTGGGCAGTTACTGACGCTGAGGAGCGAAAGCATGGGTAGCGAACAGGATTAGATA
CCCTGGTAGTCCATGCCGTAAACGGTGGGCGCTAGGTGTGAGGGTCTTTTCACGACTTTTCGTGCCGTAGC
TAACGCATTAAGCGCCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGGCCC
GCACAAGCGGCGGAGCATGTGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATACACC
GGATCGGGCTAGAGATAGTCTTCCCTTTGTGGCTGGTGTACAGGTGGTGCATGGTTGTCGTCAGCTCGT
GTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCTTATGTTGCCAGCATTGTTGGTTGGG
GACTCATGAGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTAT
GTCCAGGGCTTCACACATGCTACAATGGTTCGGTACAACGCGCAGCGACACTGTGAGGTGGAGCGAATCGC
TGAAAGCCGGCCTTAGTTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGC
AGATCAGCAATGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCATGAAAGTTGG
TAACACCCGAAGCCGGTGGCCCAAACCTTGTTAGGGAGCCGTCGAAGGTGGGATCGGCGATTGGGACGAA

>66878690|gb|AY958984.1|Corynebacterium|Uncultured bacterium clone

rRNA211 16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGAAA
GGCCAGTGCTTGCACTGGTACTCGAGTGGCGAACGGGTGAGTAACACGTGGGTGATCTGCCCTGTACTTC
GGGATAAGCTTGGGAAACTGGGTCTAATACCGGATAGGACAACTTTTTGGATATTGTTGTGGAAAGCTTT
TGCGGTATGGGATGAGCTCGCGGCCTATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGTCGACGGG
TAGCCGGCCTGAGAGGGTGTACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGGGGGATGAAGGCCTTCGGGT
TGTAAACTCCTTTTCGCTAGGGACGAAGCGCAAGTGACGGTACCTGGAGAAGAAGCACCGGCTAACTACGT
GCCAGCAGCCGCGGTAATACGTAGGGTGCAGCGTGTGCCGGAATTACTGGGCGTAAAGAGCTCGTAGGT
GTTTTGTGCGCTCGTTTGTGTAAGTCCACAGCTTAACGTGGGACTGCAGGCGATACGGGCATAACTTGA

GTGCTGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGATGG
CGAAGGCAGGTCTCTGGGCAGTAGCTGACGCTGAGGAGCGAAAGCATGGGTAGCGAACAGGATTAGATAC
CCTGGTAGTCCATGCCGTAAACGGTGGGCGCTAGGTGTGAGTCCCTTCCACGGGATTTGTGCCGTAGCTA
ACGCATTAAGCGCCCCGCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGC
ACGAGCGGCGGAGCATGTGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGTAGCGG
ATCGCCGCGAGAGATGTGGTTTCCCTTGTGGTTCGTATACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTC
GTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTCTTATGTTGCCAGCACGTAATGGTGGGG
ACTCATGAGAGACTGCCGGGGTTAACTCGGTGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATG
TCCAGGGCTTCACACATGCTACAATGGTCGGTACAGCGCGTTTGTACCTTGTGAGGGGATGCTAATCGC
ACAAAGCCGGCCTTAGTTTCGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGC
AGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACGTCATGAAAGTTGG
TAACACCCGAAGCCAGTGGCCTGTCATGGGAGCTGTGCAAGGTGGGATCGGCGATTGGGACGAAGTCGTA
ACAAGGTAACCGTAAAGGGCG

>158905533|gb|EU086796.1|Brevibacterium|Brevibacterium paucivorans strain
28 16S ribosomal RNA gene, partial sequence

GGAGAAGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGAAGCTCTAGCTTGCTGGGGTGGATTAG
TGGCGAACGGGTGAGTAACACGTGAGTAACCTGCCCTTTACTTCGGGATAAGCTTGGGAAACTGGGTCTA
ATACCGGATATTCTGCATGGTCGGATGGTTGTGTAGGAAAGATTTTTTGGTAAGGGATGGGCTCGCGGCC
TATCAGTTTGTGGTGGGGTGATGGCCTACCAAGACGACGACGGGTAGCCGGCCTGAGAGGGCGACCGGC
CACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGA
AACCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTCGGGTTGTAAACCTCTTTCAGTAGGGAAGA
AGCGAAAGTGACGGTACCTGCAGAAGAAGTACCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTAGG
GTACTAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGTGGTTTGTGCGCTCTGCTGTGGAAC
GTGCCGCTTAACGGTGCGCGTGCAGTGGGTACGGGCGGACTAGAGTGCAGTAGGGGAGTCTGGAATTCCT
GGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGGACTCTGGGCTGTTACT
GACGCTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGTTG
GGCACTAGGTGTGGGGTCCATTCCACGGATTCTGCGCCGTAGCTAACGCATTAAGTGCCCCGCTGGGGA
GTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGCGGAGCATGCGGATTAA
TTCGATGCAACGCGAAGAACCCTTACCAAGGCTTGACATGCACTAGACCATCGCAGAGATGTGGTTTTCTT
TTTGACTGGTGTACAGGTGGTGCATGGTTGTGTCGTAGCTCGTGTGTCGTGAGATGTTGGGTTAAGTCCCGCA
ACGAGCGCAACCCCTCGTTCTATGTTGCCAGCACGTGATGGTGGGAACTCATGGGAGACTGCCGGGGTCAA
CTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGTCTTGGGCTTCACGCATGCTACAAT
GGCCGGTACAGAGGGTGGCGATACCGTGAGGTGGAGCGAATCTCTTAAAGCCGGTCTCAGTTCGGATCGT
AGTCTGCAACTCGACTACGTGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCAATGCTGCGGTGAATACG
TTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCTAACCC
CTGTGTGGGGGAGCCGTCGAAGGTGGGACTGGTGATTGGGACT

>66878914|gb|AY959208.1|Brevibacterium|Uncultured bacterium clone rRNA435
16S ribosomal RNA gene, partial sequence

ACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAGCGCTGAAGCTTGGTGTTTTCACTGGGTGGATG
AGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGCCCTTTACTTCGGGATAAGCTTGGGAAACTGGGTG
TAATACCGGATATTCTGCGTGATCGTATGGTTGTGTAGGAAAGATTTTTTGGTAAGGGATGGGCTCGCGG
CCTATCAGTTTGTGGTGGGGTGATGGCCTACCAAGACGACGACGGGTAGCCGGCCTGAGAGGGCGACCG
GCCCACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGG
GAAACCCTGATACAGCGACGCCGCGTGGGGGATGACGGCCTTCGGGTTGTAAACCTCTTTCAGTAGGGAA
GAAGCGTAAGTGACGGTACCTGCAGAAGAAGTACCGGCTAACTACGTGCCAGCAGCCGCGTAATACGTA
GGGTACTAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGTGGTTTGTGCGCTCTGCTGTGGA
ACGTGCCGCTTAACGGTGCGCGTGCAGTGGGTACGGGCGGACTAGAGTGCAGTAGGGGAGTCTGGAATTC
CTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGGTGGCGAAGGCGGGACTCTGGGCTGTTA
CTGACGCTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGT
TGGGCACTAGGTGTGGGGTCCATTCCACGGATTCTGCGCCGTAGCTAACGCATTAAGTGCCCCGCTGGG
GAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGCGGAGCATGCGGATT
AATTCGATGCAACGCGAAGAACCCTTACCAAGGCTTGACATGCACTGGATCGCTGCAGAGATGTGGTTTTTC
TTTTGACTGGTGTACAGGTGGTGCATGGTTGTGTCGTAGCTCGTGTGTCGTGAGATGTTGGGTTAAGTCCCG
CAACGAGCGCAACCCCTCGTTCTATGTTGCCAGCACGTGATGGTGGGAACTCATGGGAGACTGCCGGGGT

AACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTTATGTCTTGGGCTTCACGCATGCTACA
ATGGCCGGGTACAGAGGGTGGCGATACCGTGAGGTGGAGCGAATCTCTTAAAGCCGGTCTCAGTTCGGATC
GTAGTCTGCAACTCGACTACGTGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCAATGCTGCGGTGAATA
CGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAGTCGGTAACACCCGAAGCCGGTGGCCTAA
CCTGTGTGGGGGAGCCGTCAAGGTGGGACTGGTGATTGGGACTAA

>1359505|emb|X91032.1|Brachybacterium|Brachybacterium faecium 16S
ribosomal RNA gene

AGAGTTTGATNNTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGACGGTG
GTGCTTGCACTGCCTGATTAGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGCCCTCACTTCGGGAT
AACCTCGGGAAATCGAGGCTAATACCGGATATGAGCTTCTGCCGCATGGTGGGGGTGTAAAGATTTATC
GGTGAGGGATGGACTCGCGCCTATCAGTTTGTGTGGTGAGGTAATGGCTCACCAAGGCGATGACGGGTAG
CCGGCCTGAGAGGGGCGACCGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTG
GGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTCGGGTGT
AAACCCCTTTTCAGTAGGGAAGAAGCGAGAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTACGTGCC
AGCAGCCGCGGTAAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTAGGTGGC
TTGTGCGCTCTGCCGTGAAAACCCGAGGCTCAACCTCGGGCGTGCGGTGGGTACGGGCAGGCTAGAGTGT
GGTAGGGGAGACTGGAACCTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAAGAACACCGATGGCGAA
GGCAGGTCTCTGGGCCATTACTGACACTGAGAAGCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTG
GTAGTCCATGCCGTAAACGTTGGGCACTAGGTGTGGGGGACATTCCACGTTCTCCGCGCCGTAGCTAACG
CATTAAGTGCCCCGCTTGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGCCCCGACA
AGCGGCGGAGCATGCTGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATGCACCGGACG
GTCGCAGAGATGTGGCTTTCTTCGGACTGGTGCACAGGTGGTGCATGGTTGTGTCGTACGCTCGTGTCTGA
GATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTTCTATGTTGCCAGCACGTGATGGTGGGGACTC
ATAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAATCATCATGCCCTTTATGTCTT
GGGCTTCAAGCATGCTACAATGGCCGGTACAATGGGTTGCGAAACTGTGAGGTGGAGCGAATCCAAAAA
GCCGGCCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGCAGATC
AGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAGTCGGTAACA
CCCGAAGCCAGTGGCCCATCCTCGTGAGGGAGCTGTGGAAGGTGGGATCGGTGATTGGGACTAAGTCGTA
ACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCACCTCCTTT

>66878893|gb|AY959187.1|Brachybacterium|Uncultured bacterium clone
rRNA414 16S ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCGAGTCGAACGAT
GACGGTGGTGCTTGCATCACCTGATTAGTGGCGAACGGGTGAGTAACACGTGAGTAACCTGCCCTTCACT
TCGGGATAACCTCGGGAAATCGTGGCTAATACCGGATATGAGCTCCTGCCGCATGGTGGGGGTGTGAAAG
ATTTATCGGTGAAGGATGGACTCGCGGCCTATCAGTTTGTGTGGTGAGGTAATGGCTCACCAAGGCGATGA
CGGGTAGCCGGCCTGAGAGGGCGACCGGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGC
AGCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGGGGGATGACGGCCTTC
GGTTGTAAACCCCTTTTCAGTAGGGAAGAAGCGAAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACT
ACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGT
AGGTGGCTTGTGCGCTCTGCCGTGAAAACCCGAGGCTCAACCTCGGGCGTGCGGTGGGTACGGGCAGGCT
AGAGTGTGGTAGGGGAGACTGGAACCTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAAGAACACCGA
TGGCGAAGGCAGGTCTCTGGGCCATTACTGACACTGAGGAGCGAAAGCATGGGTAGCGAACAGGATTAGA
TACCCTGGTAGTCCATGCCGTAAACGTTGGGCACTAGGTGTGGGGGACATTCCACGTTTTCCGCGCCGTA
GCTAACGCATTAAAGTCCCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGC
CCGCACAAGCGGCGGAGCATGCTGATTAATTTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATGCA
CCGGACGGCCGAGAGATGTGGCTTTCTTCGGACTTGTGCACAGGTGGTGCATGGTTGTGTCGTACGCTCGT
GTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTTCTATGTTGCCAGCACGTGATGGTG
GGGACTCATAGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGACGACGTCAAATCATCATGCCCTTT
ATGTCTTGGGCTTCAAGCATGCTACAATGGTTCGGTACAATGGGTTGCGAAACTGTGAGGTGGAGCGAATC
CCAAAAAGCCGGCCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATC
GCAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAGTC
GGTAACACCCGAAGCCAGTGGCCCATCCTTGTGAGGGAGCTGTGGAAGGTGGGATCGGTGATTGGGACTA

A

>299818468|gb|HM222676.1|Kocuria|Kocuria sp. 0712C1-3 16S ribosomal RNA gene, partial sequence

AGAGTTTGTATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGCTGAAGCAC
CAGCTTGCTGGTGTGGATGAGTGGCGAACGGGTGAGTAATACGTGAGTAACCTGCCCTTGACTCTGGGAT
AAGCCCGGGAAGTGGGTCTAATACTGGATGCTACATGTCACCGCATGGTGGTGTGTGGAAAGGGTTTAC
TGGTCTTGGATGGGCTCACGGCCTATCAGCTTGTTGGTGAGGTAATGGCTCACCAAGGCGACGACGGGTA
GCCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCGGGTTG
TAAACCTCTTTTACGACAGGGAAGAAGCCACAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACTACGTG
CCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGTAGGCG
GTTTGTGCGCTCTGCTGTGAAAGCCCGGGGCTTAACCCCGGGTGTGCAGTGGGTACGGGCAGACTAGAGT
GCAGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAACACCGATGGCG
AAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGATACCC
TGGTAGTCCATGCCGTAAACGTTGGGCACTAGGTGTGGGGGACATTCCACGTTTTCCGCGCCGTAGCTAA
CGCATTAAGTGCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGGCCGCA
CAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATATAACCGGA
TCGTTCCAGAGATGGTTCTTCCCCTTTGGGGTCGGTATACAGGTGGTGCATGGTTGTGCTCAGCTCGTGT
CGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTCGTTCCATGTTGCCAGCACGTGATGGTGGG
GACTCATGGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTAT
GTCTTGGGCTTCACGCATGCTACAATGGCCGGTACAAAGGGTTGCGATACTGCGAGGTGGAGCTAATCCC
AAAAAGCCGGTCTCAGTTTCGATTGAGGTCTGCAACTCGACCTCATGAAGTCGGAGTCGCTAGTAATCGC
AGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAGTCGG
TAACACCCGAAGCCGGTGGCCCAACCCCTTGTGGAGGGAGCCGTGCAAGGTGGGACTGGCGATTGGGACTA
AGTCGTAACAAGGTAACC

>66878593|gb|AY958887.1|Kocuria|Uncultured bacterium clone rRNA114 16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGTATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGCTGA
AGCACCAGCTTGCTGGTGTGGATGAGTGGCGAACGGGTGAGTAATACGTGAGTAACCTGCCCTTGACTCT
GGGATAAGCCCGGGAAGTGGGTCTAATACTGGATGCTACATGTCACCGCATGGTGGTGTGTGGAAAGGG
TTTACTGGTCTTGGATGGGCTCACGGCCTATCAGCTTGTTGGTGAGGTAATGGCTCACCAAGGCGACGAC
GGGTAGCCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGGGATGACGGCCTTCG
GGTTGTAAACCTCTTTCAGCAGGGAAGAAGCCACAAGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACT
ACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTCGT
AGGCGGTTTTGTGCGCTCTGCTGTGAAAGCCCGGGGCTTAACCCCGGGTGTGCAGTGGGTACGGGCAGACT
AGAGTGCAGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGGAATGCGCAGATATCAGGAGGAACACCGA
TGGCGAAGCCAGGTCTCTGGGCTGTTACTGACGCTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGA
TACCCTGGTAGTCCATGCCGTAAACGTTGGGCACTAGGTGTGGGGGACATTCCACGTTTTCCGCGCCGTA
GCTAACGCATTAAGTGCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGGC
CCGCACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATATA
CCGGATCGTTCCAGAGATGGTTCTTCCCCTTTGGGGTCGGTATACAGGTGGTGCATGGTTGTGCTCAGCT
CGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTCGTTCCATGTTGCCAGCACGTGATG
GTGGGGACTCATGGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCC
CTTATGTCTTGGGCTTCACGCATGCTACAATGGCCGGTACAAAGGGTTGCGATACTGTGAGGTGGAGCTA
ATCCCAAAAAGCCGGTCTCAGTTTCGATTGAGGTCTGCAACTCGACCTCATGAAGTCGGAGTCGCTAGTA
ATCGCAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAA
GTCGGTAACACCCGAAGCCGGTGGCCCAACCCCTTGTGGAGGGAGCCGTGCAAGGTGGGACTGGCGATTGG
GACTAA

>119721297|gb|EF151509.1|Nesterenkonia|Nesterenkonia sp. YIM 90721 16S ribosomal RNA gene, partial sequence (95%)

CGATTAGAGTTTGTATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATGA
AGCCCGTGCTTGCACGGGTGGATTAGTGGCGAACGGGTGAGTATCACGTGAGTAACCTGCCCTTGACTCT
GGGATAAGCCTGGGAAAGTGGGTCTAATACCGGATATGACCAGTCCTCGCATGAGGTGCTGGTGGAAAGA
TTTTATCGGTCTTGGATGGACTCGCGGCCTATCAGCTAGACGGTGAGGTAACGGCTCACCGTGGCGATGA

CGGGTAGCCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGC
AGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGCGGGATGACGGCCTTC
GGGTTGTAAACCGCTTTCAGCAGGGAAGAAGCTTTTGTGACGGTACCTGCAGAAGAAGCGCCGGCTAACT
ACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCGAGCGTTATCCGGAATTATTGGGCGTAAAGAGCTCGT
AGGCGGCTTGTCGCGTCTGCTGTGAAAGCCCGGGCTTAACCCCGGTGTGCAGTGGGTACGGGCAGGCT
AGAGTGCAGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGA
TGGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGGAGCGAAAGCATGGGGAGCGAACAGGATTAGA
TACCCTGGTAGTCCATGCCGTAAACGTTGGGCACTAGGTGTGGGGGACATTCCACGTTTTCGCGCCGTA
GCTAACGCATTAAGTGCCCCGCCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGC
CCGCACAAGCGGCGGAGCATGCGGATTAATTTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATGGA
CCGATCGCTGCAGAGATGTAGTTTCCCTTCGGGGCTGGTTCACAGGTGGTGCATGGTTGTCGTAGCTC
GTGTCGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCTATGTTGCCAGCACGTAATGG
TGGGGACTCATGGGAGACTGCCGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCC
TTATGTCTTGGGCTTCACGCATGCTACAATGGCCGGTACAGTGGGTGCGATACTGTGAGGTGGAGCTAA
TCCCTAAAAGCCGGTCTCAGTTCGGATCGAAGTCTGCAACTCGACTTCGTGAAGTTGGAGTCGCTAGTAA
TCGCAGATCAGCAACGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAG
TTGGTAACACCCGAAGCCACGGCCCAACCGGTTTTCCGGGGGAGTGGTCAAGGTGGGACTGGCGATT
GGGACTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCA

>66878582|gb|AY958876.1|Nesterenkonia|Uncultured bacterium clone rRNA103
16S ribosomal RNA gene, partial sequence

ACGAGCGCTGGCGGCGTGCCTAATACATGCAAGTCGAACGATGAAGCTGCCTGCTTGCAGGTGGTGGATT
AGTGGCGAACGGGTGAGTATCACGTGAGTAACCTGCCCTTGACTCTGGGATAAGCCCCGGGAACTGGGTC
TAATACCGGATATGACCTCTCATCGCATGGTGGGGGGTGGAAAGTTTTTAACGGTCTTGGATGGGCTCGC
GGCCTATCAGCTTGACGGTGGGGTAGTGGCCTACCGTGGCTTTGACGGGTAGCCGGCCTGAGAGGGTGAC
CGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
GCGCAAGCCTGATGCAGCGACGCCGCGTGCGGGATGACGGCCTTCGGGTGTAAACCGCTTTCAGTACAG
AGAAGCCCTTTTTGGGTGACGGTATGTGCAGAAGAAGCGCCGGCTAACTACGTGCCAGCGGCCGCGGTA
ATACGTAGGGCGCGAGCGTTATCCGGAATTATTGGGCGTAAAGAGCTTGTAGGCGGTTTGCCGCGTCTGC
TGTGAAAGCCCCGGGGCTTAACCTCCGGGTGTGCAGTGGGTACGGGCAGGCTAGAGTGCAGTAGGGGAGACT
GGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACACCGATGGCGAAGGCAGGTCTCTGG
GCTGTTTTCTGACGCTGAGAAGCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCTG
TAAACGTTGGGCACTAGGTGTGGGGGGCGTTTCTCGTCGTCCGCGCCGTAGCTAACGCATTAAGTGCCCC
GCCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGCGGAGCAT
GCGGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTTGACATACACCGGATCGCGCTGGAGACAG
TGTTTCCCTTCGGGGCTGGTGTACAGGTGGTGCATGGTTGTCGTGAGCTCGTGTGCTGAGATGTTGGGTT
AAGTCCCGCAACGAGCGCAACCCTTGTCTATGTTGCCAGCACGTAGTGGTGGGGACTCATGGGAGACTG
CCGGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGTCTTGGGCTTCACGC
ATGCTACAATGGCTGGTACAGTGGGTGCGATACCGTGAGGTGGAGCTAATCCCTGAAAAGCTGGTCTCAG
TTCGGATCGAAGTCTGCAACTCGACTTCGTGAAGTTGGAGTCGCTAGTAATCGCAGATCAGCAATGCTGC
GGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCACGAAAGTTGGTAACACCCGAAGCTCA
CGGCCTAACCGGTTTTTCCGGGGGAGTGGTCAAGGCGGGACTGGCGATTGGGACTAAGTCGTAACAAG
GTAACCGTAAAGGGC

>66878837|gb|AY959131.1|Nesterenkonia|Uncultured bacterium clone rRNA358
16S ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGATG
ATGCTTCCAGCTTTGCTGGGGGTGGATTAGTGGCGAACGGGTGAGTATCACGTGAGTAACCTGCCCTTGA
CTCTGGGATAAGCCCCGGGAACTGGGTCTAATACCGGATAGGACTTCGCATCGCATGGTGTGGGGTTGAA
AGTTTTTAACGGTCTTGGATGGGCTCGCGGCCTATCAGTTTGACGGTGGGGTAGTGGCTACCGTGGCGA
TGACGGGTAGCCGGCCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGA
GGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGCGGGATGACGGCC
TTCGGGTGTAAACCGCTTTCAGTAGGGACGAAGCCCTTCGGGGTGACGGTACTTGCAAGAAGAAGCGCCG
GCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGCGCGAGCGTTATCCGGAATTATTGGGCGTAAAG
AGCTTGTAGGCGGTTTGTACGCTCTGCTGTGAAAGCCCGGGGCTCAACTCCGGGTGTGCAGTGGGTACGG
GCTGACTAGAGTGCAGTAGGGGAGACTGGAATTCCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGA

ACACCGATGGCGAAGGCAGGTCTCTGGGCTGTTTCTGACGCTGAGAAGCGAAAGCATGGGTAGCGAACAG
GATTAGATACCCTGGTAGTCCATGCCGTAAACGTTGGGCACTAGGTGTGGGGGGCGTTCCTCGTCGTCCG
CGCCGTAGCTAACGCATTAAGTGCCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGA
CGGGGGCCCCGACAAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAAGGCTTG
ACATAACCCGACCGCCCTAGAGATAGGGCTTCCCTTCGGGGCTGGTGTACAGGTGGTGCATGGTTGTCG
TCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCAGAACGAGCGCAACCCTTGTCTATGTTGCCAGCAC
GTAATGGTGGGACTCATGGGAGACTGCCGGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAAATCATC
ATGCCCCCTTATGTCTTGGGCTTCACGCATGCTACAATGGCCGGTACAGTGGGTTGCGATACTGTGAAGTG
GAGCTAATCCCTAAAAGCCGGTCTCAGTTCGGATCGAAGTCTGCAACTCGACTTCGTGAAGTTGGAGTCG
CTAGTAATCGCAGATCAGCAATGCTGCGGTGAATACGTTCGCCGGCCTTGTACACACCGCCCGTCAAGTC
ACGAAAGTTGGTAACACCCGAAGCCGGTGGCCAGCCCTTGTGGGGGGAGCCGTGCAAGGTGGGACGAGC
GATTGGGACTAA

>219878136|ref|NR_025275.1|Propionimicrobium|Propionimicrobium
lymphophilum strain DSM 4903 16S ribosomal RNA, partial sequence
TCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAGCGGTAAGGCCCTTTCGGGGGTACACGA
GCGGCGAACGGGTGAGTAACGCGTGAGTAACCTGCCCCCTCTCTGGGATAACAGTTGGAAACGGCTGCT
AATACCGGATATTCAGACCTTTAGGCATCTTTTGGTTTGGAAAGTTCTGGCGGTGGGGGATGACTCGCGT
CCTATCAGCTTGTGGTGGGGTAGTGGCCTACCAAGGCGACGACGGGTAGCCGGCCTGAGAGGGCGACCG
GCCACATTGGGACTGAGATACGGCCCAAACCTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGG
GAAACCCTGATGCAGCAACGCGCGTGCGGGATGACGGCCTTCGGGTTGTAAACCGCTTTCAGCCATGACG
AAGCTTTTGTGACGGTAGTGGCAGAAGAAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTGATACGTAG
GGTGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTAGGCGGTTTGTGCGCGTCGAAAGTGTA
CTCAGTGCTTAACGCTGAGCCTGCTTTCGATACGGGTTGACTAGAGGAAGGTAGGGGAGAATGGAATTCC
CGGTGGAGCGGTGGAATGCGCAGATATCGGGAGGAACACCAGTGGCGAAGGCGGTTCTCTGGACCTTTCC
TGACGCTGAGAAGCGAAAGCGTGGGGTAGCAAACAGGCTTAGATACCCTGGTAGTCCACGCCGTAAACGG
TGGGTACTAGGTGTGGGGGACATTCCACGTTCTCTGTGCCGTAGCTAACGCATTAAGTACCCCGCTGGG
GAGTACGGCCGCAAGGTAAAACCTCAAAGGAATTGACGGGGCCCCGACAAAGCGGCGGAGCATGCGGATTA
ATTCGATGCAACGCGAAGAACCTTACCTGGGTTTGAATAATACCGGAAACGTCTAGAGATAGGCGCCCCG
TAAGGTCGGTATACAGGTGGTGCATGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCA
ACGAGCGCAACCCTCGTCTAATGTTGCCAGCAAGTTATGTTGGGGACTCGTTAGAGACCGCCGAGGTCAA
CTCGGAGGAAGGTGAGGACGACGTCAAGTCATCATGCCCTTATGTCCAGGGCTTCACGCATGCTACAAT
GGTCGGTACAGTCAGTTGCGAGCCTGTAAGGGTTAGCGAATCTGTAAAAGCCGGCCTCAGTTCGGATTGG
GGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGCAGATCAGCAACGCTGCGGTGAATACG
TTCCCGGGGCTTGTACACACCGCCCGTCAAGTCATGAAAGTTGGCAACACCCGAAGCCAGTGGCCTAACCC
CTTGTGGGGGGGAGCTGTGCAAGGTGGGGCTGATAATTAGGACTAAGTCGTAACAAGGTAGCCGTACCG
GAAGGTGCGGCTGGATCACCTCCTTTCTAAGG

>66878575|gb|AY958869.1|Propionimicrobium|Uncultured bacterium clone
rRNA096 16S ribosomal RNA gene, partial sequence
GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAGCGGTA
AGGCCCTTTCGGGGGTACACGAGCGGCGAACGGGTGAGTAACGCGTGAGTAACCTGCCCCCTCTCTGGG
ATAACAGTTGGAAACGGCTGCTAATACCGGATATTCAGACCTTTAGGCATCTTTTGGTTTGGAAAGTTCT
GGCGGTGGGGGATGGACTCGCGTCTATCAGCTTGTGGTGGGGTAGTGGCCTACCAAGGCGACGACGGG
TAGCCGGCCTGAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAAACCTCCTACGGGAGGCAGCA
GTGGGGAATATTGCACAATGGGGGAAACCCTGATGCAGCAACGCCGCGTGCGGGATGACGGCCTTCGGGT
GTAAACCGCTTTCAGCCATGACGAAGCTTTTGTGACGGTAGTGGCAGAAGAAGCACCGGCTAACTACGT
GCCAGCAGCCGCGGTGATACGTAGGTTGCGAGCGTTGTCCGGAATTATTGGGCGTAAAGAGCTTGTAGGC
GGTTTGTGCGCGTCGAAAGTGTAACCTCAGTGCTTAACGCTGAGCCTGCTTTCGATACGGGCTGACTAGAG
GAAGGTAGGGGAGAATGGAATTCGCGGTGGAGCGGTGGAATGCGCAGATATCGGGAGGAACACCAGTGGC
GAAGGCGGTTCTCTGGACCTTTCCTGACGCTGAGAAGCGAAAGCGTGGGTAGCAAACAGGCTTAGATACC
CTGGTAGTCCACGCCGTAAACGGTGGGTACTAGGTGTGGGGGACATTCCACGTTCTCTGTGCCGTAGCTA
ACGCATTAAGTACCCCGCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGGAATTGACGGGGCCCCGC
GCAAGCGGCGGAGCATGCGGATTAATTGATGCAACGCGAAGAACCTTACCTGGGTTTGGAGATATACCGG
AAACGTCTAGAGATAGGCGCCCCGTAAGGTCGGTATACAGGTGGTGCATGGCTGTGCTCAGCTCGTGTGCG
TGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTCGTCTAATGTTGCCAGCAAGTTATGTTGGGGA

CTCGTTAGAGACCGCCGAGGTCAACTCGGAGGAAGGTGAGGACGACGTCAAGTCATCATGCCCCTTATGT
CCAGGGCTTCACGCATGCTACAATGGTCGGTACAGTCAGTTGCGAGCCTGTAAGGGTTAGGGAATCTGTA
AAAGCCGGCCTCAGTTCGGATTGGGGTCTGCAACTCGACCCCATGAAGTCGGAGTCGCTAGTAATCGCAG
ATCAGCAACGCTGCGGTGAATACGTTCCCGGGGCTTGTACACACCGCCCGTCAAGTCATGAAAGTTGGCA
ACACCCGAAGCCAGTGGCCTAACCTTGTGGGGGGAGCTGTCTGAAGGTGGGGCTGATAATTAGGACTAAG
TCGTAACAAGGTAACCGTAAAGGG

>301072772|gb|HM596282.1|Scardovia|Scardovia wiggisiae strain F0424 16S
ribosomal RNA gene, partial sequence

GGGTTCGATTCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGGATCCACTG
GGCTTTTGTGGTGGTGGAGAGTGGCGAACGGGTGAGTAATGCGTGACTAACCTGCCGTATGGTTGGGGA
TAGCTCCTGGAAACGGGTGGTAATACCCAATGCTCCAGCTGGATGCATGTCTGGTTGGGAAAGCTTTTTTG
TGCCATATGATGGGGTCGCGTCCATCAGCTTGTGGTGGGGTGATGGCCTACCAAGGCGTCGACGGGTA
GCCGGCCTAAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGCGGGATGGAGGCCTTCGGGTTG
TAAACCGCTTTTATAGGGGGGCAAGCTATGCCTGTGTGGTGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
GCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAAGCGTTGTCCGGATTTATTGGGCGTAAAG
GGCTCGTAGGCGGTTTGTGCGTCTGGTGTGAAAGCTTACTGCTTAACGGTAGGTTGCGCTGGATACGGG
CAGGCTTGAGTGCAGTAGGGGAGACTGGAATTCTCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGAA
CACCTATGGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGG
ATTAGATACCCTGGTAGTCCATGCTGTAAACGGTGGACGCTGGATGTGGGGCCATTTCCACGGGTTCTG
TGTCGGAGCTAACCGGTTAAGCGTCCCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAAGAAATTGA
CGGGGGCCCGCACAAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAGGGCTTG
ACATAACCTGGATGATGCCAGAGATGGTGTGTCCCTTCGGGGCTGGGTTACAGGTGGTGCATGGTGCCTG
TCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGCCCTGTGTTACCAGCGG
GTCGTGCCGGGGACTCACAAGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATC
ATGCCCCTTACGTCTGGGCTTCACGCATGCTACAATGGCTGGTACAGCGGGATGCGATACTGTAAGGTG
GAGCGGATCCTGTAAACCGGTCTCAGTTCCGATCGGGGCCTGCAACTCGGCCTCGTGAAAGGTGGAGTCG
CTAGTAATCGCGGATCAGCAGTGCCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTC
ATGAAAGTGGGCAGCACCCGAAGCCGGTGGCCTAACCTGTTGTGGGGGGAGCCGTCTAAGGTGAGGTTTCG
CGATTGGGACTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGC

>66878608|gb|AY958902.1|Scardovia|Uncultured bacterium clone rRNA129 16S
ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGG
ATCCACTGGGCTTTTGTGGTGGTGGAGAGTGGCGAACGGGTGAGTAATGCGTGACTAACCTGCCGTATG
GTTGGGGATAGCTCCTGGAAACGGGTGGTAATACCCAATGCTCCAGCTGGATGCATGTCTGGTTGGGAAA
GCTTTTGTGCCATATGATGGGGTCGCGTCCATCAGCTTGTGGTGGGGTGATGGCCTACCAAGGCGTCG
ACGGGTAGCCGGCCTAAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGG
CAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGCGGGATGGAGGCCTT
CGGGTTGTAAACCGCTTTTATAGGGGGGCAAGCTATGCCTGTGTGGTGTGGTGGTGGTGGTGGTGGT
AGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAAGCGTTGTCCGGATTTATTGGG
CGTAAAGGGCTCGTAGGCGGTTTGTGCGTCTGGTGTGAAAGCTTACTGCTTAACGGTAGGTTGCGCTGG
ATACGGGCAGGCTTGAGTGCAGTAGGGGAGACTGGAATTCTCGGTGTAACGGTGGAATGTGTAGATATCG
GGAAGAACACCTATGGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGGAGCGAAAGCGTGGGGAGC
GAACAGGATTAGATACCCTGGTAGTCCATGCTGTAAACGGTGGACGCTGGATGTGGGGCCCCATTTCCACG
GGTCTGTGTGCGAGCTAACGCGTTAAGCGTCCCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAAG
AAATTGACGGGGGCCCCGACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCA
GGGCTTGACATAACCTGGATGATGCCAGAGATGGTGTGTCCCTTCGGGGCTGGGTTACAGGTGGTGCATG
GTCGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGCCCTGTGTTA
CCAGCGGGTCGTGCCGGGGACTCACAAGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCA
GATCATCATGCCCTTACGTCCCTGGGCTTCACGCATGCTACAATGGCTGGTACAGCGGGATGCGATACTG
TAAGGTGGAGCGGATCCTGTAAACCGGTCTCAGTTCGGATCGGGGCCTGCAACTCGGCCTCGTGAAAGGT
GGAGTCGCTAGTAATCGCGGATCAGCAGTGCCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCCG
TCAAGTCATGAAAGTGGGCAGCACCCGAAGCCGGTGGCCTAACCTATGTGGGGGGAGCCGTCTAAGGTGA
GTTTCGCGATTGGGACTAAGTCGTAACAAGGTAACCGTAAAGGGC

>291419623|gb|GU733463.1|Janthinobacterium|Janthinobacterium sp. Lc10-10
16S ribosomal RNA gene, partial sequence

AGAGTTTGTATCCTGGCTCAGATTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGCAGCACGG
AGCTTGCTCTGGTGGCGAGTGGCGAACGGGTGAGTAATATATCGGAACGTACCCTAGAGTGGGGGATAAC
GTAGCGAAAGTTACGCTAATACCGCATAACGATCTAAGGATGAAAGTGGGGGATCGCAAGACCTCATGCTC
GTGGAGCGGCCGATATCTGATTAGCTAGTTGGTAGGGTAAAAGCCTACCAAGGCATCGATCAGTAGCTGG
TCTGAGAGGACGACCAGCCACACTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGA
ATTTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGAGTGAAGAAGGCCTTCGGGTGTAAAG
CTCTTTTGTGTCAGGGAAGAAACGGTGAGAGCTAATATCTTTTGCTAATGACGGTACCTGAAGAATAAGCAC
CGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGAAGCGTTAATCGGAATTACTGGGCGTAA
AGCGTGCGCAGGCGGTTTTGTAAAGTCTGATGTGAAATCCCCGGGCTCAACCTGGGAATTGCATTGGAGAC
TGCAAGGCTAGAATCTGGCAGAGGGGGGTAGAATTCCACGTGTAGCAGTGAAATGCGTAGATATGTGGAG
GAACACCGATGGCGAAGGCAGCCCCCTGGGTCAAGATTGACGCTCATGCACGAAAGCGTGGGGAGCAAAC
AGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCTACTAGTTGTCGGGTCTTAATTGACTTGGT
AACGCAGCTAACGCGTGAAAGTAGACCGCCTGGGGAGTACGGTCGCAAGATTAAGAACTCAAAGGAATTGAC
GGGGACCCGCACAAGCGGTGGATGATGTGGATTAATTCGATGCAACGCGAAAAACCTTACCTACCCTTGA
CATGGCTGGAATCCTTGAGAGATCGAGGGAGTGCTCGAAAGAGAACCAGTACACAGGTGCTGCATGGCTG
TCGTGAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCATTAGTTGCTAC
GAAAGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCCTCATGG
CCCTTATGGGTAGGGCTTCACACGTCATACAATGGTACATACAGAGCGCCGCCAACCCGCGAGGGGGAGC
TAATCGCAGAAAGTGTATCGTAGTCCGGATTGTAGTCTGCAACTCGACTGCATGAAGTTGGAATCGCTAG
TAATCGCGGATCAGCATGTGCGGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCCGTACACCATGGG
AGCGGGTTTTTACCAGAAGTAGGTAGCTTAACCGCAAGGAGGGCGCTTACCACGGTAGGATTCTGTGACTGG
GGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCTCCTTAC

>66878491|gb|AY958785.1|Janthinobacterium|Uncultured bacterium clone
rRNA012 16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGCAG
CACGGAGCTTGCTCTGGTGGGGAGTGGCGAACGGGTGAGTAATATATCGGAACGTACCCTAGAGTGGGGG
ATAACGTAGCGAAAGTTACGCTAATACCGCATAACGATCTAAGGATGAAAGTGGGGGATCGCAAGACCTCA
TGCTCGTGGAGCGGCCGATATCTGATTAGCTAGTTGGTAGGGTAAAAGCCTACCAAGGCATCGATCAGTA
GCTGGTCTGAGAGGACGACCAGCCACACTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATTTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGAGTGAAGAAGGCCTTCGGGTG
TAAAGCTCTTTTGTGTCAGGGAAGAAACGGTGAGAGCTAATATCTTTTGCTAATGACGGTACCTGAAGAATA
AGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGAAGCGTTAATCGGAATTACTGGG
CGTAAAGCGTGCGCAGGCGGTTTTGTAAAGTCTGATGTGAAAGTCCCCGGGCTCAACCTGGGAATTGCATTG
GAGACTGCAAGGCTAGAATCTGGCAGAGGGGGGTAGAATTCCACGTGTAGCAGTGAAATGCGTAGATATG
TGGAGGAACACCGATGGCGAAGGCAGCCCCCTGGGTCAAGATTGACGCTCATGCACGAAAGCGTGGGGAG
CAAACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCTACTAGTTGTCGGGTCTTAATTGAC
TTGGTAACGCAGCTAACGCGTGAAAGTAGACCGCCTGGGGAGTACGGTCGCAAGATTAAGAACTCAAAGGAA
TTGACGGGGACCCGCACAAGCGGTGGATGATGTGGATTAATTCGATGCAACGCGAAAAACCTTACCTACC
CTTGACATGGCTGGAATCCTTGAGAGATCAGGGAGTGCTCGAAAGAGAACCAGTACACAGGTGCTGCATG
GCTGTGCTGAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCATTAGTTG
CTACGAAAGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCCTC
ATGGCCCTTATGGGTAGGGCTTCACACGTCATACAATGGTACATACAGAGCGCCGCCAACCCGCGAGGGG
GAGCTAATCGCAGAAAGTGTATCGTAGTCCGGATTGTAGTCTGCAACTCGACTGCATGAAGTTGGAATCG
CTAGTAATCGCGGATCAGCATGTGCGGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCCGTACACCA
TGGGAGCGGGTTTTTACCAGAAGTAGGTAGCTTAACCGCAAGGAGGGCGCTTACCACGGTAGGATTCTGTGA
CTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGGGCG

>219846773|ref|NR_026365.1|Janthinobacterium|Janthinobacterium lividum
strain DSM 1522 16S ribosomal RNA, partial sequence

TTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGCAGCACGGAGCTTGCTCTGGTGGCGAGTG
GCGAACGGGTGAGTAATATATCGGAACGTACCCTAGAGTGGGGGATAACGTAGCGAAAGTTACGCTAATA
CCGCATAACGATCTAAGGATGAAAGTGGGGGATCGCAAGACCTCATGCTCGTGGAGCGGCCGATATCTGAT
TAGCTAGTTGGTAGGGTAAAAGCCTACCAAGGCATCGATCAGTAGCTGGTCTGAGAGGACGACCAGCCAC

ACTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATTTTGGACAATGGGCGAAAG
CCTGATCCAGCAATGCCGCGTGAGTGAAGAAGGCCTTCGGGTGTAAAGCTCTTTTGTGAGGGAAGAAAC
GGTGAGAGCTAATATCTCTTGCTAATGACGGTACCTGAAGAATAAGCACCGGCTAACTACGTGCCAGCAG
CCGCGGTAATACGTAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCAGAGCGGTTTTGT
AAGTCTGATGTGAAATCCCCGGGCTCAACCTGGGAATTGCATTGGAGACTGCAAGGCTAGAATCTGGCAG
AGGGGGGTAGAATTCCACGTGTAGCAGTGAAATGCGTAGATATGTGGAGGAACACCGATGGCGAAGGCAG
CCCCCTGGGTCAAGATTGACGCTCATGCACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGT
CCACGCCCTAAACGATGTCTACTAGTTGTCGGGTCTTAATTGACTTGGAACGCAGCTAACGCGTGAAGT
AGACCGCCTGGGGAGTACGGTCGCAAGATTAACCTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGG
ATGATGTGGATTAATTCGATGCAACGCGAAAAACCTTACCTACCCTTGACATGGCTGGAATCCCCGAGAG
ATTGGGGAGTGCTCGAAAGAGAACCAGTACACAGGTGCTGCATGGCTGTCGTCAGCTCGTGTCTGAGAT
GTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCTATTAGTTGCTACGAAAGGGCACTCTAATGAGACT
GCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCCTCATGGCCCTTATGGGTAGGGCTTCACA
CGTCATACAATGGTACATACAGAGCGCCGCCAACCCGCGAGGGGGAGCTAATCGCAGAAAGTGTATCGTA
GTCCGGATTGTAGTCTGCAACTCGACTGCATGAAGTTGGAATCGCTAGTAATCGCGGATCAGCATGTCGC
GGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGCGGGTTTTACCAGAAGTAGG
TAGCTTAACCGCAAGGAGGGCGCTTACCACGGTAGGATTCTGTGACTGGGGTGAAGTCGTAACAAGGTAG
>306411029|gb|HM234001.1|Delftia|Delftia sp. IHB B 4037 16S ribosomal RNA
gene, partial sequence

AGAGTTTGATCTTGGCTCAGATTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGTAACAGGT
CTTCGGACGCTGACGAGTGGCGAACGGGTGAGTAATACATCGGAACGTGCCAGTCGTGGGGGATAACTA
CTCGAAAGAGTAGCTAATACCGCATAACGATCTGAGGATGAAAGCGGGGGACCTTCGGGCCTCGCGCGATT
GGAGCGGCCGATGGCAGATTAGGTAGTTGGTGGGATAAAAGCTTACCAAGCCGACGATCTGTAGCTGGTC
TGAGAGGACGACCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAAT
TTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGAGGATGAAGGCCTTCGGGTGTAAAGT
CTTTTGTACGGAACGAAAAAGCTTCTCCTAATACGAGAGGCCATGACGGTACCGTAAGAATAAGCACCG
GCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCGAGCGTTAATCGGAATTACTGGGCGTAAAG
CGCGCGCAGGCGGTTATGTAAGACAGATGTGAAATCCCCGGGCTCAACCTGGGAAGTGCATTTGTGACTG
CATGGCTAGAGTACGGTAGAGGGGGATGGAATTCCGCGTGATGACAGTGAATGCGTAGATATGCGGAGGA
ACACCGATGGCGAAGGCAATCCCCTGGACCTGTACTGACGCTCATGCACGAAAGCGTGGGGAGCAAACAG
GATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCAACTGGTTGTTGGGAATTAGTTTTCTCAGTAA
CGAAGCTAACGCGTGAAAGTTGACCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAATTGACGG
GGACCCGCACAAGCGGTGGATGATGTGGTTTAATTCGATGCAACGCGAAAAACCTTACCCACCTTTGACA
TGGCAGGAAGTTTCCAGAGATGGATTCTGTGCTCGAAAGAGAACCCTGCACACAGGTGCTGCATGGCTGTCTG
TCAGCTCGTGTCTGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCTATTAGTTGCTACATT
TAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCCTCATG
GCCCTTATAGGTGGGGCTACACACGTCATACAATGGCTGGTACAGAGGGTTGCCAACCCGCGAGGGGGAG
CTAATCCCATAAAAACAGTCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGAATCGCTA
GTAATCGCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGG
GAGCGGGTCTCGCCAGAAGTAGGTAGCCTAACCGCAAGGAGGGCGCTTACCACGGCGGGGTTCGTGACTG
GGGTGAAGTCGTAACAAGGTACCCGT

>66878813|gb|AY959107.1|Delftia|Uncultured bacterium clone rRNA334 16S
ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGTAA
CAGGTCTTCGGACGCTGACGAGTGGCGAACGGGTGAGTAATACATCGGAACGTGCCAGTCGTGGGGGAT
AACTACTCGAAAGAGTAGCTAATACCGCATAACGATCTGAGGATGAAAGCGGGGGACCTTCGGGCCTCGCG
CGATTGGAGCGGCCGATGGCAGATTAGGTAGTTGGTGGGATAAAAGCTTACCAAGCCGACGATCTGTAGC
TGGTCTGAGAGGACGACCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGG
GGAATTTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGACAGATGAAGGCCTTCGGGTGTGA
AACTGCTTTTGTACGGAACGAAAAAGCTTCTCCTAATACGAGAGGCCCATGACGGTACCGTAAGAATAAG
CACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCGAGCGTTAATCGGAATTACTGGGCG
TAAAGCGTGCGCAGGCGGTTATGTAAGACAGATGTGAAATCCCCGGGCTCAACCTGGGAAGTGCATTTGT
GACTGCATGGCTAGAGTACGGTAGAGGGGGATGGAATTCGCGGTGTAGCAGTGAATGCGTAGATATGCG
GAGGAACACCGATGGCGAAGGCAATCCCCTGGACCTGTACTGACGCTCATGCACGAAAGCGTGGGGAGCA

AACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCAACTGGTTGTTGGGAATTAGTTTTCTC
AGTAACGAAGCTAACGCGTGAAAGTTGACCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAATT
GACGGGGACCCGCACAAGCGGTGGATGATGTGGTTTAATTCGATGCAACGCGAAAAACCTTACCCACCTT
TGACATGGCAGGAAGTTTCCAGAGATGGATTTCGTGCTCGAAAGAGAACCTGCACACAGGTGCTGCATGGC
TGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGTCATTAGTTGCT
ACATTTAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCC
TCATGGCCCTTATAGGTGGGGCTACACACGTCATACAATGGCTGGTACAGAGGGTTGCCAACCCGCGAGG
GGGAGCTAATCCCATAAAACCAGTCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGAAT
CGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGTCTTGACACACCGCCCGTCACAC
CATGGGAGCGGGTCTCGCCAGAAGTAGGTAGCCTAACCGCAAGGAGGGCGCTTACCACGGCGGGGTTTCGT
GACTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAGGGCGA

>265678855|ref|NR_029161.1|Comamonas|Comamonas testosteroni strain KS
0043 16S ribosomal RNA, complete sequence

CGAACTATAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCATGCTTTACACATGCAAGTCGAACGG
TAACAGGTCTTCGGATGCTGACGAGTGGCGAACGGGTGAGTAATACATCGGAACGTGCCTAGTAGTGGGG
GATAACTACTCGAAAGAGTAGCTAATACCGCATGAGATCTACGGATGAAAGCAGGGGACCTTCGGGCCTT
GTGCTACTAGAGCGGCTGATGGCAGATTAGGTAGTTGGTGGGGTAAAGGCTTACCAAGCCTGCGATCTGT
AGCTGGTCTGAGAGGACGACCAGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAG
TGGGGAATTTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGCAGGATGAAGGCCCTCGGGTT
GTAACTGCTTTTGTACGGAACGAAAAGCCTGGGGCTAATATCCCCGGGTGATGACGGTACCGTAAGAAT
AAGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAAGCGTTAATCGGAATTACTGG
GCGTAAAGCGTGCGCAGGCGGTTTTGTAAAGACAGTGGTGAATCCCCGGGCTCAACCTGGGAAGTGCAT
TGTGACTGCAAGGCTAGAGTGCGGCAGAGGGGGATGGAATTCGCGTGTAGCAGTGAATGCGTAGATAT
GCGGAGGAACACCGATGGCGAAGGCAATCCCCTGGGCCTGCACTGACGCTCATGCACGAAAGCGTGGGGA
GCAAACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCAACTGGTTGTTGGGTCTTAAGTGA
CTCAGTAACGAAGCTAACGCGTGAAGTTGACCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGA
ATTGACGGGGACCCGCACAAGCGGTGGATGATGTGGTTTAATTCGATGCAACGCGAAAAACCTTACCCAC
CTTTGACATGGCAGGAACCTTACCAGAGATGGTTTTGGTGCTCGAAAGAGAACCTGCACACAGGTGCTGCAT
GGCTGTGCTCAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGCCATTAGTT
GCTACATTGAGTTGAGCACTCTAATGGGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAG
TCCTCATGGCCCTTATAGGTGGGGCTACACACGTCATACAATGGCTGGTACAAAGGGTTGCCAACCCGCG
AGGGGGAGCTAATCCCATAAAAGCCAGTCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGG
AATCGCTAGTAATCGTGGATCAGAATGTCACGGTGAATACGTTCCCGGGTCTTGACACACCGCCCGTCA
CACCATGGGAGCGGGTCTCGCCAGAAGTAGGTAGCCTAACCGTAAGGAGGGCGCTTACCACGGCGGGGTT
CGTGACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCTCCTTTCT

>66878699|gb|AY958993.1|Comamonas|Uncultured bacterium clone rRNA220 16S
ribosomal RNA gene, partial sequence

CGCCCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCATGCTTTACACATGCAAGTCGAACGGT
AACAGGTCTTCGGATGCTGACGAGTGGCGAACGGGTGAGTAATACATCGGAACGTGCCTAGTAGTGGGGG
ATAACTACTCGAAAGAGTAGCTAATACCGCATGAGATCTACGGATGAAAGCAGGGGACCTTCGGGCCTTG
TGCTACTAGAGCGGCTGATGGCAGATTAGGTAGTTGGTGGGGTAAAGGCTTACCAAGCCTGCGATCTGTA
GCTGGTCTGAGAGGACGACCAGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATTTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGCAGGATGAAGGCCCTCGGGTTG
TAACTGCTTTTGTACGGAACGAAAAGCCTGGGGCTAATATCCCCGGGTGATGACGGTACCGTAAGAATA
AGCACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAAGCGTTAATCGGAATTACTGGG
CGTAAAGCGTGCGCAGGCGGTTTTGTAAAGACAGTGGTGAATCCCCGGGCTCAACCTGGGAAGTGCAT
GTGACTGCAAAGCTAGAGTGCGGCAGAGGGGGATGGAATTCGCGTGTAGCAGTGAATGCGTAGATATG
CGGAGGAACACCGATGGCGAAGGCAATCCCCTGGGCCTGCACTGACGCTCATGCACGAAAGCGTGGGGAG
CAAACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCAACTGGTTGTTGGGTCTTAAGTGA
TCAGTAACGAAGCTAACGCGTGAAGTTGACCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAAAGGAA
TTGACGGGGACCCGCACAAGCGGTGGATGATGTGGTTTAATTCGATGCAACGCGAAAAACCTTACCCACC
TTTGACATGGCAGGAACCTTACCAGAGATGGTTTTGGTGCTCGAAAGAGAACCTGCACACAGGTGCTGCATG
GCTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTGCCATTAGTTG
CTACATTGAGTTGAGCACTCTAATGGGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGT

CCTCATGGCCCTTATAGGTGGGGCTACACACGTCATACAATGGCTGGTACAAAGGGTTGCCAACCCGCGA
GGGGGAGCTAATCCCATAAAGCCAGTCGTAGCCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGA
ATCGCTAGTAATCGTGGATCAGAATGTCACGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCAC
ACCATGGGAGCGGGTCTCGCCAGAAGTAGGTAGCCTAACCGTAAGGAGGGCGCTTACCACGGCGGGGTTT
GTGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAGGG

>269784593|dbj|AB503703.1|Ralstonia|Ralstonia sp. RS2 gene for 16S rRNA,
partial sequence

AGAGTTTGTATCCTGGCTCAGATTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGCAGCATGA
TCTAGCTTGCTAGATTGATGGCGAGTGGCGAACGGGTGAGTAATACATCGGAACGTGCCCTGTAGTGGGG
GATAACTAGTCGAAAGATTAGCTAATACCGCATACGACCTGAGGGTGAAAGTGGGGGACCGCAAGGCCTC
ATGCTATAGGAGCGGCCGATGTCTGATTAGCTAGTTGGTGGGGTAAAGGCCCACCAAGGCGACGATCAGT
AGCTGGTCTGAGAGGACGATCAGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAG
TGGGGAATTTTGGACAATGGGCGAAAGCCTGATCCAGCAATGCCGCGTGTGTGAAGAAGGCCTTCGGGTT
GTAAAGCACTTTTGTCCGAAAGAAATGGCTCTGGTTAATACCTGGGGTCGATGACGGTACCGBAAGAAT
AAGGACCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTCCAAGCGTTAATCGGAATTACTGG
GCGTAAAGCGTGCGCAGGCGGTTGTGCAAGACCGATGTGAAATCCCCGAGCTTAAGTTGGGAATTGCATT
GGTGAAGTGCACGGCTAGAGTGTGTGAGAGGGGGGTAGAATTCACGTGTAGCAGTGAAATGCGTAGAGAT
GTGGAGGAATACCGATGGCGAAGGCAGCCCCCTGGGATAACACTGACGCTCATGCACGAAAGCGTGGGGA
GCAAACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGTCAACTAGTTGTTGGGGATTTCATTTT
CTTAGTAACGTAGCTAACGCGTGAAGTTGACCGCCTGGGGAGTACGGTGCAGAGATTAAGAACTCAAAGGA
ATTGACGGGGACCCGCACAAGCGGTGGATGATGTGGATTAAATTCGATGCAACGCGAAAAACCTTACCTAC
CCTTGACATGCCACTAACGAAGCAGAGATGCATTAGGTGCTCGAAAGAGAAAGTGGACACAGGTGCTGCA
TGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTCTCTAGT
TGCTACGAAAGGGCACTCTAGAGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCC
TCATGGCCCTTATGGGTAGGGCTTCACACGTCATACAATGGTGCATACAGAGGGTTGCCAAGCCGCGAGG
TGGAGCTAATCCCAGAAAAATGCATCGTAGTCCGGATCGTAGTCTGCAACTCGACTACGTGAAGCTGGAAT
CGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACAC
CATGGGAGTGGGCTTTACCAGAAGTAGTTAGCCTAACCGCAAGGAGGGCGATTACCACGGTAGGGTTTCAT
GACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCTCCTT

>239923955|gb|GQ179677.1|Ralstonia|Uncultured Ralstonia sp. clone VE6A10
16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCATGCCTTACACATGCAAGTCGAACGGCAGCATGATCTAGCTTGCTAGATTGATG
GCGAGTGGCGAACGGGTGAGTAATACATCGGAACGTGCCCTGTAGTGGGGGATAACTAGTCGAAAGATTA
GCTAATACCGCATACGACCTGAGGGTGAAAGTGGGGGACCGCAAGGCCTCATGCTATAGGAGCGGCCGAT
GTCTGATTAGCTAGTTGGTGGGGTAAAGGCCCACCAAGGCGACGATCAGTAGCTGGTCTGAGAGGACGAT
CAGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGGAATTTTGGACAATGG
GCGAAAGCCTGATCCAGCAATGCCGCGTGTGTGAAGAAGGCCTTCGGGTTGTAAAGCACTTTTGTCCGGA
AAGAAATGGCTCTGGTTAATACCTGGGGTTCGATGACGGTACCGBAAGAATAAGGACCGGCTAACTACGTG
CCAGCAGCCGCGGTAATACGTAGGGTCCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGGCG
GTTGTGCAAGACCGATGTGAAATCCCCGAGCTTAAGTTGGGAATTGCATTGGTGAAGTGCACGGCTAGAGT
GTGTCAGAGGGGGGTAGAATTCACGTGTAGCAGTGAAATGCGTAGAGATGTGGAGGAATACCGATGGCG
AAGGCAGCCCCCTGGGATAACACTGACGCTCATGCACGAAAGCGTGGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCCCTAAACGATGTCAACTAGTTGTTGGGGATTTCATTTCTTAGTAACGTAGCTAACGC
GTGAAGTTGACCGCCTGGGGAGTACGGTTCGCAAGATTAAAGCTCAAAGGAATTGACGGGGACCCGCACAA
GCGGTGGATGATGTGGATTAAATTCGATGCAACGCGAAAAACCTTACCTACCCTTGACATGCCACTAACGA
AGCAGAGATGCATTAGGTGCTCGAAAGAGAAAGTGGACACAGGTGCTGCATGGCTGTCGTGAGCTCGTGT
CGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTCTCTAGTTGCTACGAAAGGGCACTCTA
GAGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCTCATGGCCCTTATGGGTAGG
GCTTCACACGTCATACAATGGTGCATACAGAGGGTTGCCAAGCCGCGAGGTGGAGCTAATCCCAGAAAAAT
GCATCGTAGTCCGGATCGTAGTCTGCAACTCGACTACGTGAAGCTGGAATCGCTAGTAATCGCGGATCAG
CATGCCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTGGGCTTTACCA
GAAGTAGTTAGCCTAACCGCAAGGAGGGCGATTACCACGGTAGGGTTTCATGACTGGGGTGAAGTCGTAAC
AAGGTA

>239923961|gb|GQ179683.1|Aeromonas|Uncultured Aeromonas sp. clone VE39G03
16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCAGGCCCTAACACATGCAAGTCGAGCGGCAGCGGAAAGTAGCTTGCTACTTTTGC
CGGCGAGCGGCGGACGGGTGAGTAATGCCTGGGGATCTGCCAGTCGAGGGGGATAACAGTTGGAAACGA
CTGCTAATACCGCATAACGCCCTACGGGGGAAAGGAGGGGACCTTCGGGCCTTTCGCGATTGGATGAACCC
AGGTGGGATTAGCTAGTTGGTGGGGTAATGGCTCACCAAGGCGACGATCCCTAGCTGGTCTGAGAGGATG
ATCAGCCACACTGGAACCTGAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAAT
GGGGGAAACCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCGGGTTGTAAAGCACTTTCAGCGA
GGAGGAAAGGTTGGCGCCTAATACGTGTCAACTGTGACGTTACTCGCAGAAGAAGCACCCGGCTAACTCCG
TGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCACACGCAGG
CGGTTGGATAAGTTAGATGTGAAAGCCCCGGGCTCAACCTGGGAATTGCATTTAAACTGTCCAGCTAGA
GTCTTGTAGAGGGGGGTAGAAATCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGGTGG
CGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATAC
CCTGGTAGTCCACGCCGTAAACGATGTGATTTGGAGGCTGTGTCCTTGAGATGTGGCTTCCGGAGCTAA
CGCGTTAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCCCGCA
CAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTGGCCTTGACATGTCTGGAA
TCCTGTAGAGATGCGGGAGTGCCTTCGGGAATCAGAACACAGGTGCTGCATGGCTGTCTGTCAGCTCGTGT
CGTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTGTCCTTTGTTGCCAGCACGTAATGGTGGG
AACTCAAGGGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTAC
GGCCAGGGCTACACACGTGCTACAATGGCGCGTACAGAGGGCTGCAAGCTAGCGATAGTGAGCGAATCCC
AAAAAGCGCGTCGTAGTCCGGATCGGAGTCTGCAACTCGACTCCGTGAAGTCGGAATCGCTAGTAATCGC
GAATCAGAATGTGCGGTTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGT
TGCACCAGAAGTAGATAGCTTAACCTTCGGGAGGGCGCTTACCACGGTGTGATTTCATGACTGGGGTGAAG
TCGTAACAAGGTA

>62953206|emb|AJ967026.1|Shewanella|Shewanella sp. LMG 23023 16S rRNA
gene, strain LMG 23023

ATTGAACGCTGGCGGCAGGCCCTAACACATGCAAGTCGAGCGGCAGCGGAAAGATAGCTTGCTATCTTTGC
CGGCRAGCGGCGGACGGGTGAGTAATGCCTAGGGATCTGCCAGTCGAGGGGGATAACAGTTGGAAACGA
CTGCTAATACCGCATAACGCCCTACGGGGGAAAGGAGGGGACCTTCGGGCCTTCCGCGATTGGATGAACCT
AGGTGGGATTAGCTAGTTGGTGAAGTAATGGCTCACCAAGGCGACGATCCCTAGCTGTTCTGAGAGGATG
ATCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAAT
GGGGGAAACCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCGGGTTGTAAAGCACTTTCAGTAG
GGAGGAAAGGTAGCAGCTTAATACGCTGTTGCTGTGACGTTACCTACAGAAGAAGGACCCGGCTAACTCCG
TGCCAGCAGCCGCGGTAATACGGAGGGTCCGAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGG
CGGTTTGTTAAGCGAGATGTGAAAGCCCCGGGCTCAACCTGGGAATTGCATTTTGAAGTGGCGAACTAGA
GTCTTGTAGAGGGGGGTAGAAATCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGGTGG
CGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGCACGAAAGCGTGGGGAGCAAACAGGATTAGATAC
CCTGGTAGTCCACGCCGTAAACGATGTCTACTCGGAGTTTGGTGTCTTGAACACTGGGCTCTCAAGCTAA
CGCATTAAGTAGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCCCGCA
CAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCASRGAA
TTCGCTAGAGATAGCTTAGTGCTTCGGGAACYCTGAGACAGGTGCTGCATGGCTGTCTGTCAGCTCGTGT
TGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATCCTTATTTGCCAGCACGTAATGGTGGG
AACTCTAGGGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGGCCCTTAC
GAGTAGGGCTACACACGTGCTACAATGGCGAGTACAGAGGGTTGCAAAGCCGCGAGGTGGAGCTAATCTC
ACAAAGCTCGTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGT
GGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGC
TGCAAAAGAAGTGGGTAGCTTAACCTTCGGGGGGGCGCTCACCCTTTGTGGTTTCATGACTGGGGTGAAG
TCGTAACAAGGTAGCCCTAGGGGAACC

>66878789|gb|AY959083.1|Shewanella|Uncultured bacterium clone rRNA310 16S
ribosomal RNA gene, partial sequence

TTGAACGCTGGCGGCAGGCCCTAACACATGCAAGTCGAGCGGCAGCGGAAAGATAGCTTGCTATCTTTGCC
GGCGAGCGGCGGACGGGTGAGTAATGCCTAGGGATCTGCCAGTCGAGGGGGATAACAGTTGGAAACGAC
TGCTAATACCGCATAACGCCCTACGGGGGAAAGGAGGGGACCTTCGGGCCTTCCGCGATTGGATGAACCTA
GGTGGGATTAGCTAGTTGGTGAAGTAATGGCTCACCAAGGCGACGATCCCTAGCTGTTCTGAGAGGATGA

TCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATG
GGGGAAACCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCGGGTTGTAAAGCACTTTCAGTAGG
GAGGAAAGGTAGCAGCTTAATACGCTGTTGCTGTGACGTTACCTACAGAAGAAGGACCGGCTAACTCCGT
GCCAGCAGCCGCGGTAATACGGAGGGTCCGAGCGTTAATCGGAATTACTGGGCGTAAAGCGTGCGCAGGC
GGTTTGTTAAGCGAGATGTGAAAGCCCCGGGCTCAACCTGGGAATTGCATTTCGAACTGGCGAACTAGAG
TCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGGTGGC
GAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGCACGAAAGCGTGGGGAGCAAACAGGATTAGATACC
CTGGTAGTCCACGCCGTAAACGATGTCTACTCGGAGTTTGGTGTCTTGAACACTGGGGCTCTCAAGCTAA
CGCATTAAGTAGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGGCCGCA
CAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCACGGAA
TTCGCTAGAGATAGCTTAGTGCCTTCGGGAACCGTGAGACAGGTGCTGCATGGCTGTCTGTCAGCTCGTGT
TGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATCCTTATTTGCCAGCACGTAATGGTGGG
AACTCTAGGGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGGCCCTTAC
GAGTAGGGCTACACACGTGCTACAATGGCGAGTACAGAGGGTTGCAAAGCCGCGAGGTGGAGCTAATCTC
ACAAAGCTCGTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGT
GGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGC
TGCAAAAGAAGTGGGTAGCTTAACCTTCGGGGGGGCGCTCACCACCTTTGTGGTTTCATGACTGGGGTGAA
>239923982|gb|GQ179704.1|Enterobacter|Uncultured Enterobacter sp. clone
VE45H12 16S ribosomal RNA gene, partial sequence
ATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAACAGGGAGTAGCTTGCTACTCCGCTG
ACGAGCGGCGGACGGGTGAGTAATGTCTGGGGATCTGCCTGATGGAGGGGGATAACTACTGGAAACGGTA
GCTAATACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCTCTTGCCATCGGATGAACCCAG
ATGGGATTAGCTAGTAGGTGGGGTAATGGCTCACCTAGGCGACGATCCCTAGCTGGTCTGAGAGGATGAC
CAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
GCGCAAGCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCGGGTTGTAAAGCACTTTCAGCGAGG
AGGAAGGCATTAAGGTTAATAACCTTGGTGATTGACGTTACTCGCAGAAGAAGCACCGGCTAACTCCGTG
CCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCACGCAGGCG
GTTTGTTAAGTCGGATGTGAAATCCCCGGGCTCAACCTGGGAAGTGCATTCGAAACTGGCAAGCTTGAGT
CTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGGTGGCG
AAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCCGTAAACGATGTGCACTTGGAGGTTGTGCCCTTGAGGCGTGGCTTCCGGAGCTAACG
CGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGGCCGACA
AGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCAGAGAACT
TTCCAGAGATGGATTGGTGCCCTTCGGGAAGTCTGAGACAGGTGCTGCATGGCTGTCTGTCAGCTCGTGTG
TGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTATCCTTTGTTGCCAGCGGTTTCGGCCGGGAAC
TCAAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAG
TAGGGCTACACACGTGCTACAATGGCGCATACAAAGAGAAAGTGAAGTTCGCGAGAGCAAGCGGACCTCATA
AAGTGCCTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGTAGA
TCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGTGTC
AAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTGTGATTTCATGACTGGGGTGAAGTCG
TAACAAGGTA

>66878681|gb|AY958975.1|Enterobacter|Uncultured bacterium clone rRNA202
16S ribosomal RNA gene, partial sequence
TTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAACAGGGAGTAGCTTGCTACTCCGCTGA
CGAGCGGCGGACGGGTGAGTAATGTCTGGGGATCTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAG
CTAATACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCTCTTGCCATCGGATGAACCCAGA
TGGGATTAGCTAGTAGGTGGGGTAATGGCTCACCTAGGCGACGATCCCTAGCTGGTCTGAGAGGATGACC
AGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGG
CGCAAGCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCGGGTTGTAAAGCACTTTCAGCGAGGA
GGAAGGCATTAAGGTTAATAACCTTGGTGATTGACGTTACTCGCAGAAGAAGCACCGGCTAACTCCGTGC
CAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCACGCAGGCGG
TTTGTTAAGTCGGATGTGAAATCCCCGGGCTCAACCTGGGAAGTGCATTCGAAACTGGCAAGCTTGAGTC
TTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGGTGGCGA
AGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCTT

GGTAGTCCACGCCGTAAACGATGTCGACTTGGAGGTTGTGCCCTTGAGGCGTGGCTTCCGGAGCTAACGC
GTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACCTCAAATGAATTGACGGGGGCCCCGCACAA
GCGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCCTTACCTACTCTTGACATCCAGAGAACTT
TCCAGAGATGGATTGGTGCCTTCGGGAACCTCTGAGACAGGTGCTGCATGGCTGTCGTCAGCTCGTGTGT
GAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCCAGCGGTTCCGGCCGGGAAC
CAAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGT
AGGGCTACACACGTGCTACAATGGCGCATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAA
AGTGCCTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGTAGAT
CAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGTTGCA
AAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGATTTCGTGACTGGGGTGAAGTCGT
ACAAGGTAACCGTAAAGGC

>194399042|gb|EU855202.1|Enterobacter|Enterobacter sp. CTSP21 16S
ribosomal RNA gene, partial sequence

AGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAGCACAG
AGAGCTTGCTCTCGGGTGACGAGCGGCGGACGGGTGAGTAATGTCTGGGAACTGCCTGATGGAGGGGGA
TAACTACTGGAAACGGTAGCTAATACCGCATACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCTCTT
GCCATCAGATGTGCCAGATGGGATTAGCTAGTAGGTGGGGTAACGGCTCACCTAGGCGACGATCCCTAG
CTGGTCTGAGAGGATGACCAGCCACACTGGAAGTCTGAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTG
GGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGGTTGT
AAAGTACTTTTACGCGGGGAGGAAGGCGATAAGGTTAATAACCTTGTTCGATTGACGTTACCCGCAGAAGAA
GCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGC
GTAAAGCGCACGCAGGCGGTCTGTCAAGTCGGATGTGAAATCCCGGGCTCAACCTGGGAACTGCATTTCG
AACTGGCAGGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCT
GGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGC
AAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGTCGACTTGGAGGTTGTGCCCTTGAGGCG
TGGCTTCCGGAGCTAACCGGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACCTCAAATGAA
TTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCCTTACCTACT
CTTGACATCCAGAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAACCTCTGAGACAGGTGCTGCATGGC
TGTCGTCAGCTCGTGTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCC
AGCGGTTCCGGCCGGGAACCTCAAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCAAGT
CATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGCATACAAAGAGAAGCGACCTCGCGA
GAGCAAGCGGACCTCATAAAGTGCGTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGA
ATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAC
ACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGATTC
ATGACTGGGGTGAAGTCGTAACAAGGTAGCC

>66878543|gb|AY958837.1|Escherichia/Shigella|Uncultured bacterium clone
rRNA064 16S ribosomal RNA gene, partial sequence

AGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAACGGTAACAGGA
AACAGCTTGCTGTTTCGCTGACGAGTGGCGGACGGGTGAGTAATGTCTGGGAACTGCCTGATGGAGGGG
GATAACTACTGGAAACGGTAGCTAATACCGCATACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCTC
TTGCCATCGGATGTGCCAGATGGGATTAGCTTGTGGTGGGGTAACGGCTCACCAAGGCGACGATCCCT
AGCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTCTGAGACACGGTCCAGACTCCTACGGGAGGCAGCAG
TGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCCTCGGGTT
GTAAAGTACTTTTACGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTGCTCATTGACGTTACCCGCAGAAG
AAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTGATACGGAGGGTGCAAGCGTTAATCGGAATTACTGG
GCGTAAAGCGCACGTAGGCGGTTTGTAAAGTCAGATGTGAAATCCCGGGCTCAACCTGGGAACTGCATC
TGATACTGGCAAGCTTGAGTCTCGTAGAGGGGGGTAGAATTCTAGGTGTAGCGGTGAAATGCGTAGAGAT
CTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCGTGGGGA
GCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGTCGACTTGGAGGTTGTGCCCTTGAGG
CGTGGCTTCCGGAGCTAACCGGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACCTCAAATG
AATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCCTTACCTG
GTCTTGACATCCACGGAAGTTTTTACAGAGATGAGAATGTGCCCTTCGGGAACCGTGAGACAGGTGCTGCATG
GCTGTCGTCAGCTCGTGTGTGGAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTG
CCAGCGGTCCGGCCGGGAACCTCAAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCAA

GTCATCATGGCCCTTACGACCAGGGCTACACACGTGCTACAATGGCGCATACAAAGAGAGGGCGACCTCGC
GAGAGCAAGCGGACCTCATAAAGTGCCTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCG
GAATCGCTAGTAATCGTGGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTC
ACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTCCGGGAGGGCGCTTACCACCTTTGTGAT
TCATGACTGGGGTGAA

>295983632|gb|HM021350.1|Escherichia/Shigella|Uncultured bacterium clone
13L-19 16S ribosomal RNA gene, partial sequence

CTTGCGGCAGGCCTACACATGCAAGTCGAACGGTAACAGGAAACAGCTTGCTGTTTCGCTGACGAGTGGC
GGACGGGTGAGTAATGTCTGGGAACTGCCTGATGGAGGGGGATAACTACTGGAAACGGTAGCTAATACC
GCATAACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCTCTTGCCATCGGATGTGCCAGATGGGATTA
GCTAGTAGGTGGGGTAACGGCTCACCTAGGCGACGATCCCTAGCTGGTCTGAGAGGATGACCAGCCACAC
TGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCC
TGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGGTTGTAAAGTACTTTTCAGCGGGGAGGAAGGGA
GTAAAGTTAATACCTTTACTCATTGACGTTACCCGCGAGAAGAAGCACC GGCTAACTCCGTGCCAGCAGCC
GCGGTAATACGGAGGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCACGCAGGCGGTTTTGTAA
GTCAGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATCTGATACTGGCAAGCTTGAGTCTCGTAGAG
GGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCC
CCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCTTGGTAGTCC
ACGCCGTAAACGATGTGCACTTGGAGGTTGTGCCCTTGAGGCGTGGCTTCCGGAGCTAACGCGTTAAGTC
GACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGGCCCGCACAAAGCGGTGGA
GCATGTGGTTTTAATTCGATGCAACGCGAAGAACCTTACCTGGTCTTGACATCCACGGAAGTTTTTCAGAGA
TGAGAATGTGCCTTCGGGAACCGTGAGACAGGTGCTGCATGGCTGTGCTCAGCTCGTGTGTGAAATGTT
GGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCCAGCGGTCCGGCCGGGAACCTCAAAGGAG
ACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGACCAGGGCTAC
ACACGTGCTACAATGGCGCATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGGACCTCATAAAGTGCCTC
GTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGTGGATCAGAATGC
CACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCCGTCACACCATGGGAGTGGGTTGCAAAAGAAGT
AGGTAGCTTAACCTTCGGGAGGGCGCTACCCACTTTTTTGTAAAGGG

>239923984|gb|GQ179706.1|Morganella|Uncultured Morganella sp. clone
VE3A10 16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGGGCGGTAACAGGGAGAAGCTTGCTTCTCTGCTG
ACGAGCGGCGGACGGGTGAGTAATGTATGGGGATCTGCCTGATGGCGGGGGATAACTACTGGAAACGGTA
GCTAATACCGCATAATGTCTACGGACCAAAGCGGGGGACCTCCGGGCCTCGCGCCATCAGATGAACCCAT
ATGGGATTAGCTTGTAGGTGAGGTAACGGCTCACCTAGGCGACGATCCCTAGCTGGTCTGAGAGGATGAT
CAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
GCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGGTTGTAAAGTACTTTTCAGTCGGG
AGGAAGGTGGTAAGGTAAATAACCTTATCAATTGACGTTACCGACAGAAGAAGCACCGGCTAACTCCGTG
CCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCACGCAGGCG
GTTGATTGAGTCAGATGTGAAATCCCCGGGCTTAACCCGGGAATTGCATCTGATACTGGTCAGCTAGAGT
CTTGTAGAGGGGGGTAGAATTCCATGTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAATACCGGTGGCG
AAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCTGTAAACGATGTGCACTTGGAGGTTGTGCCCTTGAGGCGTGGCTTCCGGAGCTAACG
CGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGGCCCGCACA
AGCGGTGGAGCATGTGGTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCAGAGAACT
TAGCAGAGATGCTTTGGTGCCCTTCGGAACTCTGAGACAGGTGCTGCATGGCTGTGCTCAGCTCGTGTG
TGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCCAGCGCGTGATGGCGGGAA
CTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGA
GTAGGGCTACACACGTGCTACAATGGCGTATACAAAGGGAAGCGACCCCGCGAGGGCAAGCGGAACCTCAT
AAAGTACGTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGTAG
ATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCCGTCACACCATGGGAGTGGGTTG
CAAAAGAAGTAGGTAGCTTAACCTCCGGGGGGGCGCTTACCACCTTTGTGATTTCATGACTGGGGTGAAGTC
GTAACAAGGTA

>81157826|emb|AM156948.1|Morganella|Morganella sp. TR 90 16S rRNA gene,
isolate TR 90

GGAATTCGATTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGGG
CGGTAACAGGGGAAGCTTGCTTCTCTGCTGACGAGCGGCGGACGGGTGAGTAATGTATGGGGATCTGCC
TGATGGCGGGGGATAACTACTGGAACGGTAGCTAATACCGCATAATGTCTTCGGACCAAAGCGGGGGAC
CTCAGGGCCTCGCGCCATCAGATGAACCCATATGGGATTAGCTAGTAGGTGAGGTAACGGCTTACCTAGG
CGACGATCCCTAGCTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGATACGGCCCAGACTCCTACG
GGTGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAG
GCCTTCGGGTTGTAAAGTACTTTCAGTCGGGAGGAAGGTGGTAAGGTTAATAACCTTATCAATTGACGTT
ACCGACAGAAGAAGCACC GGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATC
GGAATTACTGGGCGTAAAGCGCACGCAGGCGGTTGATTGAGTCAGATGTGAAATCCCCGGGCTTAACCCG
GGAATTGCATCTGATACTGGTCAGCTAGAGTCTTGATAGAGGGGGGTAGAATTCCATGTGTAGCGGTGAAA
TGCGTAGAGATGTGGAGGAATACCGGTGGCGAAGGCGGCCCTGGACAAAGACTGACGCTCAGGTGCGA
AAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGTCGACTTGGAGGTTG
TGCCCTTGAGGCGTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTA
AACTCAAATGAATTGACGGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAG
AACCTTACCTACTCTTGACATCCAGAGAACTTAGCAGAGATGCTTTGGTGCCTTCGGGAACCTCTGAGACA
GGTGTGTCATGGCTGTCGTCAGCTCGTGTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTT
ATCCTTTGTTGCCAGCGCGTGATGGCGGGAAC TCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGG
GGATGACGTCAAGTCATCATGGCCCTTATGAGTAGGGCTACACACGTGCTACAATGGCGTATACAAAGGG
AAGCGACCCCGCAGGGGCAAGCGGAAC TCAAAAGTACGTCGTAGTCCGGATTGGAGTCTGCAACTCGAC
TCCATGAAGTCGGAATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTAC
ACACCGCCCGTCACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTCCGGGAGGGCGCTTA
CCACTTTGTGATTTCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAAATCACTAGTGAATTCGCGGCC
GCCTGCAG

>302746245|gb|HM122047.1|Morganella|Morganella morganii subsp. morganii
strain ATCC 25830 16S ribosomal RNA gene, partial sequence

TCCAGAGTTTGATCATGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGGGCGGTAACA
GGGAGAAGCTTGCTTCTCTGCTGACGAGCGGCGGACGGGTGAGTAATGTATGGGGATCTGCCTGATGGCG
GGGAGAAGCTACTGGAACGGTAGCTAATACCGCATAATGTCTTCGGACCAAAGCGGGGGACCTCCGGGCC
TCGCGCCATCAGATGAACCCATATGGGATTAGCTAGTAGGTGAGGTAACGGCTTACCTAGGCGACGATCC
CTAGCTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGC
AGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGG
TTGTAAAGTACTTTCAGTCGGGAGGAAGGTGTCAAGGTTAATAACCTTGGCAATTGACGTTACCGACAGA
AGAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACT
GGGCGTAAAGCGCACGCAGGCGGTTGATTGAGTCAGATGTGAAATCCCCGGGCTTAACCCGGGAATTGCA
TCTGATACTGGTCAGCTAGAGTCTTGATAGAGGGGGGTAGAATTCCATGTGTAGCGGTGAAATGCGTAGAG
ATGTGGAGGAATACCGGTGGCGAAGGCGGCCCTGGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGG
GAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGTCGACTTGGAGGTTGTGCCCTTGA
GGCGTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAA
TGAATTGACGGGGGCGCACAAAGCGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCTTACC
TACTCTTGACATCCAGAGAACTTAGCAGAGATGCTTTGGTGCCTTCGGGAACCTCTGAGACAGGTGCTGCA
TGGCTGTGTCGTCAGCTCGTGTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGT
TGCCAGCGCGTGATGGCGGGAAC TCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGT
CAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAAAGGGAAGCGACCC
CGCGAGGGCAAGCGGAAC TCAAAAGTACGTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAG
TCGGAATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCC
GTCACACCATGGGAGTGGGTTGCAAAAGAAGTATGTAGCTTAACCTCCGGGAGGGCGCTTACCCTTTGT
G

>171191216|gb|EU373416.1|Providencia|Providencia sp. YRL09 16S ribosomal
RNA gene, partial sequence

CGGAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAACA
GGGGAAGCTTGCTTCCCGCTGACGAGCGGCGGACGGGTGAGTAATGTATGGGGATCTGCCCCATAGAGGG
GGATAACTACTGGAACGGTAGCTAATACCGCATAATCTCTAAGGAGCAAAGCAGGGGAACCTTCGGTCCT
TGCGCTATCGGATGAACCCATATGGGATTAGCTAGTAGGTGAGGTAATGGCTCACCTAGGCGACGATCCC
TAGCTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCA

GTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCCTAGGGT
TGTAAGTACTTTTCAGTCGGGAGGAAGGCGTTGATGCTAATATCATCAACGATTGACGTTACCGACAGAA
GAAGCACC GGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTG
GGCGTAAAGCGCACGCAGGCGGTTGATTAAGTTAGATGTGAAATCCCCGGGCTTAACCTGGGAATGGCAT
CTAAGACTGGTCAGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCATGTGTAGCGGTGAAATGCGTAGAGA
TGTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGG
AGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGTGATTTGAAGGTTGTTCCCTTGAG
GAGTGGCTTTTCGGAGCTAACGCGTTAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACCTCAAAT
GAATTGACGGGGGGCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCT
ACTCTTGACATCCAGAGAATTTAGCAGAGATGCTTTAGTGCCTTCGGGAACCTCTGAGACAGGTGCTGCAT
GGCTGTCGTAGCTCGTGTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTT
GCCAGCGATTTCGGTCGGGAACCTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCA
AGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAAAGAGAAGCGACCTCG
CGAGAGCAAGCGGAACCTCATAAAGTACGTGCTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTC
GGAATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGT
CACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGA
TTCATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTA

>66878658|gb|AY958952.1|Providencia|Uncultured bacterium clone rRNA179
16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAA
CAGGGGAAAGCTTGCTTTCCCGCTGACGAGCGGCGGACGGGTGAGTAATGTATGGGGATCTGCCCGATAG
AGGGGGATAACTACTGGAACCGGTGGCTAATACCGCATAATCTCTAAGGAGCAAAGCAGGGGAACCTTCGG
TCCTTGCGCTATCGGATGAACCCATATGGGATTAGCTAGTAGGTGAGGTAATGGCTCACCTAGGCGACGA
TCCCTAGCTGGTCTGAGAGGATGATCAGCCACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGC
AGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTA
GGGTTGTAAAGTACTTTTCAGTCGGGAGGAAGGCGTTGATGCGAATACCATCAGCGATTGACGTTACCGAC
AGAAGAAGCACC GGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATT
ACTGGGCGTAAAGCGCATGCAGGCGGTTGATTAAGTTAGATGTGAAATCCCCGGGCTTAACCTGGGAATG
GCATCTAAAACCTGGTCAGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCATGTGTAGCGGTGAAATGCGTA
GAGATGTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGATGCGAAAGCGT
GGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGTGCACTTGAAGGTTGTTCCCT
TGAGGAGTGGCTTTTCGGAGCTAACGCGTTAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACCTC
AAATGAATTGACGGGGGGCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTT
ACCTACTCTTGACATCCAGAGAACTTAGCAGAGATGCTTTGGCGCCTTCGGGAACCTCTGAGACAGGTGCT
GCATGGCTGTGCTAGCTCGTGTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTT
TGTTGCCAGCACGTGATGGTGGGAACCTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGA
CGTCAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAAAGAGAAGCAA
ACTCGCGAGAGCTAGCGGAACCTCATAAAGTACGTGCTAGTCCGGATTGGAGTCTGCAACTCGACTCCATG
AAGTCGGAATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTT
TGTGATTTCATGACTGGGGTGAA

>310975248|ref|NR_037112.1|Serratia|Serratia proteamaculans strain 4364
16S ribosomal RNA, partial sequence

TGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAGCACAGGAGAGCTTGCTC
TCTGGGTGACGAGCGGCGGACGGGTGAGTAATGTCTGGGAACTGCCTGATGGAGGGGGATAACTACTGG
AAACGGTAGCTAATACCGCATAACGTCTTCGGACCAAAGTGGGGGACCTTCGGGCCTCACGCCATCAGAT
GTGCCCAGATGGGATTAGCTAGTAGGTGGGGTAATGGCTCACCTAGGCGACGATCCCTAGCTGGTCTGAG
AGGATGACCAGCCACACTGGAACCTGAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTG
CACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCGGGTGTAAAGCACTTT
CAGCGAGGAGGAAGGGTAGTGTGTTAATAGCACATTGCATTGACGTTACTCGCAGAAGAAGCACCGGCTA
ACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCA
CGCAGGCGGTTTGTGTTAAGTCAGATGTGAAATCCCCGCGCTTAACGTGGGAACCTGCATTTGAACTGGCAA
GCTAGAGTCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAATAC
CGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAGCAAACAGGATT

AGATACCCTGGTAGTCCACGCTGTAAACGATGTCGACTTGGAGGTTGTGCCCTTGAGGCGTGGCTTCCGG
AGCTAACGCGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGG
CCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCCTTACCTACTCTTGACATCC
AGAGAATTCGCTAGAGATAGCTTAGTGCCTTCGGGAACCTCTGAGACAGGTGCTGCATGGCTGTCGTCAGC
TCGTGTTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCCAGCACGTAAT
GGTGGGAACCTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGC
CCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAAAGAGAAGCGAACTCGCGAGAGCCAGCG
GACCTCATAAAGTACGTCGTAGTCCGGATCGGAGTCTGCAACTCGACTCCGTGAAGTCGGAATCGCTAGT
AATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGA
GTGGGTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGATTTCATGACTGGG
GTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGG

>66878677|gb|AY958971.1|Serratia|Uncultured bacterium clone rRNA198 16S
ribosomal RNA gene, partial sequence

CCTTAGAGTTTGTATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAGC
ACAAGAGAGCTTGCTCTCTGGGTGACGAGCGGCGGACGGGTGAGTAATGTCTGGGAACTGCCTGATGGA
GGGGGATAACTACTGGAAACGGTAGCTAATACCGCATAACGTCTTCGGACCAAAGTGGGGGACCTTCGGG
CCTCACGCCATCAGATGTGCCAGATGGGATTAGCTAGTAGGTGGGGTAATGGCTCACCTAGGCGACGAT
CCCTAGCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCACAAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTCG
GGTTGTAAAGCACTTTCAGCGAGGAGGAAGGGTAGTGTGTTAATAGCACATTGCATTGACGTTACTCGCA
GAAGAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTA
CTGGGCGTAAAGCGCACGCAGGCGGTTTGTTAAGTCAGATGTGAAATCCCCGCGCTTAACGTGGGAAGT
CATTTGAAACTGGCAAGCTAGAGTCTTGTAGAGGGGGGTAGAATTCAGGTGTAGCGGTGAAATGCGTAG
AGATCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTG
GGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGTCGACTTGGAGGTTGTGCCCTT
GAGGCGTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCTGGGGAGTACGGCCGCAAGGTTAAACTCA
AATGAATTGACGGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCCTTA
CCTACTCTTGACATCCAGAGAATTCGCTAGAGATAGCTTAGTGCCTTCGGGAACTCTGAGACAGGTGCTG
CATGGCTGTCTGTCAGCTCGTGTTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTT
GTTGCCAGCACGTAATGGTGGGAACTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGAC
GTCAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAAAGAGAAGCGAA
CTCGCGAGAGCAAGCGGACCTCATAAAGTACGTGCTAGTCCGGATCGGAGTCTGCAACTCGACTCCGTGA
AGTCGGAATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGC
CCGTCACACCATGGGAGTGGGTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTT
GTGATTTCATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAG

>28624924|gb|AY167282.1|Halomonas|Halomonas variabilis strain ANT9112 16S
ribosomal RNA gene, partial sequence

GAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAACAGATCTAGCTTGCTAGATGCTGACGAG
CGGCGGACGGGTGAGTAATGCATAGGAATCTGCCCGATAGTGGGGGATAACCTGGGGAAACCCAGGCTAA
TACCGCATACGTCCTACGGGAGAAAGGGGGCTCCGGCTCCCGCTATTGGATGAGCCTATGTCGGATTAGC
TAGTTGGTGAGGTAAAGGCTCACCAAGGCGACGATCCGTAGCTGGTCTGAGAGGATGATCAGCCACATCG
GGACTGAGACACGGCCCCGAACCTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGGGCAACCCTG
ATCCAGCCATGCCGCGTGTGTGAAGAAGGCCCTCGGGTTGTAAAGCACTTTCAGCGAGGAAGAAGCGCTG
TCGGTTAATACCCGGCAGGAAAGACATCACTCGCAGAAGAAGCACCGGCTAACTCCGTGCCAGCAGCCGC
GGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCGCGTAGGTGGCTTGATAAGC
CGGTTGTGAAAGCCCCGGGCTCAACCTGGGAACGGCATCCGGAAGTGTGAGGCTAGAGTGCAGGAGAGGA
AGGTAGAATTCCCGGTGTAGCGGTGAAATGCGTAGAGATCGGGAGGAATACCAGTGGCGAAGGCGGCCTT
TCTGGACTGACACTGACACTGAGGTGCGAAAGCGTGGGTAGCAAACAGGATTAGATACCCTGGTAGTCCA
CGCCGTAAACGATGTCGACCAGCCGTTGGGTGCCTAGAGCACTTTGTGGCGAAGTTAACGCGATAAGTCG
ACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCCGCACAAAGCGGTGGAG
CATGTGGTTTAATTCGATGCAACGCGAAGAACCCTTACCTACCCTTGACATCTACAGAAGCCGGAAGAGAT
TCTGGTGTGCCTTCGGGAACTGTAAGACAGGTGCTGCATGGCTGTCGTCAGCTCGTGTTGTGAAATGTTG
GGTTAAGTCCCGTAACGAGCGCAACCCTTGTCTTATTTGCCAGCGAGTAATGTGGGAACTCTAAGGAG
ACTGCCGGTGACAAACCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGGCCCTTACGGGTAGGGCTAC

ACACGTGCTACAATGGCCGGTACAAAGGGCTGCGAGCTCGCGAGAGTCAGCGAATCCCTTAAAGCCGGTC
TCAGTCCGGATCGGAGTCTGCAACTCGACTCCGTGAAGTCGGAATCGCTAGTAATCGTGAATCAGAATGT
CACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGACTGCACCAGAAGT
GGTTAGCCTAACGCAAGAGGGCGATCACCACGGTGTGGTTCATGACTGGGGTGAAGTCGTAACAAGGTAG
CCGTAGGGGAACC

>66878536|gb|AY958830.1|Halomonas|Uncultured bacterium clone rRNA057 16S
ribosomal RNA gene, partial sequence

TTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAGCACAAAGAAGCTTGCTTCTTGGGTGA
CGAGCGGCGGACGGGTGAGTAATGCATAGGAATCTGCCGATAGTGGGGGATAACCTGGGGAAACCCAGG
CTAATACCGCATACGTCCTACGGGAGAAAGGGGGCTTCGGCTCCCGCTATTGGATGAGCCTATGTCGGAT
TAGCTAGTTGGTAGGGTAAAGGCCTACCAAGGCGACGATCCGTAGCTGGTCTGAGAGGATGATCAGCCAC
ATCGGGACTGAGACACGGCCCCGAACCTCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGGGCAAC
CCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGCCCTCGGGTTGTAAAGCACTTTCAGCGAGGAAGAACG
CCTAGTGGTTAATACCCATTAGGAAAGACATCACTCGCAGAAGAAGCACCGGCTAACTCCGTGCCAGCAG
CCGCGGTAATACGGAGGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCGCGTAGGTGGCTTGAT
AAGCCGGTTGTGAAAGCCCCGGGCTCAACCTGGGAACGGCATCCGGAAGTGTGAGGCTAGAGTGCAGGAG
AGGAAGGTAGAATTCCCGGTGTAGCGGTGAAATGCGTAGAGATCGGGAGGAATACCAGTGGCGAAGGCGG
CCTTCTGGACTGACACTGACACTGAGGTGCGAAAGCGTGGGTAGCAAACAGGATTAGATACCCTGGTAGT
CCACGCCGTAAACGATGTGACAGCCGTTGGGTGCCTAGCGCACTTTGTGGCGAAGTTAACGCGATAAG
TCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGACGGGGGGCCCGCACAAAGCGGTG
GAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCTACAGAAGCCGGAAGA
GATTCTGGTGTGCCTTCGGGAAGTGTAAAGACAGGTGCTGCATGGCTGTCGTCAGCTCGTGTGTGAAATG
TTGGGTAAAGTCCCGTAACGAGCGCAACCCTTGTCTTATTTGCCAGCGAGTAATGTGCGGAAGTCTAAG
GAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGACGACGTCAAGTCATCATGGCCCTTACGAGTAGGGC
TACACACGTGCTACAATGGCCGGTACAAAGGGCTGCGAGCTCGCGAGAGTCAGCGAATCCCTTAAAGCCG
GTCTCAGTCCGGATCGGAGTCTGCAACTCGACTCCGTGAAGTCGGAATCGCTAGTAATCGTGAATCAGAA
TGTCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGACTGCACCAGA
AGTGGTTAGCCTAACGCAAGAGGGCGATCACCACGGTGTGGTTCATGACTGGGGTGAAGTCGTAACAAGG
TAACCGTAAAGGGCG

>155001223|gb|EU083530.1|Haemophilus|Haemophilus parainfluenzae strain
CIP 102513 16S ribosomal RNA gene, partial sequence

TAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAACGGTAACATA
AAGAAGCTTGCTTCTTTGATGACGAGTGGCGGACGGGTGAGTAATGCTTGGGAATCTAGCTTATGGAGGG
GGATAACTACGGGAAACTGTAGCTAATACCGCGTAGAATCGAAAGATGAAAGTGTGGGACCTTCGGGCCA
CATGCCATAGGATGAGCCCCAAGTGGGATTAGGTAGTTGGTGAGGTAAAGGCTCACCAAGCCGACGATCTC
TAGCTGGTCTGAGAGGATGACCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATATTGCGCAATGGGGGCAACCCTGACGCAGCCATGCCGCGTGAATGAAGAAGGCCTTCGGGT
GTAAAGTTCTTTTCGGTAGCGAGGAAGGCATTTAGTTTAACTAGACTAGGTGATTGACGTTAACTACAGAA
GAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAGCGTTAATCGGAATAACTG
GGCGTAAAGGGCACGAGGCGGTGACTTAAGTGAGGTGTGAAAGCCCCGGGCTTAACCTGGGAATTGCAT
TTCATACTGGGTGCTAGAGTACTTTAGGGAGGGGTAGAATTCACGTGTAGCGGTGAAATGCGTAGAGA
TGTGGAGGAATACCGAAGGCGAAGGCAGCCCCCTTGGGAATGTACTGACGCTCATGTGCGAAAGCGTGGGG
AGCAAACAGGATTAGATACCCCTGGTAGTCCACGCTGTAAACGATGTGATTTGGGGGTGAGCTTTAAGC
TTGGCGCCCGTAGCTAACGTGATAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGA
ATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCTTACCTAC
TCTTGACATCCAGAGAACATTCAGAGATGGATTGGTGCCCTTCGGGAAGTCTGAGACAGGTGCTGCATGG
CTGTCGTCAGCTCGTGTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGC
CAGCGATTCCGTCGGGAAGTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAG
TCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAGAGGGAAGCGAGAGTGC
AGCTGGAGCGAATCTCACAAGTACGTCTAAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGG
AATCGCTAGTAATCGAAATCAGAATGTTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCA
CACCATGGGAGTGGGTGTACCAGAAGTAGATAGCTTAACCTTCGGGGGGGCGTTTACCACGGTATGATT
CATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTA

>66878748|gb|AY959042.1|Haemophilus|Uncultured bacterium clone rRNA269
16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAACGGTAA
CATAAAGGAGCTTGCTTCTTTGATGACGAGTGGCGGACGGGTGAGTAATGCTTGGAATCTAGCTTATGG
AGGGGGATAACTACGGGAACTGTAGCTAATACCGCGTAATATCGAAAGATTAAAGTGTGGGACCTTCGG
GCCACATGCCATAAGATGAGCCCAAGTGGGATTAGGTAGTTGGTGAGGTAAAGGCTCACCAAGCCGACGA
TCTCTAGCTGGTCTGAGAGGATGACCAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGC
AGCAGTGGGGAATATTGCGCAATGGGGGCAACCCTGACGCAGCCATGCCGCGTGAATGAAGAAGGCCTTC
GGGTTGTAAAGTTCTTTTCGGTAGCGAGGAAGGCATTTAGTTTAAATAGACTAGATGATTGACGTAACTAC
AGAAGAAGCACC GGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCGAGCGTTAATCGGAATA
ACTGGGCGTAAAGGGCACGCAGGCGGTGACTTAAGTGAGGTGTGAAAGCCCCGGGCTTAACCTGGGAATT
GCATTTTCATACTGGGTGCTAGAGTACTTTAGGGAGGGGTAGAATTCCACGTGTAGCGGTGAAATGCGTA
GAGATGTGGAGGAATACCGAAGGCGAAGGCAGCCCCCTTGGAATGTACTGACGCTCATGTGCGAAAGCGT
GGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGTGCGATTTGGGGGTTGAGCTTT
AAGTTTGGCGCCCGTAGCTAACGTGATAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAAC TCA
ATGAATTGACGGGGGGCCCGCACAAGCGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCTTAC
CTACTCTTGACATCCAGAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAAC TCTGAGACAGGTGCTGC
ATGGCTGTCGTGAGCTCGTGTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTTTG
TTGCCAGCGATTTCGGTCGGGAAC TCAAAGGAGACTGCCCGTGATAAACCGGAGGAAGGTGGGGATGACGT
CAAGTCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCGTATACAGAGGGAAGCGATAG
TGCGAGCTGGAGCGAATCTCACAAGTACGTCTAAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAG
TCGGAATCGCTAGTAATCGCAAATCAGAATGTTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCC
GTCACACCATGGGAGTGGGTTGTACCAGAAGTAGATAGCTTAACCTTCGGGAGGGCGTTTACCACGGTAT
GATTCATGACTGGGGTGAA

>239923954|gb|GQ179676.1|Haemophilus|Uncultured Haemophilus sp. clone
VE4A10 16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAACGGTAACATAAAGAAGCTTGCTTCTTTGATG
ACGAGTGGCGGACGGGTGAGTAATGCTTGGAATCTAGCTTATGGAGGGGGATAACTACGGGAAACTGTA
GCTAATACCGCGTAATATCGAAAGATGAAAGTGTGGGACCTTCGGGCCACATGCCATAGGATGAGCCCAA
GTGGGATTAGGTAGTTGGTGAGGTAAAGGCTCACCAAGCCGACGATCTCTAGCTGGTCTGAGAGGATGAC
CAGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCGCAATGG
GGGCAACCCTGACGCAGCCATGCCGCGTGAATGAAGAAGGCCTTCGGGTTGTAAAGTTCTTTTCGGTAGCG
AGGAAGGCATTTAGTTTAAATAGACTAGGTGATTGACGTTAAC TACAGAAGAAGCACCCGGCTAACTCCGTG
CCAGCAGCCGCGGTAATACGGGGGGTGCGAGCGTTAATCGGAATAACTGGGCGTAAAGGGCACGCAGGCG
GTGACTTAAGTGAGGTGTGAAAGCCCCGGGCTTAACCTGGGAATTGCATTTTCATACTGGGTGCTAGAGT
ACTTTAGGGAGGGGTAGAATTCCACGTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAATACCGAAGGCG
AAGGCAGCCCCCTTGGAATGTACTGACGCTCATGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCTGTAAACGATGTGCGATTTGGGGGTTAAGCTTTGAGCTTGGCGCCCGTAGCTAACGTG
ATAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAAAC TCAAATGAATTGACGGGGGCCCGCACAAG
CGGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCAGAGAACTTT
CCAGAGATGGATTGGTGCCTTCGGGAAC TCTGAGACAGGTGCTGCATGGCTGTGCTCAGCTCGTGTGTG
AAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCCAGCGATTTGGTTCGGGAAC TC
AAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGTA
GGGCTACACACGTGCTACAATGGCGTATACAGAGGGAAGCGAGAGTGCAGCTGGAGCGAATCTCACAAA
GTACGTCTAAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGCAAATC
AGAATGTTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGTTGTAC
CAGAAGTAGATAGCTTAACCTTTTGGAGGGCGTTTACCACGGTATGATTCATGACTGGGGTGAAGTCGTA
ACAAGGTA

>294721598|gb|GU145275.1|Acinetobacter|Acinetobacter radioresistens
strain S13 16S ribosomal RNA gene, partial sequence

TTTGATCATGGCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAGCGGATGAAGGTAGCT
TGCTACTGGATTACGCGGCGGACGGGTGAGTAATGCTTAGGAATCTGCCTATTAGTGGGGGACAACGTTTC
CGAAAGGAGCGCTAATACCGCATACGTCCTACGGGAGAAAGCAGGGGACCTTTGGGCCTTGCCTAATAG
ATGAGCCTAAGTCGGATTAGCTAGTTGGTAGGGTAAAGGCCTACCAAGGCGACGATCTGTAGCGGGTCTG

AGAGGATGATCCGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATAT
TGGACAATGGGGGGAACCCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGCCTTTTGGTTGTAAAGCACT
TTAAGCGAGGAGGAGGCTACCTAGATTAATACTTTAGGATAGTGGACGTTACTCGCAGAATAAGCACCGG
CTAACTCTGTGCCAGCAGCCGCGGTAATACAGAGGGTGCAGCGTTAATCGGATTTACTGGGCGTAAAGC
GTGCGTAGGCGGCCAATTAAGTCAAATGTGAAATCCCCGAGCTTAACTTGGAATTGCATTCGATACTGG
TTGGCTAGAGTATGGGAGAGGATGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGAA
TACCGATGGCGAAGGCAGCCATCTGGCCTAATACTGACGCTGAGGTACGAAAGCATGGGGAGCAAACAGG
ATTAGATACCCTGGTAGTCCATGCCGTAAACGATGTCTACTAGCCGTTGGGGCCCTTGAGGCTTTAGTGG
CGCAGCTAACGCGATAAGTAGACCGCCTGGGGAGTACGGTCGCAAGACTAAAACCTCAAATGAATTGACGG
GGGCGGCACAAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCCTTACCTGGCCTTGACA
TACAGAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAACTCTGATACAGGTGCTGCATGGCTGTCGTC
AGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTTTCCTTATTTGCCAGCACTT
CGGGTGGGAACTTTAAGGATACTGCCAGTGACAACTGGAGGAAGGCGGGGACGACGTCAAGTCATCATG
GCCCTTACGGCCAGGGCTACACACGTGCTACAATGGTCGGTACAAAGGGTTGCTACACAGCGATGTGATG
CTAATCTCAAAAAGCCGATCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTA
GTAATCGCGGATCAGAATGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGG
GAGTTTGTGTCACCAGAAGTAGGTAGTCTAACCGCAAGGAGGACGCTTACCACGGTGTGGCCGATGACTG
GGGTGAAGTCGTAACAAGGA

>66878500|gb|AY958794.1|Acinetobacter|Uncultured bacterium clone rRNA021
16S ribosomal RNA gene, partial sequence

CCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAGCGGATGA
AGGTAGCTTGCCACCGGATTTCAGCGGCGGACGGGTGAGTAATGCTTAGGAATCTGCCTATTAGTGGGGGA
CAACGTTCCGAAAGGAGCGCTAATACCGCATACGTCCTACGGGAGAAAGCAGGGGACCTTCGGGCCTTGC
GCTAATAGATGAGCCTAAGTCGGATTAGCTAGTTGGTAGGGTAAAGGCCTACCAAGGCGACGATCTGTAG
CGGGTCTGAGAGGATGATCCGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTG
GGGAATATTGGACAATGGGGGGAACCCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGCCTTTTGGTTGT
AAAGCACTTTAAGCGAGGAGGAGGCTACCTAGATTAATACTTTAGGATAGTGGACGTTACTCGCAGAATA
AGCACCGGCTAACTCTGTGCCAGCAGCCGCGGTAATACAGAGGGTGCAGCGTTAATCGGATTTACTGGG
CGTAAAGCGTGCCTAGGCGGCCAATTAAGTCAAATGTGAAATCCCCGAGCTTAACTTGGAATTGCATTC
GATACTGGTTGGCTAGAGTATGGGAGAGGATGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATC
TGGAGGAATACCGATGGCGAAGGCAGCCATCTGGCCTAATACTGACGCTGAGGTACGAAAGCATGGGGAG
CAAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGTCTACTAGCCGTTGGGGCCCTTGAGGC
TTTAGTGGCGCAGCTAACGCGATAAGTAGACCGCCTGGGGAGTACGGTCGCAAGACTAAAACCTCAAATGA
ATTGACGGGGGCGGCACAAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCCTTACCTGG
CCTTGACATACAGAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAACTCTGATACAGGTGCTGCATGG
CTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTTTCCTTATTTGC
CAGCACTTCGGGTGGGAACTTTAAGGATACTGCCAGTGACAACTGGAGGAAGGCGGGGACGACGTCAAG
TCATCATGGCCCTTACGGCCAGGGCTACACACGTGCTACAATGGTCGGTACAAAGGGTTGCTACACAGCG
ATGTGATGCTAATCTCAAAAAGCCGATCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGG
AATCGCTAGTAATCGCGGATCAGAATGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCA
CACCATGGGAGTTTGTGTCACCAGAAGTAGGTAGTCTAACCGCAAGGAGGACGCTTACCACGGTGTGGCC
GATGACTGGGGTGAA

>66878618|gb|AY958912.1|Acinetobacter|Uncultured bacterium clone rRNA139
16S ribosomal RNA gene, partial sequence

CCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAGCGGGGGA
GGTTGCTTCGGTAACTGACCTAGCGGCGGACGGGTGAGTAATACTTAGGAATCTGCCTATTAATGGGGGA
CAACATCTCGAAAGGGATGCTAATACCGCATACGCCCTACGGGGGAAAGCAGGGGATCACTTGTGACCTT
GCGTTAATAGATGAGCCTAAGTCGGATTAGCTAGTTGGTGGGGTAAAGGCCTACCAAGGCGACGATCTGT
AGCGGGTCTGAGAGGATGATCCGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAG
TGGGGAATATTGGACAATGGGGGGAACCCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGCCTTATGGTT
GTAAAGCACTTTAAGCGAGGAGGAGGCTCTCTTGGTTAATACCCAAGATGAGTGGACGTTACTCGCAGAA
TAAGCACCGGCTAACTCTGTGCCAGCAGCCGCGGTAATACAGAGGGTGCAGCGTTAATCGGATTTACTG
GGCGTAAAGCGTGCCTAGGCGGCTTTTAAAGTCGGATGTGAAATCCCCGAGCTTAACTTGGAATTGCAT
TCGATACTGGGAAGCTAGAGTATGGGAGAGGATGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGA

TCTGGAGGAATACCGATGGCGAAGGCAGCCATCTGGCCTAATACTGACGCTGAGGTACGAAAGCATGGGG
AGCAAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGTCTACTAGCCGTTGGGGCCTTTGAG
GCTTTAGTGGCGCAGCTAACGCGATAAGTAGACCGCCTGGGGAGTACGGTCGCAAGACTAAAACCTCAAAT
GAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCCTTACCT
GGTCTTGACATAGTAAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAACCTACATACAGGTGCTGCAT
GGCTGTCGTGAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTTTCCTTATTT
GCCAGCACTTCGGGTGGGAACTTTAAGGATACTGCCAGTGACAACTGGAGGAAGGCGGGGACGACGTCA
AGTCATCATGGCCCTTACGACCAGGGCTACACACGTGCTACAATGGTCGGTACAAAGGGTTGCTACCTAG
CGATAGGATGCTAATCTCAAAAAGCCGATCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGAC
GGAATCGCTAGTAATCGCGGATCAGAATGCCGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCGT
CACACCATGGGAGTTTGTGTCACCAGAAGTAGGTAGTCTAACCGTAAGGAGGACGCTTACCACGGTGTGG
CCGATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAAAGG

>239923994|gb|GQ179716.1|Acinetobacter|Uncultured Acinetobacter sp. clone
VE12D01 16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAGCGGGGAGATTGCTTCGGTAATTGACCTAGC
GGCGGACGGGTGAGTAATACTTAGGAATCTGCCTATTAATGGGGGACAACATCTCGAAAGGGATGCTAAT
ACCGCATACGCCCTACGGGGGAAAGCAGGGGATCACTTGTGACCTTGCCTTAATAGATGAGCCTAAGTCG
GATTAGCTAGTTGGTGGGGTAAAGGCCTACCAAGGCGACGATCTGTAGCGGGTCTGAGAGGATGATCCGC
CACACTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCGAGCAGTGGGGAATATTGGACAATGGGGGG
AACCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGCCCTTATGGTTGTAAAGCACTTTAAGCGAGGAGGA
GGCTCCTGTAGTTAATACCTACAGAGAGTGGACGTTACTCGCAGAATAAGCACCGGCTAACTCTGTGCCA
GCAGCCGCGGTAATACAGAGGGTGCAGCGTTAATCGGATTTACTGGGCGTAAAGCGTGCGTAGGCGGCT
TTTTAAGTCGGATGTGAAATCCCCGAGCTTAACCTGGGAATTGCATTCGATACTGGGAAGCTAGAGTATG
GGAGAGGATGGTAGAATTCAGGTGTAGCGGTGAAATGCGTAGAGATCCGGAGGAATACCGATGGCGAAG
GCAGCCATCTGGCCTAATACTGACGCTGAGGTACGAAAGCATGGGGAGCAAACAGGATTAGATACCCTGG
TAGTCCATGCCGTAAACGATGTCTACTAGCCGTTGGGGCCTTTGAGGCTTTAGTGGCGCAGCTAACGCGA
TAAGTAGACCGCCTGGGGAGTACGGTCGCAAGACTAAAACCTCAAATGAATTGACGGGGGGCCGCACAAGC
GGTGGAGCATGTGGTTTAAATTCGATGCAACGCGAAGAACCCTTACCTGGTCTTGACATAGTAAGAACTTTC
CAGAGATGGATTGGTGCCTTCGGGAACCTACATACAGGTGCTGCATGGCTGTGCTGAGCTCGTGTGCTGA
GATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTTTCCTTATTTGCCAGCACTTCGGGTGGGAACCTTT
AAGGATACTGCCAGTGACAACTGGAGGAAGGCGGGGACGACGTCAAGTCATCATGGCCCTTACGACCAG
GGCTACACACGTGCTACAATGGTCGGTACAAAGGGTTGCTACCTAGCGATAGGATGCTAATCTCAAAAAG
CCGATCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGCGGATCA
GAATGCCGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCGTCACACCATGGGAGTTTGTGTCACC
AGAAGTAGGTAGTCTAACCGTAAGGAGGACGCTTACCACGGTGTGGCCGATGACTGGGGTGAAGTCGTAA
CAAGGTA

>154240524|dbj|AB334528.1|Pseudomonas|Pseudomonas sp. MPU L18 gene for
16S ribosomal RNA, partial sequence

AGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGTAGAGAGA
AGCTTGCTTCTCTTGAGAGCGGCGGACGGGTGAGTAATGCCTAGGAATCTGCCTGGTAGTGGGGGATAAC
GTTCCGAAACGGACGCTAATACCGCATACGTCCTACGGGAGAAAGCAGGGGACCTTCGGGCCTTGCGCTA
TCAGATGAGCCTAGGTTCGGATTAGCTAGTTGGTGAGGTAATGGCTCACCAAGGCGACGATCCGTAACCTGG
TCTGAGAGGATGATCAGTCACACTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCGAGCAGTGGGGA
ATATTGGACAATGGGCGAAAGCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGTCTTCGGATTGTAAAG
CACTTTAAGTTGGGAGGAAGGGCAGTAAATTAATACTTTGCTGTTTTGACGTTACCGACAGAATAAGCAC
CGGCTAACTCTGTGCCAGCAGCCGCGGTAATACAGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAA
AGCGCGCGTAGGTGGTTTGTAAAGTTGGATGTGAAATCCCCGGGCTCAACCTGGGAAGTGCATTCAAAAC
TGACTGACTAGAGTATGGTAGAGGGTGGTGGAATTTCTGTGTAGCGGTGAAATGCGTAGATATAGGAAG
GAACACCAAGTGGCGAAGGCGACCACCTGGACTAATACTGACACTGAGGTGCGAAAGCGTGGGGAGCAAAC
AGGATTAGATACCCTGGTAGTCCACGCGCTAAACGATGTCAACTAGCCGTTGGAAGCCTTGAGCTTTTAG
TGGCGCAGCTAACGCATTAAGTTGACCGCTGGGGAGTACGGCCGCAAGGTTAAAACCTCAAATGAATTGA
CGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAAATTCGAAGCAACGCGAAGAACCCTTACCAGGCCTTG
ACATCCAATGAACTTTCTAGAGATAGATTGGTGCCTTCGGGAACATTGAGACAGGTGCTGCATGGCTGTC
GTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGTAACGAGCGCAACCCTTGTCCTTAGTTACCAGCA

CGTCATGGTGGGCACTCTAAGGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCAT
CATGGCCCTTACGGCCTGGGCTACACACGTGCTACAATGGTCGGTACAGAGGGTTGCCAAGCCGCGAGGT
GGAGCTAATCCANAAAAACCGATCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGAATC
GCTAGTAATCGCGAATCAGAATGTCGCGGTGAATACGTTCGCCGGCCTTGTACACACCGCCCGTCACACC
ATGGGAGTGGGTGTCACCAGAAGTAGCTAGTCTAACCTTCGGGAGGACGGTTACCACGGTGTGATTCATG
ACTGGGGTGAAGTCGTAACAAGGTAACC

>66878583|gb|AY958877.1|Pseudomonas|Uncultured bacterium clone rRNA104
16S ribosomal RNA gene, partial sequence

CCTTAGAGTTTGTATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCGAGTCGAGCGGTAGA
GAGGAGCTTGCTCCTCTTGAGAGCGGCGGACGGGTGAGTAATGCCTAGGAATCTGCCTGGTAGTGGGGGA
TAACGTTTCGGAACCGGACGCTAATACCGCATACGTCCTACGGGAGAAAGCAGGGGACCTTCGGGCCTTGC
GCTATCAGATGAGCCTAGGTTCGGATTAGCTAGTTGGTGAGGTAATGGCTCACCAAGGCGACGATCCGTAA
CTGGTCTGAGAGGATGATCAGTCACACTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGTG
GGGAATATTGGACAATGGGCGAAAGCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGTCTTCGGATTGT
AAAGCACTTTAAGTTGGGAGGAAGGGCAGTAAATTAATACTTTGCTGTTTTGACGTTACCGACAGAATAA
GCACCGGCTAACTCTGTGCCAGCAGCCGCGGTAATACAGAGGGTGCAAGCGTTAATCGGAATTACTGGGC
GTAAAGCGCGCGTAGGTGGTTTGTAAAGTTGGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATTCA
AACTGACTGACTAGAGTATGGTAGAGGGTGGTGGAATTTCTGTGTAGCGGTGAAATGCGTAGATATAG
GAAGGAACACCAGTGGCGAAGGCGACCACCTGGACTAATACTGACACTGAGGTGCGAAAGCGTGGGGAGC
AAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGTCAACTAGCCGTTGGAAGCCTTGAGCTT
TTAGTGGCGCAGCTAACGCATTAAGTTGACCGCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAA
TTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTCTGAAGCAACGCGAAGAACCCTTACCAGGC
CTTGACATCCAATGAACTTTCTAGAGATAGATTGGTGCCTTCGGGAACATTGAGACAGGTGCTGCATGGC
TGTCGTGAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGTAACGAGCGCAACCCTTGTCTTAGTTACC
AGCACGTCATGGTGGGCACTCTAAGGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAG
TCATCATGGCCCTTACGGCCTGGGCTACACACGTGCTACAATGGTCGGTACAGAGGGTTGCCAAGCCGCG
AGGTGGAGCTAATCCACAAAACCGATCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGG
AATCGCTAGTAATCGCGAATCAGAATGTCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCA
CACCATGGGAGTGGGTGTCACCAGAAGTAGCTAGTCTAACCTTCGGGAGGACGGTTACCACGGTGTGATT
CATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAGGGCGA

>239923999|gb|GQ179721.1|Pseudomonas|Uncultured Pseudomonas sp. clone
VE51B10 16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCAGGCCCTAACACATGCAAGTCGAGCGGTAGAGAGGTGCTTGCACCTCTTGAGAGC
GGCGGACGGGTGAGTAATACCTAGGAATCTGCCTGGTAGTGGGGGATAACGTTTCGGAACGGACGCTAAT
ACCGCATACGTCCTACGGGAGAAAGCAGGGGACCTTCGGGCCTTGCCTATCAGATGAGCCTAGGTTCGGA
TTAGCTAGTTGGTGAGGTAATGGCTCACCAAGGCTACGATCCGTAACTGGTCTGAGAGGATGATCAGTCA
CACTGGAAGTGAACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGGCGAAA
GCCTGATCCAGCCATGCCGCGTGTGTGAAGAAGGTCTTCGGATTGTAAAGCACTTTAAGTTGGGAGGAAG
GGCATTAACTAATACGTTAGTGTTTTGACGTTACCGACAGAATAAGCACCGGCTAACTCTGTGCCAGCA
GCCGCGGTAATACAGAGGGTGCAAGCGTTAATCGGAATTACTGGGCGTAAAGCGCGCGTAGGTGGTTTGT
TAAGTTGAATGTGAAATCCCCGGGCTCAACCTGGGAACTGCATCCAAAAGTGGCAAGCTAGAGTATGGTA
GAGGGTAGTGGAATCTCCTGTGTAGCGGTGAAATGCGTAGATATAGGAAGGAACACCAGTGGCGAAGGCG
ACTACCTGGACTGATACTGACACTGAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAG
TCCACGCCGTAAACGATGTCAACTAGCCGTTGGGAACCTTGAGTTCTTAGTGGCGCAGCTAACGCATTAA
GTTGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCCCGACAAGCGGT
GGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCCTTACCAGGCCTTGACATCCAATGAACTTTCCAG
AGATGGATTGGTGCCTTCGGGAACATTGAGACAGGTGCTGCATGGCTGTCGTGAGCTCGTGTGCTGAGAT
GTTGGGTTAAGTCCCGTAACGAGCGCAACCCTTGTCTTAGTTACCAGCACGTAATGGTGGGCACTCTAA
GGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGGCCTGGG
CTACACACGTGCTACAATGGTCGGTACAAAGGGTTGCCAAGCCGCGAGGTGGAGCTAATCCCATAAAACC
GATCGTAGTCCGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGAATCGCTAGTAATCGTGAATCAGA
ATGTCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTGGGTGTCACCAG
AAGTAGCTAGTCTAACCTTCGGGAGGACGGTTACCACGGTGTGATTTCATGACTGGGGTGAAGTCGTAACA
AGGTA

>239923990|gb|GQ179712.1|Stenotrophomonas|Uncultured Stenotrophomonas sp.
clone VE12C08 16S ribosomal RNA gene, partial sequence

AGTGAACGCTGGCGGTAGGCCTAACACATGCAAGTCGAACGGCAGCACAGTAAGAGCTTGCTCTTACGGG
TGGCGAGTGGCGGACGGGTGAGGAATACATCGGAATCTACTTTTTTCGTGGGGGATAACGTAGGGAACTT
ACGCTAATACCGCATAACGACCTACGGGTGAAAGCAGGGGATCTTCGGACCTTGCGCGATTGAATGAGCCG
ATGTCGGATTAGCTAGTTGGCGGGGTAAAGGCCACCAAGGCGACGATCCGTAGCTGGTCTGAGAGGATG
ATCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATACTGGACAAT
GGGCGCAAGCCTGATCCAGCCATAACGCGTGGGTGAAGAAGGCCTTCGGGTTGTAAAGCCCTTTTGTG
GAAAGAAATCCAGCCGGCTAATACCTGGTTGGGATGACGGTACCCAAAGAATAAGCACCGGCTAACTTCG
TGCCAGCAGCCGCGTAATACGAAGGGTGAAGCGTTACTCGGAATCACTGGGCGTAAAGCGTGCCTAGG
TGGTCGTTTTAAGTCTGTTGTGAAAGCCCTGGGCTCAACCTGGGAAGTGCAGTGGAAACTGGACGACTAGA
GTGTGGTAGAGGGTAGCGGAATTCCTGGTGTAGCAGTGAAATGCGTAGAGATCAGGAGGAACATCCATGG
CGAAGGCAGCTACCTGGACCAACACTGACACTGAGGCACGAAAGCGTGGGGAGCAAACAGGATTAGATAC
CCTGGTAGTCCACGCCCTAAACGATGCGAACTGGATGTTGGGTGCAATTTGGCACGCAGTATCGAAGCTA
ACGCGTTAAGTTTCGCCGCTGGGGAGTACGGTTCGCAAGACTGAAACTCAAAGGAATTGACGGGGGCCCGC
ACAAGCGGTGGAGTATGTGGTTTTAATTCGATGCAACGCGAAGAGCCTTACCTGGCCTTGACATGTCGAGA
ACTTTCCAGAGATGGATTGGTGCCTTCGGGAAGTTCGAACACAGGTGCTGCATGGCTGTCTGTCAGCTCGTG
TCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTCTTAGTTGCCAGCACGTAATGGTGG
GAACTCTAAGGAGACCGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTA
CGGCCAGGGCTACACACGTACTACAATGGTAGGGACAGAGGGCTGCAAGCCGGCGACGGTAAGCCAATCC
CAGAAACCCTATCTCAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCG
CAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTTT
GTTGCACCAGAAGCAGGTAGCTTAACCTTCGGGAGGGCGCTTGCCACGGTGTGGCCGATGACTGGGGTGA
AGTCGTAACAAGGTA

>2832587|emb|AJ002814.1|Stenotrophomonas|Stenotrophomonas sp. 16S rRNA
gene, isolate S3

AGTGAACGCTGGCGGTAGGCCTAACACATGCAAGTCGAACGGCAGCACAGTAAGAGCTTGCTCTTACGGG
TGGCGAGTGGCGGACGGGTGAGGAATACATCGGAATCTACTTTTTTCGTGGGGGATAACGTAGGGAACTT
ACGCTAATACCGCATAACGACCTACGGGTGAAAGCAGGGGATCTTCGGACCTTGCGCGATTGAATGAGCCG
ATGTCGGATTAGCTAGTTGGCGGGGTAAAGGCCACCAAGGCGACGATCCGTAGCTGGTCTGAGAGGATG
ATCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAAT
GGGCGCAAGCCTGATCCAGCCATAACGCGTGGGTGAAGAAGGCCTTCGGGTTGTAAAGCCCTTTTGTG
GAAAGAAATCCAGCTGGTTAATACCCGGTTGGGATGACGGTACCCAAAGAATAAGCACCGGCTAACTTCG
TGCCAGCAGCCGCGTAATACGAAGGGTGAAGCGTTACTCGGAATTACTGGGCGTAAAGCGTGCCTAGG
TGGTCGTTTTAAGTCTGTTGTGAAAGCCCTGGGCTCAACCTGGGAAGTGCAGTGGAAACTGGACGACTAGA
GTGTGGTAGAGGGTAGCGGAATTCCTGGTGTAGCAGTGAAATGCGTAGAGATCAGGAGGAACATCCATGG
CGAAGGCAGCTACCTGGACCAACACTGACACTGAGGCACGAAAGCGTGGGGAGCAAACAGGATTAGATAC
CCTGGTAGTCCACGCCCTAAACGATGCGAACTGGATGTTGGGTGCAATTTGGCACGCAGTATCGAAGCTA
ACGCGTTAAGTTTCGCCGCTGGGGAGTACGGTTCGCAAGACTGAAACTCAAAGGAATTGACGGGGGCCCGC
ACAAGCGGTGGAGTATGTGGTTTTAATTCGATGCAACGCGAAGAACCTTACCTGGCCTTGACATGTCGAGA
ACTTTCCAGAGATGGATTGGTGCCTTCGGGAAGTTCGAACACAGGTGCTGCATGGCTGTCTGTCAGCTCGTG
TCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTCTTAGTTGCCAGCACGTAATGGTGG
GAACTCTAAGGAGACCGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTA
CGGCCAGGGCTACACACGTACTACAATGGTAGGGACAGAGGGCTGCAAGCCGGCGACGGTAAGCCAATCC
CAGAAACCCTATCTCAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCG
CAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGGGAGTTT
GTTGCACCAGAAGCAGGTAGCTTAACCTTCGGGAGGGCGCTTGCCACGGTGTGGCCGATGACTGGGGTGA
AGTCGTAACAAGGTAGCCGTATCGGAAGGTGC

>66878829|gb|AY959123.1|Stenotrophomonas|Uncultured bacterium clone
rRNA350 16S ribosomal RNA gene, partial sequence

CTTAGAGTTTGATCCTGGCTCAGAGTGAACGCTGGCGGTAGGCCTAACACATGCAAGTCGAACGGCAGCA
CAGGAGAGCTTGCTCTCTGGGTGGCGAGTGGCGGACGGGTGAGGAATACATCGGAATCTACTTTTTTCGTG
GGGGATAACGTAGGGAACTTACGCTAATACCGCATAACGACCTACGGGTGAAAGCAGGGGATCTTCGGAC
CTTGCGCGATTGAATGAGCCGATGTCGGATTAGCTAGTTGGCGGGGTAAAGGCCACCAAGGCGACGATC

CGTAGCTGGTCTGAGAGGATGATCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAG
CAGTGGGGAATATTGGACAATGGGCGCAAGCCTGATCCAGCCATACCGCGTGGGTAAAGAAAGGCCTTCGG
GTTGTAAAGCCCTTTTGTGGGAAAGAAATCCAGCTGGCTAATACCCGGTTGGGATGACGGTACCCAAAG
AATAAGCACCGGCTAACTTCGTGCCAGCAGCCGCGTAATACGAAGGGTGCAAGCGTTACTCGGAATTAC
TGGGCGTAAAGCGTGCCTAGGTGGTTCGTTTAAAGTCCGTTGTGAAAGCCCTGGGCTCAACCTGGGAAGTGC
AGTGGATACTGGGCGACTAGAGTGTGGTAGAGGGTAGCGGAATTCCTGGTGTAGCAGTGAAATGCGTAGA
GATCAGGAGGAACATCCATGGCGAAGGCAGCTACCTGGACCAACACTGACACTGAGGCACGAAAGCGTGG
GGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCCTAAACGATGCGAACTGGATGTTGGGTGCAATT
TGGCACGCAGTATCGAAGCTAACGCGTTAAGTTTCGCCGCTGGGGAGTACGGTCGCAAGACTGAAACTCA
AAGGAATTGACGGGGGCGCACAAGCGGTGGAGTATGTGGTTTAAATTCGATGCAACGCGAAGAACCTTA
CCTGGCCTTGACATGTGAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAAGTCAACACAGGTGCTG
CATGGCTGTCTGAGCTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCTTGTCTTTA
GTTGCCAGCACGTAATGGTGGGAAGTCTAAGGAGACCGCGGTGACAAACCGGAGGAAGGTGGGGATGAC
GTCAAGTCATCATGGCCCTTACGGCCAGGGCTACACACGTACTACAATGGTAGGGACAGAGGGCTGCAAG
CCGGCGACGGTAAGCCAATCCCAGAAACCCTATCTCAGTCCGGATTGGAGTCTGCAACTCGACTCCATGA
AGTCGGAATCGCTAGTAATCGCAGATCAGCATTGCTGCGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCACACCATGGGAGTTTGTGTCACCAGAAGCAGGTAGCTTAACCTTCGGGAGGGCGCTTGCCACGG
TGTGGCCGATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAAAGGGCGA

>52222164|gb|AY738675.1|Prevotella|Uncultured Prevotella sp. clone 127-Q
23 16S ribosomal RNA gene, partial sequence

TGAGGAATATTGGTCAATGGACGCAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAGTCTTTTATATGGGGATAAAGTGGGGAACGTGTTCCCTTTTGCAGGTACCATATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGTAATACGGAAGGTTTCGGGCGTTATCCGGATTATTGGGTTTA
AAGGGAGCGTAGGCCGTTTGGTAAGCGTGTGTGAAATGTAGGAGCTCAACTTCTAGATTGCAGCGCGAA
CTGTCAGACTTGAGTGCGCACAACTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
AGAAGTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTGAAGCTCGAAGGTGCGGGTATCGAA
CAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGCTGTTAGCACCTAGTGTTAGCGG
CTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGCGCAACGGTGAAACTCAAAGGAATTGACGG
GGGCGCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAT
TGCAGATGAACGATTTAGAGATAATGAGGTCTTTCGGGACATCTGTGAAGGTGCTGCATGGTTGTCTGCA
GCTCGTGCCGTGAGGTGTGCGGCTTAAAGTGCCATAACGAGCGCAACCCCTTTCTTTAGTTGCCATCAGGTC
ATGCTGGGCACTCTGGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACG
GCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGATAGTTGGTCTGTGCAAATACGAT
CTAATCCTTAAACCATTTCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATTCTGCTAG
TAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGCCT

>343198448|ref|NR_041881.1|M.hominis|M.hominis ATCC 23114 strain PG21;
ATCC 23114 16S ribosomal RNA, partial sequence

TTTTATAAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCTGTGTGCCTAATACATGCATGTCGAGCGAG
GTTAGCAATAACCTAGCGGCGAATGGGTGAGTAACACGTGCTTAATCTACCTTTTAGATTGGAATACCCA
TTGGAACAATGGCTAATGCCGATACGCATGGAACCGCATGGTTCCGTTGTGAAAGGCGCTGTAAGGCG
CCACTAAAAGATGAGGGTGCGGAACATTAGTTAGTTGGTGAGGTAATGGCCACCAAGACTATGATGTTT
AGCCGGGTGAGAGACTGAACGGCCACATTGGGACTGAGATACGGCCCAAACCTCTACGGGAGGCAGCAG
TAGGGAATATTCCACAATGAGCGAAAGCTTGATGGAGCGACACAGCGTGCACGATGAAGGTCTTCGGATT
GTAAAGTGCTGTTATAAGGGAAGAACATTTGCAATAGGAAATGATTGCAGACTGACGGTACCTTGTGAGA
AAGCGATGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGTGCGAAGCGTTATCCGGAATTATTGG
GCGTAAAGCGTTTCGTAGGCTGTTTGTAAAGTCTGGAGTTAAATCCCGGGGCTCAACCCCGGCTCGCTTTG
GATACTAGCAAAGTAGAGTTAGATAGAGGTAAGCGGAATTCATGTGAAGCGGTGAAATGCGTAGATATA
TGGAAGAACACCAAAGGCGAAGGCAGCTTACTGGGTCTATACTGACGCTGAGGGACGAAAGCGTGGGGAG
CAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGATCATTAGTCCGTGGAGAATCACTGAC
GCAGCTAACGCATTAAATGATCCGCCTGAGTAGTATGCTCGCAAGAGTGAAACTTAAAGGAATTGACGGG
GACCCGCACAAGCGGTGGAGCATGTGGTTTAAATTTGAAGATACACGGAACCTTACCCACTCTTGACAT
CCTTCGCAAAGCTATAGAGATATAGTGGAGGTTATCGGAGTGACAGATGGTGCATGGTTGTCTGTCAGCTC
GTGTCGTGAGATGTTTGGTCAAGTCCTGCAACGAGCGCAACCCCTATCTTTAGTTACTAACATTAAGTTG
AGGACTCTAGAGATACTGCCTGGGTAAGTGGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCTCTTA

CGAGTGGGGCCACACACGTGCTACAATGGTCGGTACAAAGAGAAGCAATATGGCGACATGGAGCAAATCT
CAAAAAGCCGATCTCAGTTCGGATTGGAGTCTGCAATTCGACTCCATGAAGTCGGAATCGCTAGTAATCG
CAGATCAGCTATGCTGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGCTG
GTAATACCCAAAGTCGGTTTGCTAACCTCGGAGGCGACCGCCTAAGGTAGGACTGGTGACTGGGGTGAAG
TCGTAACAAGGTATCCCTACGAGAACGTGGGGATGGATCACCTCCTTT

>150134|gb|M96660.1|M.hominis|M.hominis 16S ribosomal RNA gene sequence

AGAGTTTGATCCTGGCTCAGGATGAACGCTGGCTGTGTGCCTAATACATGCATGTCGAGCGAGGTTAGCA
ATAACCTAGCGGCGAATGGGTGAGTAACACGTGCTTAATCTACCTTTTAGATTGGAATACCCATTGGAAA
CAATGGCTAATGCCGGATACGCATGGAACCGCATGGTTCGGTGTGAAAGGCGCTGTAAGGCGCCACTAA
AAGATGAGGGTGCAGAACATTAGTTAGTTGGTGAGGTAATGGCCCAAGACTATGATGTTTAGCCGGG
TCGAGAGACTGAACGGCCACATTGGGACTGAGATACGGCCAACTCCTACGGGAGGCAGCAGTAGGGAA
TATTCCACAATGAGCGAAAGCTTGATGGAGCGACACAGCGTGCACGATGAAGGTCTTCGGATTGTAAAGT
GCTGTTATAAGGGAAGAACATTTGCAATAGGAAATGATTGCAGACTGACGGTACCTTGTGAGAAAGCGAT
GGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGTGCGAAGCGTTATCCGGAATTATTGGGCGTAAA
GCGTTCGTAGGCTGTTTGTTAAGTCTGGAGTTAAATCCCGGGGCTCAACCCCGCTCGCTTTGGATACTAG
CAAAGTAGAGTTAGATAGAGGTAAGCGGAATTCCATGTGAAGCGGTGAAATGCGTAGATATATGGAAGAA
CACCAAAGGCGAAGGCAGCTTACTGGGTCTATACTGACGCTGGGACGAAAGCGTGGGGAGCAAACAGGAT
TAGATACCCTGGTAGTCCACGCCGTAAACGATGATCATTAGTCGGTGGAGAATCACTGACGCAGCTAACG
CATTAAATGATCCGCCTGAGTAGTATGCTCGCAAGAGTGAACTTAAAGGAATTGACGGGNNACGCACAA
GNGGAGCATGTGGTTTAATTTGAAGATACACGGAAAACCTTACCCACTCTTGACATCCTTCGCAAAGCTA
TAGAGATATAGTGGAGGTTATCGGAGTGACAGATGGTGCATGGTGTGTCGTGAGCTCGTGTGTCGTGAGATGT
TTGGTCAAGTCCTGCAACGAGCGCAACCCCTATCTTTAGTTACTAACATTAAGTTGAGGACTCTAGAGAT
ACTGCCTGGGTAAGTGGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCTCTTACGAGTGGGGCCACA
CACGTGCTACAATGGTTCGGTACAAAGAGAAGCAATATGGCGACACTGAGCAAATCTCAAAAAGCCGATCT
CAGTTCGGATTGGAGTCTGCAATTCGACTCCATGAAGTCGGAATCGCTAGTAATCGCAGATCAGCTATGC
TGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGCTGGTAATACCCAAAGT
CGGTTTGCTAACCTCGGAGGCGACCGCCTAAGGTAGGACTGGTGACTGGG

>39653271|gb|AY466443.1|M.genitalium|strain M2288 16S ribosomal RNA gene,
partial sequence

TGAGAGTTTGATCCTGGCTCAGGATTAACGCTGGCGGCATGCCTAATACATGCAAGTCGATCGGAAGTAG
CAATACTTTAGAGGCGAACGGGTGAGTAACACGTATCCAATCTACCTTATAATGGGGGATAACTAGTTGA
AAAAGTAGCTAATACCGCATAAGAAGCTTTAGTTTCGCATGAATTAAGTTGAAAGGACCTGCAAGGGTTTCG
TTATTTGATGAGGGTGCGCCATATCAGCTAGTTGGTAGGGTAATGGCCTACCAAGGCAATGACGTGTAGC
TATGCTGAGAAGTAGAATAGCCACAATGGGACTGAGACACGGCCCATACCTCCTACGGGAGGCAGCAGTAG
GGAATTTTTTACAATGAGCGAAAGCTTGATGGAGCAATGCCGCGTGAACGATGAAGGTCTTTTTTGATTGT
AAAGTTCTTTTATTTGGGAAGAATGACTCTAGCAGGCAATGGCTGGAGTTTGACTGTACCACTTTGAATA
AGTGACGACTAACTATGTGCCAGCAGTCGCGGTAATACATAGGTGCGAAGCGTTATCCGGATTTATTGGG
CGTAAAGCAAGCGCAGGCGGATTGAAAAGTCTGGTGTAAAGGCAGCTGCTTAACAGTTGTATGCATTGG
AACTATCAGTCTAGAGTGTGGTAGGGAGTTTTGGAATTTTCATGTGGAGCGGTGAAATGCGTAGATATAT
GAAGGAACACCAAGTGGCGAAGGCGAAAACCTTAGGCCATTACTGACGCTTAGGCTTGAAAAGTGTGGGGAGC
AAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATAGATACTAGCTGTGCGAGCGATCCCTTCG
GTAGTGAAGTTAACACATTAAGTATCTCGCCTGGGTAGTACATTTCGCAAGAATGAAACTCAAACGGAATT
GACGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTCGACGGTACACGAAAAACCTTACCTAGACT
TGACATCCTTGGAAGTTATGGAAACATAATGGAGGTTAACCAGTGACAGGTGGTGCATGGTTGTGTCGT
CAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTATCGTTAGTTACATTGTTT
AACGAGACTGCTAATGTAAATTGGAGGAAGGAAGGGATGACGTCAAATCATCATGCCCTTATGTCTAGG
GCTGCAAACGTGCTACAATGGCCAATACAAACAGTAGCCAACCTTGTAAGGTGAGCAAACTGAAAAGTT
GGTCTCAGTTTCGGATTGAGGGCTGCAATTCGTCTCATGAAGCTGGAATCACTAGTAATCGCGAATCAGC
TATGTCGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCAAACCTATGAAAGCTGGTAATATTT
AAAAACGTGTTGCTAACCTTTATTGGAAGTGCATGTCAAGGATAGCACCGGTGATTGGAGTTAAGTCGTA
ACAAGGTACCCCTACGAGAACG

>459531|emb|X77334.1|M.genitalium| 16S rRNA gene

AGAGTTTGATCCTGGCTCAGGATTAACGCTGGCGGCATGCCTAATACATGCAAGTCGATCGGAAGTAGCA
ATACTTTAGAGGCGAACGGGTGAGTAACACGTATCCAATCTACCTTATAATGGGGGATAACTAGTTGAAA

AACTAGCTAATACCGCATAAGAACTTTAGTTTCGCATGAATTAAAGTTGAAAGGACCTGCAAGGGTTCGTT
ATTTGATGAGGGTGCGCCATATCAGCTAGTTGGTAGGGTAATGGCCTACCAAGGCAATGACGTGTAGCTA
TGCTGAGAAGTAGAATAGCCACAATGGGACTGAGACACGGCCATACTCCTACGGGAGGCAGCAGTAGGG
AATTTTTTACAATGAGCGAAAAGCTTGATGGAGCAATGCCGCGTGAACGATGAAGGTCTTTTTTGATTGTAA
AGTTCTTTTATTTGGGAAGAATGACTCTAGCAGGCAATGGCTGGAGTTTGAAGTGTACCACTTTGAATAAG
TGACGACTAACTATGTGCCAGCAGTCGCGGTAATACATAGGTGCGAAGCGTTATCCGGATTTATTGGGCG
TAAAGCAAGCGCAGGCGGATTGAAAAGTCTGGTGTTAAAGGCAGCTGCTTAACAGTTGTATGCATTGGAA
ACTATCAGTCTAGAGTGTGGTAGGGAGTTTTGGAATTTTCATGTGGAGCGGTGAAATGCGTAGATATATGA
AGGAACACCAGTGGCGAAGGCGAAAACCTTAGGCCATTACTGACGCTTAGGCTTGAAAGTGTGGGGAGCAA
ATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATAGATACTAGCTGTGCGAGCGATCCCTTCGGT
AGTGAAGTTAACACATTAAGTATCTCGCCTGGGTAGTACATTCGCAAGAATGAAACTCAAACGGAATTGA
CGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTCGACGGTACACGAAAAACCTTACCTAGACTTG
ACATCCTTGCAAAGTTATGGAAACATAATGGAGGTTAACCGAGTGACAGGTGGTGCATGGTTGTCGTCA
GCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCGTTAGTTACATTGTTTAA
CGAGACTGCTAATGTAAATTGGAGGAAGGAAGGGATGACGTCAAATCATCATGCCCCCTTATGTCTAGGGC
TGCAAACGTGCTACAATGGCCAATACAAACAGTAGCCAACCTTGTAAGTGAAGTGAAGTGAAGTGG
TCTCAGTTCGGATTGAGGGCTGCAATTCGTCTCATGAAGCTGGAATCACTAGTAATCGCGAATCAGCTA
TGTCGCGGTGAATACGTTCTCGGGTCTTGACACACCGCCCGTCAAACATATGAAAGCTGGTAATATTTAA
AAACGTGTTGCTAACCTTTATTGGAAGCGCATGTCAAGGATAGCACCGGTGATTGGAGTTAAGTCGTAAC
AAGGTACCCCTACGAGAACG

>66878766|gb|AY959060.1|Dialister|Uncultured bacterium clone rRNA287 16S
ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGA
GGACATGAAAAGCTTGCTTTTTATGAAATCTAGTGGCAAACGGGTGAGTAACACGTAAACAACCTGCCTT
CAAGATGGGGACAACAGACGGAAACGACTGCTAATACCGAATACGATCCGAAAGTCGCATGACATTTGGA
TGAAAGGGTGGCCTATCGAAGAAGCTATCGCTTGAAGAGGGGTTTTCGTCCGATTAGGTAGTTGGTGAGG
TAACGGCCACCAAGCCGACGATCGGTAGCCGGTCTGAGAGGATGAACGGCCACACTGGAAGTGAAGACAC
GGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGC
CGCGTGAGTGAAGACGGCCTTCGGGTGTAAAGCTCTGTGATTTCGGGACGAAAGGCCATATGTGAATAAT
ATATGGAATGACGGTACCGAAAAAGCAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAG
GTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGCGCGCGCAGGCGGTCTCTTAAGTCCATCTTAGAAG
TGCGGGGCTTAACCCCGTGATGGGATGGAACTGGGAGACTGGAGTATCGGAGAGGAAAGTGGAAATTCCT
AGTGTAGCGGTGAAATGCGTAGATATTAGGAAGAACACCGGTGGGCGAAGGCGACTTTCTGGACGAAAAC
TGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGAT
GGATACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGGAGTTAACGCAATAAGTATCCCGCCTGGGAA
GTACGATCGCAAGATTAAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCGGTGGAGTATGTGGTTTTAA
TTCGACGCAACGCGAAGAACCTTACCAAGTCTTGACATTGATCGCCATTCCAAGAGATTGGAAGTTCTCC
TTCGGGAGACGAGAAAAACAGGTGGTGCACGGCTGTGCTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCC
CGCAACGAGCGCAACCCCTATCTTTTGTGTCAGCACGTAGAGGTGGGAACTCAGAAGAGACCGCCGAG
ACAATGCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACTTGGGCTACACACGTACTA
CAATGGGCTTTTAAACAAGAGCAGCGAAACCGCGAGGTGGAGCGAAACTCAAAAACAAGCCCCCAGTTTCA
ATCGCAGGCTGCAACTCGCCTGCGTGAAGCAGGAATCGCTAGTAATCGCGGGTCAGCATACCGCGGTGAA
TACGTTCCCGGGCCTTGTAACACACCGCCCGTCACACTATGAGAGTCGAAACACCCGAAGCCGGTGAGGT
AACCGCAAGGAGCCAGCCGTCGAAGGTGGGGCTGATGATTGGAGTGAAGTCGTAACAAGGTAACCGTAAA
GGG

>334905726|gb|EU394679.2|L.reuteri|Lactobacillus reuteri strain ATCC
55730 16S ribosomal RNA gene, complete sequence

AGAGTTTGATCCTGGCTCAGGATGAACGCCGGCGGTGTGCCTAATACATGCAAGTCGTACGCACTGGCCC
AACTGATTGATGGTGCTTGACCTGATTGACGATGGATCACCAAGTGAAGTGGCGGACGGGTGAGTAACACG
TAGGTAACCTGCCCCGAGCGGGGGATAACATTTGGAACAGATGCTAATACCGCATAACAACAAAAGCC
ACATGGCTTTTGTGTTGAAAGATGGCTTTGGCTATCACTCTGGGATGGACCTGCGGTGCATTAGCTAGTTG
GTAAGGTAACGGCTTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACAATGGAAGTGA
AGACACGGTCCATACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGGCGCAAGCCGTGATGGAG
CAACACCGCGTGAGTGAAGAAGGGTTTCGGCTCGTAAAGCTCTGTTGTTGGAGAAGAAGTGCCTGAGAG

TAAC TGTT CACG CAGT GACGGT ATCC AACG AAAAGT CACGGC TAACTAC GTGCCAG CAGCCG CGGTAAT
ACGTAG GTGGCA AGCGTT ATCCGG ATTTATT GGGCGT AAAAGC GAGCGC AGGCGG TTGCTTAG GTCTGATG
TGAAAG CCTTCGG CTTAAC CGAAGA AGTGCAT CGGAAAC CGGGCG ACTTGAG TGCAGA AGAGGAC AGTGG
AACTCC ATGTGT AGCGGT GGAATG CGTAGA TATATG GAAGAA CACCAG TGGCGA AGGCGG CTGTCTGG TC
TGCAACT GACGCT GAGGCT CGAAAG CATGGG TAGCGA ACAGG ATTAGAT ACCCTGG TAGTCC ATGCCG TA
AACGAT GAGTGT AGGTGT TGGAGG GTTTCG GCCCTT CAGTGCC GAGCTA ACGCAT TAAGCA CTCCGCC
TGGGGAG TACGACC GCAAGGT TGAAC TCAAAG GAATTG ACGGGG GCGCACA AGCGGT GGAGCA TGTG
GTTTAAT TCGAAG CTACG CAAGA ACCTT ACCAGG TCTTG ACATCT TGCCTA ACCTT AGAGATA AGGCG
TTCCCT TCGGGG ACGTA ATGAC AGGTGG TGCAT GGTCTG TCGTCAG CTCGTG TCGTGAG ATGTTGG GTTAA
GTCCCG CAACG AGCGCA ACCCTT GTTACT AGTTGCC AGCATTA AGTTGG GCACTC TAGTGAG ACTGCCGG
TGACAA ACCGGAG GAAGGT GGGGAC GACGTC AGATCAT CATGCC CCTTAT GACCTGG GCTACAC ACGTGC
TACAAT GGACGG TACAAC GAGTCG CAAGCT CGCGAG AGTAAG CTAATCT CTTAAAG CCGTTCTC AGTTCG
GACTGT AGGCTG CAACTC GCCTAC ACGAAG TCGGA ATCGCT AGTAAT CGCGGA TCAGCAT GCCGCG GTGA
ATACGT TCCCGG CCCTTG TACAC ACCGCC CGTCAC ACCATGG GAGTTT GTAAC GCCCAA AGTCGG TGGCC
TAACCT TTTATG GAGGG AGCCGC CTAAGG CGGGAC AGATG ACTGGG GTGAAG TCGTA ACAAGG TAGCCG TA
GGAGA ACCTG CGGCTG GATCAC CTCTTT CT

>29825721|gb|AF542231.1|Parvimonas|Parvimonas micra ATCC 33270 16S
ribosomal RNA gene, partial sequence

TTAACAC ATGCAAG TCGAAC GTGATTTTT GTGGA AATTCT TTCGGG AATGGA AATGAA ATGAAAG TGGCG
AACGGG TGAGTA ACACGT GAGCA ACCTAC CTTAC ACAGGG GGATAG CCGTTG GAAACG ACGATTA ATACC
GCATGAG ACCACA GAATCG CATGAT ATAGGG GTCAA AGATTT ATCGGT GTAAGA AGGGCT CGCGTCTG AT
TAGCTAG TTGGA AGGGTAA AGGCCT ACCAAG GCGACG ATCAGT AGCCGG TCTGAG AGGATGA ACGGCC AC
ATTGGA ACTGAG ACACGG TCCAA ACTCCT ACGGG AGGCAG CAGTGG GGAATATT GCACA ATGGGGG GAAC
CCTGATG CAGCGA CGCCG CGTGAG CGAAGA AGGTTTT CGAATC GTAAAG CTCTGT CCTATG AGAAGATA A
TGACGGT ATCATAG GAGGA AGCCCC GGTAAAT ACGT GCCAGC AGCCG CGGTAAT ACGTAT GGGGCG AGC
GTTGTCC GGAATTATT GGGCGTAA AGGGTAC GTAGGC GGTTTT TTTAAG TCAGGT GTGAAAG CGTGAG GCT
TAACCTC ATTAAG CACTTGA AACTGGA AGACTT GAGTGA AGGAG AGGAAAG TGAATT CCTAGT GTAGCG
GTGAAAT GCGTGA TATTAG GAGGA ATACCG GTGGCG AAGGCG ACTTTCT GGACTTTT ACTGAC GCTCAG
GTACGAA AGCGTGG GGAGCA AACAGG ATTAGAT ACCCTGG TAGTCC ACGCCG TAAACG ATGAATG CTAGG
TGTTGG GAGTCAA ATCTCG GTGCC GAAGTTA ACACAT TAAGCAT TCCGCCTGG GGAGTAC GGTGGCA ACA
CTGAAACT CAAAGGA ATTGAC GGGGAC CCGCACA AGCAGC GCGAGC ATGTGG TTTAATT CGAAGCA ACGCG
AGAACCT TACCAAG GCTTGAC ATATAG TTGAGT TATTG AGAAAT TGATAAG TCCCTC GGGACA ACTATA
CAGGTGG TGCATGG TTGTCTG CTCAG CTCGTG TCGTGAG ATGTTGG GTTAAG TCCCGCA ACGAGCG CAACCC
TTATCTT CAGTTGCC AGCACG TTAGAG GTGGGA ACTCTG GAGAGACT GCCGAT GACAAA TCGGAG GAAGGT
GGGGATG ACGTCAA ATCATCA TGCCCTT TATGTCT TGGGCTA CACACG TGCTACA ATGGTTGG TACAACG
AGAAGCG AGATAG AGATGTTA AGCGAA ACTCTAAA AACCAAT CTCAGT TCGGAT TGTAGG CTGCAACT CG
CCTACAT GAAGTC GGAGTTG CTAAGT AATCGC GAATCAG AATGTC GCGGTG AATGCG TTCCCG GTTCTGT
ACACACC GCGCGTCA CACCATG GGAGTTGG CAATAC CCGAAG CCGCGATCTA ACCGCA AGGAGGA AGGC
GTGCAAG GTAGGGT

>5222147|gb|AY738658.1|Atopobium|Uncultured Atopobium sp. clone 123-f 36
16S ribosomal RNA gene, partial sequence

TGGGGAT CTTG CACAAT GGGCGA AAGCCT GATGC AGCGAC GCCGCG TGCGGG ATGAAG GCCTTC GGGTTG
TAAACCG CTTTCAG CAGGGAC GAGGCC GCAAGGT GACGGT ACCTGC AGAAGA AGCCCC GGCTAA CTACGT
GCCAGC AGCCG CGGTAAT ACGTAG GGGGCA AGCGTT ATCCGG ATTCA TTGGG CGTAAAG CGCGCTAG GC
GGTTTGT TTAGGT CAGGAG TTAATCT GGGGGCT CAACCC CTATCC GCTCCTG ATACGG GCAGGCTT GAGT
CTGGTAG GGGGA AGGCGGA ATTCCA AGTGTAG CGGTG AAATG CGCAG ATATTT GGAAGA ACACGG GTGGCG
AAGGCG GCCTTCT GGGCCAC GACTG ACGCTG AGGCGC GAAAGCTAG GGGAG CGAACAG GATTAG ATACCC
TGGTAG TCCTAG CCGTAA ACGATG GACACT AGGTGT GGGGAG ATTATA CTTTCC GTGCCG AGCCAAC GC
ATTAAG TGTCCC GCCTGG GGAGTAC GGTGCA AGACTAAA ACTCAA AGGAATTG ACGGGG GCGCACA A
GCAGCG GAGCAT GTGGCT TAATTC GAAGCA ACGCGA AGAACCTT ACCAGG GCTTGAC ATTTAG GTGAAGC
AGTGGA AACACT GTGGCC GAAAGG AGCCTAA ACAGGT GGTGC ATGGCT GTCGT CAGCTC GTGTCTG AGA
TGTTGG GTTAAG TCCCGCA ACGAG CGCAAC CCTTGT CGCATG TTGCC AGCGGT TAAAG CCGGGC ACCCAT
GCGAGAC CGCGG CGTTA AGCCGG AGGAAG GTGGG GACGAC GTCAAG TCATCAT GCCCTT ATGTCCTGG
GCTGCAC ACGTGT CAAATG GCCGGC ACAGAG GGCTG CAACTG CGCGAG CAGAAG CGAATCC CTTAAAGCC

GGTCCCAGTTCGGATTGGAGGCTGCAACCCGCCTCCATGAAGTCGGAGTTGCTAGTAATCGCGGATCAGC
ACGCCGCGGTGAATGCGTTCCCGGGCCT

>78482952|emb|AJ585206.2|Atopobium|Atopobium vaginae 16S rRNA gene,
strain BVS059A5

GATGAACGCTGGCGGCGCGCCTAACACATGCAAGTCGAACGATTAAAGCACCTTCGGGTGTGTATAAAGT
GGCGAACGGCTGAGTAACACGCTGGGCAACCTGCCCTTTGCACCTGGGATAGCCTCGGGAAACCGAGGTTAA
TACCGGATACTCCATATATATCGCATGATGTATATGGGAAAGCTCCGACGGCAAAGGATGGGCCCCGCGC
CTGTTAGCTAGTTGGTGGGGTAACGGCCTACCAAGGCAATGATGGGTAGCCGGGTTGAGAGACCGACCGG
CCAGATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTGCACAATGGGCG
AAAGCCTGATGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCGGGTTGTAAACCGCTTTCAGCAGGGACG
AGGCCGCAAGGTGACGGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGT
AGGGGGCAAGCGTTATCCGGATTCAATTGGGCGTAAAGCGCGCGTAGGCGGTTTGTAGGTGAGGAGTTAA
ATCTGGGGGCTCAACCCCTATCCGCTCCTGATACCGGCAGGCTTGAGTCTGGTAGGGGAAGGCGGAATTC
CAAGTGTAGCGGTGAAATGCGCAGATATTTGGAAGAACACCGGTGGCGAAGGCGGCCCTTCTGGGCCACGA
CTGACGCTGAGGCGCGAAAGCTAGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCTAGCCGTAAACGA
TGGACACTAGGTGTGGGGAGATTATACTTTCCGTGCCGCAGCCAACGCATTAAGTGTCCCGCCTGGGGAG
TACGGTCGCAAGACTAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCAGCGGAGCATGTGGCTTAAT
TCGAAGCAACGCGAAGAACCTTACCAGGGCTTGACATTTAGGTGAAGCAGTGGAAACACTGTGGCCGAAA
GGAGCCTAAACAGGTGGTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACG
AGCGCAACCCCTTGTCGCATGTTGCCAGCGGTTAAAGCCGGGCACCCATGCGAGACCGCCGCGGTTAAGCC
GGAGGAAGGTGGGGACGACGTCAAGTCATCATGCCCCCTTATGTCCTGGGCTGCACACGTGCTACAATGGC
CGGCACAGAGGGCTGCAACTGCGCGAGCAGAAGCGAATCCCTAAAGCCGGTCCCAGTTTCGGATTGGAGGC
TGCAACCCGCCTCCATGAAGTCGGAGTTGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATGCGTTCCC
GGCCTTGTACACACCGCCCGTCACAC

>336454742|dbj|AB640696.1|Peptostreptococcus|P. anaerobius gene for 16S
ribosomal RNA, partial sequence, strain: JCM 6478

AGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCAAGTCGAGCGCGTCTGATT
TGATGCTTGCAATTGATGAAAGATGAGCGGCGGACGGGTGAGTAACGCGTGGGTAACCTGCCCTATACACA
TGGATAACATACTGAAAAGTTTACTAATACATGATAATATATATTTACGGCATCGTAGATATATCAAAGT
GTTAGCGGTATAGGATGGACCCGCGTCTGATTAGCTAGTTGGTGAGATAACTGCCCCACCAAGGCGACGAT
CAGTAGCCGACCTGAGAGGGTGATCGGCCACATTGGAAGTGAAGACACGGTCCAAACTCCTACGGGAGGCA
GCAGTGGGGAATATTGCACAAATGGGCGCAAGCCTGATGCAGCAACGCCGCGTGAACGATGAAGGTCTTCG
GATCGTAAAGTTCTGTTGCAGGGGAAGATAATGACGGTACCCTGTGAGGAAGCCCCGGCTAACTACGTGC
CAGCAGCCGCGGTAATACGTAGGGGGCTAGCGTTATCCGGATTTACTGGGCGTAAAGGGTGCGTAGGTGG
TCTTTCAAGTCGGTGGTTAAAGGCTACGGCTCAACCGTAGTTAGCCTCCGAAACTGGAAGACTTGAGTGC
AGGAGAGGAAAGTGGAATTCCCAGTGTAGCGGTGAAATGCGTAGATATTGGGAGGAACACCAGTAGCGAA
GGCGGCTTTCTGGACTGCAACTGACACTGAGGCACGAAAGCGTGGGTAGCAAACAGGATTAGATACCCTG
GTAGTCCACGCTGTAAACGATGAGTACTAGGTGTGCGGGGTTACCCCCCTCGGTGCCGCAGCTAACGCAT
TAAGTACTCCGCTGGGGAGTACGCACGCAAGTGTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGT
AGCGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCTAAGCTTGACATCCCTTAGACCGGT
GTTTAATCACACCTTCCCTTCGGGGCTGAGGTGACAGGTGGTGCATGGTTGTGTCGTGAGTCTGTGTCGTGA
GATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTGTCTTTAGTTGCCAGCATTCAGTTGGGCACTCTA
GAGAGACTGCCAGGGATAACCTGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGCTTAGG
GCTACACACGTGCTACAATGGGTGGTACAGAGGGTTGCCAAACCGTGAGGTGGAGCTAATCCCTTAAAGC
CATTTCTAGTTTCGGATTGTAGGCTGAAACTCGCCTACATGAAGCTGGAGTTACTAGTAATCGCAGATCAG
AATGCTGCGGTGAATGCGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTCGGAACACCC
GAAGCCGATTATCCAACCGCAAGGAGGAAGTCGTGAAGGTGGCGTCGATAACTGGGGTGAAGTCGTAAC
AAGGTAACC

>5222156|gb|AY738667.1|Gardnerella|Uncultured Gardnerella sp. clone BV6-
77 16S ribosomal RNA gene, partial sequence

TGGGGAATATTGCGCAATGGGGGAAACCCTGACGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCGGGTT
GTAAACCGCTTTTGATTGGGAGCAAGCCTTCGGGTGAGTGTACCTTTCGAATAAGCGCCGGCTAACTACG
TGCCAGCAGCCGCGGTAATACGTAGGGCGCAAGCGTTATCCGGATTTATTGGGCGTAAAGAGCTTGTAGG
CGGTTCTGTCGCTCTGGTGTGAAAGCCCATCGCTTAACGGTGGGTCTGCGCCGGGTACGGGCGGGCTAGA

GTGCAGTAGGGGAAACTGGAATTCTCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGAACACCAATGG
CGAAGGCAGGTTTCTGGGCTGTTACTGACGCTGAGAAGCGAAAGCGTGGGGAGCGAACAGGATTAGATAC
CCTGGTAGTCCACGCCGTAAACGGTGGACGCTGGATGTGGGGCCCATTCCACGGGTTCGTGTCGGAGCT
AACGCGTTAAGCGTCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGAAATTGACGGGGGCCCCG
CACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGTGCCT
GATGACTGCAGAGATGTGGTTTCCTTTTCGGGGCAGGTTACAGGTGGTGCATGGTTCGTTCGTACGCTCGTG
TCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTCGCCCTGTGTTGCCAGCGGGTTATGCCGG
GAACTCACGGGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATCATGCCCTTA
CGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGGTGCACATGGTGACATGGAGCTAATCC
CTTAAACCGGTCTCAGTTCGGATCGTAGTCTGCAACTCGACTACGTGAAGGCGGAGTCGCTAGTAATCG
CGAATCAGCAACGTGCGGTGAATGCGTTCCCGGGCCT

>66878859|gb|AY959153.1|Gardnerella|Uncultured bacterium clone rRNA380
16S ribosomal RNA gene, partial sequence

TCGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGG
GATCTGACCAGCTTGCTGGTTGGTGAGAGTGGCGAACGGGTGAGTAATGCGTGACCAACCTACCCCATGC
TCCAGAATAGCTCCTGGAAACGGGTGGTAATGCTGGATGCTCCAACCTTGACGCATGTTTTGTTGGGAAAG
TGTTTAGCGGCATGGGATGGGGTCGCGTCTATCAGCTTGTAGGCGGGGTAATGGCCACCTAGGCTTCG
ACGGGTAGCCGGCCTGAGAGGGCGGACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGG
CAGCAGTGGGGAATATTGCGCAATGGGGGAAACCCCTGACGCAGCGACGCCGCGTGCGGGATGAAGGCCTT
CGGGTTGTAAACCGCTTTTGATTGGGAGCAAGCCTTCGGGTGAGTGTACCTTTCGAATAAGCGCCGGCTA
ACTACGTGCCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTTATCCGGAATTATTGGGCGTAAAGAGCT
TGTAGGCGGTTTCGTGCGCTCTGGTGTGAAAGCCCATCGCTTAACGGTGGGTCTGCGCCGGGTACGGGCGG
GCTAGAGTGCAGTAGGGGAAACTGGAATTCTCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGAACAC
CAATGGCGAAGGCAGGTTTCTGGGCTGTTACTGACGCTGAGAAGCGAAAGCGTGGGGAGCGAACAGGATT
AGATACCCTGGTAGTCCACGCCGTAAACGGTGGACGCTGGATGTGGGGCCCATTCCACGGGTTCGTGTC
GGAGCTAACCGTTAAGCGTCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGAAATTGACGGG
GGCCCGCACAAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACAT
GTGCCTGATGACTGCAGAGATGTGGTTTCCTTTTCGGGGCAGGTTACAGGTGGTGCATGGTTCGTTCGTACG
CTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTCGCCCTGTGTTGCCAGCGGGTTA
TGCCGGGAACTCACGGGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATCATGC
CCCTTACGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGGTGCACATGGTGACATGGAGC
TAATCCCTTAAACCGGTCTCAGTTCGGATCGTAGTCTGCAACTCGACTACGTGAAGGCGGAGTCGCTAG
TAATCGCGAATCAGCAACGTGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCATGA
AAGTGGGCAGCACCCGAAGCCGGTGGCCTGACCTTTTTTGAGGGAGCCGTCTAAGGTGAGGCTCGTGATT
GGGACTAAGTCGTAACAAGGTAACCGTAAAGG

>306850716|gb|GQ900640.1|BVAB2|Uncultured bacterium clone 123b-28 16S
ribosomal RNA gene, partial sequence

TGGGGAATATTGGGCAATGGGCGAAAGCCTGACCCAGCAACGCCGCGTGAGTGATGAAGGCCTTCGGGTT
GTAAAACTCTTTGGACAGGGACGAAGAAAGTGACGGTACCTGTAGAACAAGCCACGGCTAACTACGTGCC
AGCAGCCGCGGTAATACGTAGGTGGCGAGCGTTATCCGGATTTACTGGGCGTAAAGGGCGTGTAGGCGGC
TAGATAAGTGTGATGTTTAAATCCAAGGCTTAACCTTGGGGTTCATTACAACTGTTTAGCTTGAGTGCT
GGAGAGGATAGTGGAATTCCTAGTGTAGCGGTAAATGCGTAGATATTAGGAGGAACACCGGTGGCGAAG
GCGGCTATCTGGACAGTAACGTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGG
TAGTCCACGCCGTAAACGATGAATACTAGCTGTAGGAGGTATCGACCCCTTCTGTGGCGCAGTTAACACA
ATAAGTATTCCGCCTGGGGAGTACGGCCGCAAGGTAAAACTCAAAGGAATTGACGGGGACCCGCACAAG
CAGTGGATTATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGACTTGACATCCTCTGACGATT
CAGGAGACTGAATTTCTCTTCGGAGACAGAGAGACAGGTGGTGCATGGTTGTCTGTCAGCTCGTGTCTGTG
AGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTGATTGTTGCTAACAGTAAGATGAGCACTCA
ATTGAGACTGCCGTTGATAAAACGGAGGAAGGTGGGGACGACGTCAAATCATCATGCCCTTATGTTCTG
GGCTACACACGTAATACAATGGCTGTGACAGAGGGAAGCAAGAGGGCGACCTTAAGCGAA

>19744807|gb|AF487886.1|Prevotella|Prevotella sp. Smarlab 121567 16S
ribosomal RNA gene, partial sequence

TAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGCGGGGCAGCATG
AGGGTTGCTTGCAACCTTGTATGGCGACCGGCGCACGGGTGAGTAACACGTATCCAACCTACTCCTTACA

ACGGAATAACCCGGCGAAAGTCGGACTAATACCGTATGATATCCTATGCAGGCATCTAACTAGGATTAAA
GGTTTAGCGGTAAGGGATGGGGATGCGTCTGATTAGGCAGTTGGCGGGGTAACGGCCCACAAACCGACG
ATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAAACTCCTACGGGAGG
CAGCAGTGAGGAATATTGGTCAATGGACGGAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCT
ATGGGTTGTAAACTGCTTTTATACGGGGATAAAGTTAGGGACGTGTCCCTATTTGCAGGTACCGTATGAA
TAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTG
GGTTTAAAGGGAGCGTAGGCCGTAGATTAAGTGTGTTGTGAAATGTAGACGCTCAACGTCTGACTTGCAG
CGCATACTGGTTTACTTGAGTTTGCACAACGTTGGCGGAATTCGTCTGTAGCGGTGAAATGCTTAGATA
TGACGAAGAACTCCGATTGCGAAGGCAGCTTGCGGGAGCAAACTGACGCTGAAGCTCGAAAGTGCGGGT
ATCGAACAGGATTAGATAACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGTTGTATGGCCTTTCGGC
TATGTGACCAAGCGAAAGCATTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAA
TTGACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGG
CTTGAAGTGTAGGCGAACGATCTAGAGATAGTGAGGCCCTTCGGGGCGCCTACGGAGGTGCTGCATGGTT
GTCGTGAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTGTTCTCAGTTGCCA
TCGGGTGATGCCGGGCACTCTGAGGATACTGCCTCCGCAAGGAGTGAGGAAGGTGGGGATGACGTCAAAT
CAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGCGTCGGTTCGTATGCAA
ATACGATCTAATCTTTAAAACCGGTCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGAT
TCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAA
GCCATGAAAGCCGGGGGCGCCTGAAGTCCGCGACCGCAAGGAACGGCCTAGGGCGAAACTGGTGATTGGG
GCTAAGTCGTAACAAGGTA

>164460376|gb|EU189000.1|Sneathia|Uncultured bacterium clone 123Q-34 16S
ribosomal RNA gene, partial sequence

ACCTACAGAAGAAGCGACGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGTGCGGAGCGTTATCC
GGAATTATTGGGCTTAAAGGGCATCTAGGCGGTTAAACAAGTTGAAGGTGAAAACCTGTGGCTCAACCAT
AGGCTTGCCTACAAAACGTATATACTAGAGTACTGGAAAGGTGGGTGGAAGTACACGAGTAGAGGTGAAA
TTCGTAGATATGTGTAGGAATGCCGATGATGAAGATAACTCACTGGACAGCAACTGACGCTGAAGTGCGA
AAGCTAGGGGAGCAAAACAGGATTAGATAACCCTGGTAGTCCCTAGCTGTAAACGATGATCACTGGGTGTGGG
GATTTCGAAGTCTCTGTGCCGAAGCAAAAGCGATAAGTGATCCGCCTGGGGAGTACGTTTCGCAAGAATGAA
ACTCAAAGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTGGTTTAATTCGACGCAACGCGAGGAA
CCTTACCAGATCTTGACATCCTCCGAAGAGCATAGAAGTATGCTTGTGCCTACGGGAACGGAGAGACAGG
TGGTGCATGGCTGTGACAGCTCGTGTGTTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGAAACCCCTAT
CATTAGTTACCATCATTAAGTTGGGGACTCTAATGAAACTGCCTACGAAGNGTAGGAGGAAGGTGGGGAT
GACGTCAAGTCATCATGCCCTTATGATCTGGGCTACACACGTGCTACAATGGATAGTACAAAGAGAAGC
TTTGTAGCGATACATGGCAAACTAAGAAAGCTATTCTTAGTTTCGGATTGAAGTCTGCAACTCGACTTCA
TGAAGTTGGAATCACTAGTAATCGTGACTCAGCAATGTCACGGTGAATACGTTCTCGGGT

>52222148|gb|AY738659.1|Sneathia|Uncultured Sneathia sp. clone 123-f 47
16S ribosomal RNA gene, partial sequence

TGGGGAATATTGGACAATGGAGGCAACTCTGATCCAGCAATTCTGTGTGTGTGAAGAAGGTTTTAGGACT
GTAAAACACTTTTAGTAGGGAAGAAAGAAATGACGGTACCTACAGAAGAAGCGACGGCTAAATACGTGCC
AGCAGCCGCGGTAATACGTATGTCGCGAGCGTTATCCGGAATTATTGGGCTTAAAGGGCATCTAGGCGGT
TAAACAAGTTGAAGGTGAAAACCTGTGGCTCAACCATAGGCTTGCCTACAAAACCTGTATAACTAGAGTAC
TGGAAGGTGGGTGGAAGTACACGAGTAGAGGTGAAATTCGTAGATATGTGTAGGAATGCCGATGATGAA
GATAACTCACTGGACAGCAACTGACGCTGAAGTGCGAAAGCTAGGGGAGCAAAACAGGATTAGATAACCCTG
GTAGTCCTAGCTGTAAACGATGATCACTGGGTGTGGGGATTCGAAGTCTCTGTGCCGAAGCAAAAGCGAT
AAGTGATCCGCCTGGGGAGTACGTTTCGCAAGAATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGTG
GTGGAGCATGTGGTTTAATTCGACGCAACGCGAGGAACCTTACCAGATCTTGACATCCTCCGAAGAGCAT
AGAAGTATGCTTGTGCCTACGGGAACGGAGAGACAGGTGGTGCATGGCTGTGACAGCTCGTGTGTGAG
ATGTTGGGTTAAGTCCCGCAACGAGCGAAACCCCTATCATTAGTTACCATCATTAAGTTGGGGACTCTAA
TGAAACTGCCTACGAAGAGTAGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCTTATGATCTGGG
CTACACACGTGCTACAATGGATAGTACAAAGAGAAGCTTTGTAGCGATACATGGCAAACTAAGAAAGCT
ATTCTTAGTTTCGGATTGAAGTCTGCAACTCGACTTCATGAAGTTGGAATCACTAGTAATCGTGAATCAGC
AATGTCACGGTGAATACGTTCTCGGGTCT

>164460324|gb|EU188948.1|Aerococcus|Uncultured bacterium clone 123f-92
16S ribosomal RNA gene, partial sequence

GTGTAAGAGAAGAACAAATTGTAGAGTAACTGCTACAGTCTTGACGGTATCTTACCAGAAAGCCACGGC
TAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGGG
GGCGCAGGCTGCTTCTTAAGTCTGATGTGAAAGCCCACGGCTTAACCGTGGAAGTGCATTGGAAACTGGG
AAGCTTGAGTACAGAAGAGGAAAGTGGAACTCCATGTGTAGCGGTGGAATGCGTAGATATATGGAAGAAC
ACCACTGGCGAAAGCGACTTTCTGGTCTGTCACTGACGCTGAGGCCCGAAAGCGTGGGTAGCAAACAGGA
TTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGCGCTAGGTGTTGGAGGGTTTCCACCCTTCAGTGC
CGCAGCTAACGCATTAAGCGCTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGG
GGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACA
TCCTTTGACCACTCTAGAGATAGAGCTTTCCCTTCGGGGACAAAGTGACAGGTGGTGCATGGTTGTCGTC
AGCTCGTGTCTGAGATGTTGGGTTAAGTCCCAGCAACGAGCGCAACCCCTATTGTTAGTTGCCAGCATTG
AGTTGGGCACTCTAGCAAGACTGCCGGTGACAAACCGGAGGAAGGCGGGGATGACGTCAAATCATCATGC
CCCTTATGACTTGGGCTACACACGTGCTACAATGGATGGTACAACGGGCAGCGAGCTCGCGAGAGTCAGC
GAATCCCTTAAAGCCATTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCCG

>315452163|gb|HQ641662.1|Gardnerella|Gardnerella vaginalis strain GV17
16S ribosomal RNA gene, partial sequence

TGACCAGCTTGCTGGTTGGTGAGAGTGGCGAACGGGTGAGTAATGCGTGACCAACCTGCCCCATGCTCCA
GAATAGCTCTTGGAACGGGTGGTAATGCTGGATGCTCCAATTGACGCATGTCTTGTGGGAAAGTGTT
TAGTGGCATGGGATGGGGTCGCGTCTATCAGCTTGTAGGCGGGGTAATGGCCACCTAGGCTTCGACGG
GTAGCCGGCCTGAGAGGGCGGACGGCCACATTGGGACTGAGATACGGCCAGACTCCTACGGGAGGCAGC
AGTGGGGAATATTGCGCAATGGGGGAAACCCTGACGCAGCGACGCCGCGTGCGGGATGAAGGCCTTCGGG
TTGTAAACCGCTTTTGATTGGGAGCAAGCTTTCGGGTGAGTGTACCTTTCGAATAAGCGCCGGCTAACTA
CGTGCCAGCAGCCGCGTAATACGTAGGGCGCAAGCGTTATCCGGAATTATTGGGCGTAAAGAGCTTGTA
GGCGGTTCTGTCGCTCTGGTGTGAAAGCCCATCGCTTAACGGTGGGTTTTCGCCGGGTACGGGCGGGCTA
GAGTGCAGTAGGGGAGACTGGAATTCTCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGAACACCAAT
GGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGAAGCGAAAGCGTGGGGAGCGAACAGGATTAGAT
ACCCTGGTAGTCCACGCCGTAAACGGTGGACGCTGGATGTGGGGCCATTCCACGGGTTCGTGTCTGGAG
CTAACGCGTTAAGCGTCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGAAATTGACGGGGGCC
CGCACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATGTGC
CTGTGCACTGCAGAGATGTGGTTTCCCTTCGGGGCAGGTTTACAGGTGGTGCATGGTTCGTCTCAGCTCG
TGTCGTGAGATGTTGGGTAAAGTCCCAGCAACGAGCGCAACCCCTCGCCCTGTGTTGCCAGCGGGTTATGCC
GGGAACCTCACGGGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTGAGATCATCATGCCCTT
TACGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGATGCGACATGGTGACATGGAGCGGAT
CCCTTAAACCGGTCTCAGTTCGGATCGTAGTCTGCAACTCGACTACGTGAAGGCGGAGTCGCTAGTAAT
CGCGAATCAGCAACGTGCGGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCA

>52222151|gb|AY738662.1|Dialister|Uncultured Dialister sp. clone 127-Q 46
16S ribosomal RNA gene, partial sequence

TGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGCCGCGTGAGTGAAGACGGCCTTCGGGTT
GTAAAGCTCTGTGATTTCGGGACGAAAGGCCATATGTGAATAATATATGGAATGACGGTACCGAAAAAGC
AAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGG
GCGTAAAGCGCGCGCAGGCGGTCACTTAAGTCCATCTTAGAAGTGCGGGGCTTAACCCCGTGATGGGATG
GAAACTGGGAGACTGGAGTATCGGAGAGGAAAGTGGAAATTCCTAGTGTAGCGGTGAAATGCGTAGATATT
AGGAAGAACACCGGTGGCGAAGGCGACTTTCTGGACGAAAACCTGACGCTGAGGCGCGAAAGCGTGGGGAG
CAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTAGGAGGTATCGACCC
CTTCTGTGCCGGAGTTAACGCAATAAGTATCCCGCCTGGGAAGTACGATCGCAAGATTAAACCTCAAAGG
AATTGACGGGGGCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGACGCAACGCGAAGAACCTTACCAA
GTCTTGACATTGATCGCCATTCCAAGAGATTGGAAGTTCTCCTTCGGGAGACGAGAAAAACAGGTGGTGCA
CGGCTGTCTGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCAGCAACGAGCGCAACCCCTATCTTTTGT
TGCCAGCACGTAGAGGTGGGAACCTCAGAAGAGACCGCCGAGACAATGCGGAGGAAGGTGGGGATGACGT
CAAGTCATCATGCCCTTATGACTTGGGCTACACACGTACTACAATGGGCTTTAACAAAGAGCAGCGAAA
CCGCGAGGTGGAGCGAACTCAAAAACAAGCCCCAGTTTCAAGTCGAGGCTGCAACTCGCCTGCGTGAA
GCAGGAATCGCTAGTAATCGCGGTGAGCATACCGCGGTGAATACGTTCCCGGGCCT

>66878580|gb|AY958874.1|Dialister|Uncultured bacterium clone rRNA101 16S
ribosomal RNA gene, partial sequence

CCCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACGAGA

GGACATGAAAAGCTTGCTTTTTATGAAATCTAGTGGCAAACGGGTGAGTAACACGTAAACAACCTGCCTT
CAAGATGGGGACAACAGACGGAAACGACTGCTAATACCGAATACGATCCGAAAGTCGCATGACATTTGGA
TGAAAGGGTGGCCTATCGAAGAAGCTATCGCTTGAAGAGGGGTTTTCGTCCGATTAGGTAGTTGGTGAGG
TAACGGCCCCACCAAGCCGACGATCGGTAGCCGGTCTGAGAGGATGAACGGCCACACTGGAAGTGAAGACAC
GGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAACGC
CGCGTGAGTGAAGACGGCCTTCGGGTGTAAAGCTCTGTGATTCGGGACGAAAGGCCATATGTGAATAAT
ATATGGAAATGACGGTACCGAAAAAGCAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAG
GTGGCAAGCGTTGTCCGGAATTATTGGGCGTAAAGCGCGCGCAGGCGGTCACTTAAGTCCATCTTAGAAG
TGCGGGGCTTAACCCCGTGATGGGATGGAAGTGGGAGACTGGAGTATCGGAGAGGAAAGTGAATTCCT
AGTGTAGCGGTGAAATGCGTAGATATTAGGAAGAACACCGGTGGCGAAGGCGACTTTCTGGACGAAAAGT
GACGCTGAGGCGCGAAAGCGTGGGGAGCAAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATG
GATACTAGGTGTAGGAGGTATCGACCCCTTCTGTGCCGGAGTTAACGCAATAAGTATCCCGCCTGGGAAG
TACGATCGCAAGATTAAAGTCAAAGGAATTGACGGGGGCCCGCACAAGCGGTGGAGTATGTGGTTTAAT
TCGACGCAACGCGAAGAACCTTACCAAGTCTTGACATTGATCGCCATTCCAAGAGATTGGAAGTTCTCCT
TCGGGAGACGAGAAAACAGGTGGTGCACGGCTGTCTGTCAGCTCGTGTCTGTGAGATGTTGGGTTAAGTCCC
GCAACGAGCGCAACCCCTATCTTTTGTTCGACGACGCTAGAGGTGGGAACTCAGAAGAGACCGCCGCGAGA
CAATGCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACTTGGGCTACACACGTACTAC
AATGGGCTTTAACAAGAGCAGCGAAACCGCGAGGTGGAGCGAAACTCAAAAACAAGCCCCCAGTTCAGA
TCGACGGCTGCAACTCGCCTGCGTGAAGCAGGAATCGCTAGTAATCGCGGGTCAGCATACCGCGGTGAAT
ACGTTCCCGGGCCTTGTACACACCGCCCGTCACACTATGAGAGTCGGAAACACCCGAAGCCGGTGAGGTA
ACCGCAAGGAGCCAGCCGTGCAAGGTGGGGCTGATGATTGGAGTGAA

>183398320|gb|AY959087.2|L.iners|Uncultured bacterium clone rRNA314 16S
ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTC
TGCCTTGAGGATCGGAGTGCTTGCACTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACA
CGTGGGTAACCTGCCCCAAGAGATCGGGATAACACCTGGAAACAGATGCTAATACCGGATAACGACAGATG
ATGCCTATCAACTGTTTTAAAGATGGTTCTGCTATCACTCTTGATGGACCTGCGGTGCATTAGGTAGTT
GGTAGGGTAACGGCCAACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACT
GAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGA
GCAACGCCGCGTGAGTGAAGAAGGGTTTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACGGGGGTA
GTAAGTACCTTTGTTTGACGGTAATCAATTAGAAAGTCAACGGCTAACTACGTGCCAGCAGCCGCGGTAA
TACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGTGCAGGCGGTTTCGATAAGTCTGAT
GTGAAAGCCTTCGGCTCAACCGGAGAATTGCATCAGAACTGTGAGCTTGAGTACAGAAGAGGAGAGTG
GAACTCCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGGCTCTCTGGT
CTGTTACTGACGCTGAGGCTCGAAAGCATGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGT
AAACGATGAGTGCTAAGTGTGAGGTTTTCCGCCTCTCAGTGTGTCAGCTAACGCATTAAGCACTCCGC
CTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCGCACAAGCGGTGGAGCATGT
GGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCATAGCCAGTCTAAGAGATTAGAT
GTTCCCTTCGGGACTATGAGACAGGTGGTGCATGGCTGTCTGTCAGCTCGTGTCTGTGAGATGTTGGGTTA
AGTCCCGCAACGAGCGCAACCCCTTGTCATTAGTTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCG
GTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTG
CTACAATGGACGGTACAACGAGAAGCGACCCCTGTGAAGGCAAGCGGATCTCTGAAAGCCGTTCTCAGTTC
GGATTGCAGGCTGCAACTCGCCTGCATGAAGCTGGAATCGCTAGTAATCGCAAATCAGCACGTTGCGGTG
AATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTCTGTAACGCCCCGAAGCCGGCGGG
ATAACCGAAAGGAGTCAGCCGTCTAAGGCGGGACAGATGATTAGGGTGAAGTCGTAACAAGGTAACCGTA
>239923964|gb|GQ179686.1|Fusobacterium|Uncultured Fusobacterium sp. clone

VE32H03 16S ribosomal RNA gene, partial sequence

GATGAACGCTGACAGAATGCTTAACACATGCAAGTCGACTCGAGTCTTCGGACTTGGGTGGCGGACGGGT
GAGTAACGCGTAAAGAACTTGCCTCATAGTCTGGGACAACATTTGGAAACGGATGCTAATACCGGATATT
ATGCTTTCTTCGCATGGAGGAAGTATGAAAGCTATATGCGCTATGAGAGAGCTTTGCGTCCCATTAGCTA
GTTGGTGAGGTAACGGCCCCACCAAGGCGATGATGGGTAGCCGGCCTGAGAGGGTGAACGGCCACAAGGGG
ACTGAGACACGGCCCTTACTCCTACGGGAGGCAGCAGTGGGGAATATTGGACAATGGACCAAAAGTCTGA
TCCAGCAATTCTGTGTGCACGATGACGTTTTTCGGAATGTAAAGTGCTTTTCACTCGGGAAGAAGCAAGTG
ACGGTACCGACAGAAGAAGCGACGGCTAAATACGTGCCAGCAGCCGCGGTAATACGTATGTCGCAAGCGT

TATCCGGATTTATTGGGCGTAAAGCGCGTCTAGGCGGCAAGGAAAGTCTGATGTGAAAAATGCGGGGCTCA
ACTCCGTATTGCGTTGGAAACTGCCTTACTAGAGTACTGGAGAGGTAGGCGGAAC TACAAGTGTAGAGGT
GAAATTCGTAGATATTTGTAGGAATGCCGATGGGGAAGCCAGCCTACTGGACAGATACTGACGCTAAAGC
GCGAAAGCGTGGGTAGCAAACAGGATTAGATACCCTGGTAGTCCACGCTGTAAACGATGATTACTAGGTG
TTGGGGGTCAAACCTCAGCGCCCAAGCTAACGCGATAAGTAATCCGCCTGGGGAGTACGTACGCAAGTAT
GAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGACGCAACGCGAG
GAACCTTACCAGCGTTTGACATCCTACAAAGAGTGCAGAGATGCGCTTGTGCTTCTTCGGAAGAATGTAG
TGACAGGTGGTGCATGGCTGTCGTCAGCTCGTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAA
CCCCTATCGTATGTTACCAGCCTTTAGTTGGGGACTCATGCGATACTGCCTGCGACGAGCAGGAGGAAGG
TGGGGATGACGTCAAGTCATCATGCCCCTTATACGCTGGGCTACACACGTGCTACAATGGGTAGTACAGA
GAGCGGCGAACCCGCGAGGGGGAGCAAATCTCAGAAAATATTCTTAGTTTCGGATTGTACTCTGCAACTC
GAGTACATGAAGTTGGAATCGCTAGTAATCGCAAATCAGCAATGTTGCGGTGAATACGTTCTCGGGTCTT
GTACACACCGCCCGTCACACCACGAGAGTTGGTTGCACCTGAAGTAGCAGGCCTAACCGTAAGGAAGGAT
GCTCCGAGGGTGTGGTTAGCGATTGGGGTGAAGTCGTAACAAGGTA

>343201461|ref|NR_042187.1|Cloacibacterium|Cloacibacterium normanense
strain :CCUG 46293 16S ribosomal RNA, partial sequence
AGCGGGAGGCCTAACACATGCAAGCCGAGCGGTATTGTTTCTTCGGAAATGAGAGAGCGGCGTACGGGTG
CGGAACACGTGTGCAACCTGCCTTTATCTGGGGGATAGCCTTTCGAAAGGAAGATTAATACTCCATAACA
TATTGATTGGCATCAATTAATATTGAAAGCTCCGGCGGATAGAGATGGGCACGCGCAAGATTAGCTAGTT
GGTGAGGTAACGGCTCACCAAGGCGATGATCTTTAGGGGGCCTGAGAGGGTGATCCCCCACACTGGTACT
GAGACACGGACCAGACTCCTACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGTGCAAGCCTGAACCA
GCCATCCCGCGTGAAGGACGACTGCCCTATGGGTTGTAAACTTCTTTTGTATAGGGATAAACCTACCCTC
GTGAGGGTAGCTGAAGGTACTATACGAATAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGG
AGGGTGCAAGCGTTATCCGGATTTATTGGGTTTAAAGGGTCCGTAGGCGGACTTATAAGTCAGTGGTGAA
AGCCTGTCGCTTAACGATAGAAGTCCATTGATACTGTAAGTCTTGAGTATATTTGAGGTAGCTGGAATA
AGTAGTGTAGCGGTGAAATGCATAGATATTACTTAGAACACCAATTGCGAAGGCAGGTTACCAAGATATA
ACTGACGCTGAGGGACGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACG
ATGCTAACTCGTTTTTTGGGCTTTAGGGTTTCAGAGACCAAGCGAAAGTGATAAGTTAGCCACCTGGGGAGT
ACGCTCGCAAGAGTGAAACTCAAAGGAATTGACGGGGGCCCGCACAAAGCGGTGGATTATGTGGTTTAATT
CGATGATACGCGAGGAACCTTACCAAGACTTAAATGGGAATTGACAGTTTTTAGAAAATAGAACTTTCTTCG
GACAATTTTCAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTTAGGTAAAGTCCTGCAACG
AGCGCAACCCCTGTCACTAGTTGCCATCATTAGTTGGGGACTCTAGTGAGACTGCCTACGCAAGTAGAG
AGGAAGGTGGGGATGACGTCAAATCATCACGGCCCTTACGTCTTGGGCCACACACGTAATACAATGGCCG
GTACAGAGGGCAGCTACACAGCGATGTGATGCAAATCTCGAAAGCCGGTCTCAGTTTCGGATTGGAGTCTG
CAACTCGACTCTATGAAGCTGGAATCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCG
GGCCTTGACACACCGCCCGTCAAGCCATGGAAGCTGGGGGTACCTGAAGTCGGTGACCGTAAAAGGAGC
TGCCTAGGGTAAAAGTAGTAAGTGGGCTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGAT
CACCT

>456680|gb|L08642.1|U.urealyticum|Ureaplasma urealyticum 16S ribosomal
RNA

TAGAATCCGTCAATTTTTTAAAGAGTTTGATCCTGGCTCAGGATTAACGCTGGCGGCATGCCTAATACATG
CAAATCGAACGAAGCCTTTTAGGCTTAGTGGTGAACGGGTGAGTAACACGTATCCAATCTACCCTTAAGT
TGGGGATAACTAGTCGAAAAGATTAGCTAATACCGAATAATAACATCAATATCGCATGAGAAGATGTAGAA
AGTCGCTCTTTGTGGCGACGCTTTTGATGAGGGTGCAGCATCAGATAGTTGGTGAGGTAATGGCTCA
CCAAGTCAATGACGCGTAGCTGTACTGAGAGGTAGAACAGCCACAATGGGACTGAGACACGGCCCATACT
CCTACGGGAGGCAGCAGTAGGGAATTTTTTACAATGGGCGCAAGCCTTATGAAGCAATGCCGCGTGAACG
ATGAAGGTCTTATAGATTGTAAAGTTCTTTTATATGGGAAGAAACGCTAAGATAGGAAAATGATTTTAGTT
TGACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGATGCAAGC
GTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGGTTTGTAAAGTTTGGTATTAAATCTAGATGCT
TAACGTCTAGCTGTATCAAAAACGTGTAACCTAGAGTGTAGTAGGGAGTTGGGGAACTCCATGTGGAGCG
GTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGCCAACCTTGGAATATCACTGACGCTTAG
GCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATCATCATTTAA
TGTCGGCCCGAATGGGTGCGGTGTTGTAGCTAACGCATTAAATGATGTGCCTGGGTAGTACATTTCGAAGA
ATGAAACTCAAACGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTTGACAATACAC

GTAGAACCTTACCTAGGTTTGACATCTATTGCGATGCTATAGAAATATAGTTGAGGTAAACAATATGACA
GGTGGTGCATGGTTGTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCGCAACGAGCGCAACCCCTT
TCGTTAGTTACTTTTCTAGCGATACTGCTACCGCAAGGTAGAGGAAGGTGGGGATGACGTCAAATCATCA
TGCCCCCTTATATCTAGGGCTGCAAACGTGCTACAATGGCTAATACAAACTGCTGCAAAATCGTAAGATGA
AGCGAAACAGAAAAAGTTAGTCTCAGTTCGGATAGAGGGCTGCAATTCGTCTCTTGAAGTTGGAATCAC
TAGTAATCGCGAATCAGACATGTCGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCAAACCTA
TGGGAGCTGGTAATATCTAAAACCGGCAAAGCTAACCTTTTGGAGGCATGCGTCTAGGGTAGGATCGGTG
ACTGGAGTTAAGTCGTAACAAGGTATCCCTACGAGAACGTGGGGATGGATCACCTCCTTTCTTCGGAGTA
AATTTTAAATTTACGTACTAATTAGTGTACATTTTTTTTAAATCC

>1808583|dbj|D79212.1|L.paracasei|Lactobacillus paracasei subsp.

paracasei gene for 16S rRNA, partial sequence

GATGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAACGAGTTCTCGTTGATGATCGGTGCTTGCACC
GAGATTCAACATGGAACGAGTGGCGGACGGGTGAGTAACACGTGGGTAACCTGCCCTTAAGTGGGGGATA
ACATTTGGAACAGATGCTAATACCGCATAGATCCAAGAACCGCATGGTTCTTGGCTGAAAGATGGCGTA
AGCTATCGCTTTTGGATGGACCCGCGGCGTATTAGCTAGTTGGTGAGGTAATGGCTCACCAAGGCGATGA
TACGTAGCCGAACGAGAGTTGATCGGCCACATTGGGACTGAGACACGGCCCAAACCTCCTACGGGAGGC
AGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGCTTTC
GGGTCGTAAACTCTGTTGTTGGAGAAGAATGGTCGGCAGAGTAAGTGTGTCGGCGTGACGGTATCCAA
CCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTATCCGGATTT
ATTGGGCGTAAGCGAGCGCAGGCGGTTTTTTAAGTCTGATGTGAAAGCCCTCGGCTTAACCGAGGAAGC
GCATCGGAAACTGGGAACTTGAGTGCAGAAGAGGACAGTGGAACTCCATGTGTAGCGGTGAAATGCGTA
GATATATGGAAGAACACCAAGTGGCGAAGGCGGCTGTCTGGTCTGTAAGTACGCTGAGGCTCGAAAGCAT
GGGTAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAATGCTAGGTGTTGGAGGGTT
TCCGCCCTTCAGTGCCCGCAGCTAACGCATTAAGCATTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACT
CAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTCAAGCAACGCGAAGAACCT
TACCAGGTCTTGACATCTTTTGATCACCTGAGAGATCAGGTTTTCCCTTCGGGGGCAAAATGACAGGTGG
TGCATGGTTGTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTATGAC
TAGTTGCCAGCATTTAGTTGGGCACTCTAGTAAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGAC
GTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGATGGTACAACGAGTTGCGAG
ACCGCGAGGTCAAGCTAATCTCTTAAAGCCATTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACACGA
AGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGC
CCGTACACCATGAGAGTTTGTAAACCCGAAGCCGGTGGCGTAACCCCTTTTAGGGAGCGAGCCGTCTAA
GGTGGGACAAATGATTAGGGTGAAGTCGTAACAAGGTAGCCGTAGGAGAACC

>265678780|ref|NR_029085.1|L.saerimneri|Lactobacillus saerimneri strain
GDA154 16S ribosomal RNA, partial sequence

AGAGTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGCATCGGCCCA
ACTGATTGAAGATGCTTGCATCCGATTGACGATGGTTTTACCGATGAGCGGCGGACGGGTGAGTAACACGT
AGGTAACCTGCCCAGAAGCGGGGGATAACACCTGGAAACAGATGCTAATACCGCATAGGTCATTTGACCG
CATGGTCAAATGATTAAAGATGGCTCTGCTATCACTTCTGGATGGACCTGCGGCGTATTAGCTAGTTGGT
AAGGTAACGGCTTACCAAGGCGATGATACGTAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAG
ACACGGCCCAGACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCA
ACGCCGCGTGAGCGAAGAAGGTCTTCGGATCGTAAACTCTGTTGTTAGAGAAGAACACGGGTGAGAGTA
ACTGTTACCTGTTGACGGTATCTAACCAGCAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATAC
GTAGGTGGCAAGCGTTATCCGGATTTATTGGGCGTAAAGGGAACGCAGGCGGTTCTTTAAGTCTGATGTG
AAAGCCTTCGGCTTAACCGAAGATGTGCATTGGAAACTGGGGAACCTTGAGTGCAGAAGAGGAGAGTGGAA
CTCCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCAAGTGGCGAAAGCGGCTCTCTGGTCTG
TAACTGACGCTGAGGTTGAAAGCGTGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTA
CGATGAATGCTAGGTGTTGGAGGGTTTCCGCCCTTCAGTGCCGAGCTAACGCACTAAGCATTCGCGCTG
GGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGT
TTAATTCAAGCTACCGAAGAACCCTTACCAGGTCTTGACATCTTTTGACCACCTAAGAGATTAGGTTTT
CCCTTCGGGGACAAAATGACAGGTGGTGCATGGTTGTGTCGTCAGTCTGTGTCGTGAGATGTTGGGTAAAGT
CCCGCAACGAGCGCAACCCCTGTTGTGTCAGTTGCCAGCATTCAGTTGGGCACTCTGGCGAGACTGCCGGTG
ACAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTA
CAATGGGCAGTACAACGAGTCGCGAAACCGCGAGGTTTAGCAAATCTCTTAAAGCTGCTCTCAGTTCGGA

CTGTAGGCTGCAACTCGCCTRCACGAAGTCGGAATCGCTAGTAATCGCGAATCAGCATGTCGCGGTGAAT
ACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTTTGTAACACCCAAAGCCGGTGGGGTA
ACCTTTTGGAGCCAGCCGTCTAAGGTGGGACAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTAGGA
GAACCTGCGGCTGGATCACCTCCTTTCT

>37655076|gb|AY391826.1|L.saerimneri|Lactobacillus sp. T059 16S ribosomal
RNA gene, partial sequence

AGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGCATCGGCCC
AACTGATTGAAGATGCTTGCATCCGATTGACGATGGTTTACCGATGAGCGGCGGACGGGTGAGTAACACG
TAGGTAACCTGCCCAGAAGCGGGGGATAACACCTGGAAACAGATGCTAATACCGCATAGGTCATTTGACC
GCATGGTCAAATGATTAAAGATGGCTCTGCTATCACTTCTGGATGGACCTGCGGCGTATTAGCTAGTTGG
TAAGGTAACGGCTTACCAAGGCGATGATACGTAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGA
GACACGGCCAGACTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGC
AACGCCGCGTGAGCGAAGAAGGTCTTCGGATCGTAAACTCTGTTGTTAGAGAAGAACACGGGTGAGAGT
AACTGTTACCTGTTGACGGTATCTAACCAGCAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATA
CGTAGGTGGCAAGCGTTATCCGGATTTATTGGGCGTAAAGGGAACGCAGGCGGTTCTTTAAGTCTGATGT
GAAAGCCTTCGGCTTAACCGAAGATGTGCATTGGAAGTGGGGAACCTTGAGTGCAGAAGAGGAGAGTGG
ACTCCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCAAGTGGCGAAAGCGGCTCTCTGGTCT
GTAAGTACGCTGAGGTTTCGAAAGCGTGGGTAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAA
ACGATGAATGCTAGGTGTTGGAGGGTTTTCCGCCCTTCAGTGCCGCAGCTAACGCCTAAGCATTCCGCCT
GGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGG
TTTAATTCGAAGCTACGCGAAGAACCTTACCAGGTCTTGACATCTTTTGACCACCTAAGAGATTAGGTTT
TCCCTTCGGGGACAAAATGACAGGTGGTGCATGGTTGTCGTGCTCAGCTCGTGTGCTGAGATGTTGGGTTAAG
TCCCGCAACGAGCGCAACCCCTTGTGTGTCAGTTGCCAGCATTTCAGTTGGGCACTCTGGCGAGACTGCCGGT
GACAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGACCTGGGCTACACACGTGCT
ACAATGGGCAGTACAACGAGTCGCGAAACCGCGAGGTTTAGCAAATCTCTTAAAGCTGCTCTCAGTTCCG
ACTGCAGGCTGCAACTCGCCTGCACGAAGTCGGAATCGCTAGTAATCGCGAATCAGCATGTCGCGGTGAA
TACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTTTGTAACACCCAAAGCCGGTGGGGT
AACCTTTTGGAGCCAGCCGTCTAAGGTGGGACAGATGATTGGGGTGAAGTCGTAACAAGGTAACC

>66878779|gb|AY959073.1|P.bivia|94%Uncultured bacterium clone rRNA300 16S
ribosomal RNA gene, partial sequence

GCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGCA
GCGAATAGATGGCTTGCTATTTATGTGCGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCCCA
TAACTAAGGGATAACCCAGCGAAAGTTGGACTAATACCTTATGTATTTCGTTTGATCTCATGAGATTACGA
ATAAAGATTTATCGGTTATGGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAACGGCCCACCAAGG
CAACGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCCACATTGGAAGTGAAGACACGGTCCAACTCCTACG
GGAGGCAGCAGTGAGGAATATTGGTCAATGGACGCAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACG
GCCCTATGGGTTGTAAACTGCTTTTATATGGGGATAAAGTGGGGAACGTGTTCCCTTTTGCAGGTACCAT
ATGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTTTCGGGCGTTATCCGGATT
TATTGGGTTTAAAGGGAGCGTAGGCCGTTTGGTAAGCGTGTGTGAAATGTAGTAGCTCAACTTCTAGAT
TGCAGCGCAACTGTCAGACTTGAGTGCGCACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTC
AGATATCATGAAGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTGAAGCTCGAAGGTG
CGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGTGTTAGCACCT
AGTGTTAGCGGCTAAGCGAAAGCATTAAGCATCCACCTGGGGGAGTACGCCGGCAACGGTGAAGTCAA
AGGAATTGGCGGGGCCCCGCACAAGCGGCGGGTTCATGTGGTTTAATTCGATGATACGCGACGAACCTTGC
CCGGGCTTGAATTGCAGATGAACGATTTAGAGATAATGAGGTCCTTCGGGACATCTGTGAAGGTGCTGCA
TGGTTGTCGTGCTCAGCTGGTGCCGTGAGGTGTCGGATTAAAGTACCATAACGAGCGCCCCCTTTTTTTTAGT
CCTCATCAGGTTTTTGGTGCGCTCTGTGGAGATAACCCCCCTGTAAGGTGTGAGGAAGGTGGGGATGGTGT
CAAATCAGCGCGCCCCCTTATCTCCGGGGCCACACGCGTGTACCAATGGGTGGCACAGATAGTTTGTGTGT
ATGCAAATCCTATTTTCTCCTTAAACCCATTTCCAGTTCGGATTGGGTTTTCCACCCCGCCCCCCCCGAAG
CTGGATTTCGTTAGTATTCGGCCATCACCCATGGCGCGGTGAATCGGTTCCGGGCGCTTGTGTCCCCCCCC
CCGTCAACCCATGAAACCGGGGGGTCCTTGAAGTTTCGTGCCCGTAAGGATCGACCTAGGGCAAACCTGGT
AATTGGGGCTAA

>302129311|dbj|AB547673.1|P.bivia|Prevotella bivia gene for 16S
ribosomal RNA, partial sequence, strain: JCM 6331

AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGCAGCGAAT
AGATAGCTTGCTATTTATGTCGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTACCCATAACTA
AGGGATAACCCAGCGAAAAGTTGGACTAATACCTTATGTATTCGTTTGATCTCATGAGATTACGAATAAAG
ATTTATCGGTTATGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGTAACGGCCCACCAAGGCAACGA
TCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAACGAGACACGGTCCAAACTCCTACGGGAGGC
AGCAGTGAGGAATATTGGTCAATGGACGCAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTA
TGGGTTGTAAACTGCTTTTATATGGGGATAAAGTGGGGAACGTGTTCCCTTTTGCAGGTACCATATGAAT
AAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTTTCGGGCGTTATCCGGATTTATTGG
GTTTAAAGGGAGCGTAGGCCGTTTGGTAAGCGTGTTGTGAAATGTAGGAGCTCAACTTCTAGATTGCAGC
GCGAACTGTCAGACTTGAGTGCGCACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATAT
CATGAAGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTGAAGCTCGAAGGTGCGGGTA
TCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCACCTAGTGTT
AGCGGCTAAGCGAAAGCATTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATT
GACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCT
TGAATTGCAGATGAACGATTTAGAGATAATGAGGTCCTTCGGGACATCTGTGAAGGTGCTGCATGGTTGT
CGTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTTTCTTTAGTTGCCATC
AGGTTCTGCTGGGCACTCTGGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCA
GCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGATAGTTGGTCTGTGCAAAT
ACGATCTAATCCTTAAAACCATTTCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATT
GCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTAACACCGCCCGTCAAGC
CATGAAAGCCGGGGGTGCCTGAAGTTCGTGACCGTAAGGATCGACCTAGGGCAAACCTGGTAATTGGGGC
TAAGTCGTAACAAGGTAACC

>345296748|gb|HQ219658.1|S.sanguinis|Streptococcus sanguinis 16S

ribosomal RNA gene, partial sequence

GCAAGTAGGACGCACAGTTTATACCGTAGCTTGCTACACCATAGACTGTGAGTTGCGAACGGGTGAGTAA
CGCGTAGGTAACCTGCCTATTAGAGGGGGATAACTATTGGAAACGATAGCTAATACCGCATAACAGTATG
TAACACATGTTAGATGCTTGAAAGATGCAATTGCATCGCTAGTAGATGGACCTGCGTTGTATTAGCTAGT
AGGTAGGGTAATGGCCTACCTAGGCGACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGAC
TGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTAGGGAATCTTCGGCAATGGGGGGAACCTGACCG
AGCAACGCCGCGTGAGTGAAAGAGGTTTTTCGGATCGTAAAGCTCTGTTGTTAAGGAAGAACGAGTGTGAG
AATGGAAGTTTCATACTGTGACGGTACTTAACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGGT
AATACGTAGGTCCCGAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTAGAAAAGTCTG
AAGTGAAAGGCAGTGCTCAACCATTTGATAGGCTTTGGAAACTGTTTAACTTGAGTGCAGAAGGGGAGAGT
GGAATTCCATGTGTAGCGGTGAAATGCGTAGATATATGGAGGAACACCGGTGGCGAAAAGCGGCTCTCTGG
TCTGTAACCTGACGCTGAGGCTCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCG
TAAACGATGAGTGCTAGGTGTTAGGTCTTTCCGGGACTTAGTGCCCGCAGCTAACGCATTAAGCACTCCG
CCTGGGGAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGTGGAGCATG
TGGTTTAATTGCAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCCGATGCTATTTCTAGAGATAGG
AAGTTTCTTCGGAACATCGGTGACAGGTGGTGCATGGTTGTCGTGAGCTCGTGTGCTGAGATGTTGGGTT
AAGTCCCGCAACGAGCGCAACCCCTATTGTTAGTTGCCATCATTGAGTTGGGCACTCTAGCGAGACTGCC
GGTAATAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGACCTGGGCTACACACGT
GCTACAATGGCTGGTACAACGAGTCGCAAGCCGGTGACGGCAAGCTAATCTCTGAAAGCCAGTCTCAGTT
CGGATTGTAGGCTGCAACTCGCCTACATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGT
GAATACGTTCCCGGGCCTTGTAACACCGCCCGTCAACCACGAGAGTTTGTAAACACCCGAAGTCGGTGA
GGTAACCGTAA

>66878628|gb|AY958922.1|Lactobacillus|Uncultured bacterium clone rRNA149
16S ribosomal RNA gene, partial sequence

CCCTTAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGTC
TGCCTTGAAGATCGGAGTGCTTGCACTCTGTGAAACAAGATACAGGCTAGCGGCGGACGGGTGAGTAACA
CGTGGGTAACCTGCCAAGAGATCGGGATAACACCTGGAAACAGATGCTAATACCGGATAACAACAGATG
ATGCCTATCAACTGTTTTAAAAGATGGTTCTGCTATCACTCTTGATGGACCTGCGGTGCATTAGCTAGTT
GGTAGGGTAACGGCCTACCAAGGCGATGATGCATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACT
GAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGA
GCAACGCCGCGTGAGTGAAAGAGGTTTCGGCTCGTAAAGCTCTGTTGTTGGTGAAGAAGGACAGGGGTA

GTAAGTACCTTTGTTTGACGGTAATCAATTAGAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAA
TACGTAGGTGGCAAGCGTTGTCCGGATTTATTGGGCGTAAAGCGAGTGCAGGCGGCTCGATAAGTCTGAT
GTGAAAGCCTTCGGCTCAACCGGAGAATTGCATCAGAAACTGTCGAGCTTGAGTACAGAAGAGGAGAGTG
GAACTCCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGACCACCTGGA
CTAATACTGACACTGAGGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGT
AAACGATGTCAACTAGCCGTTGGAAGCCTTGAGCTTTTAGTGGCGCAGCTAACGCATTAAGTTGACCGCC
TGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCGACAAAGCGGTGGAGCATGTG
GTTTAATTGCAAGCAACGCGAAGAACCTTACCAGGCCTTGACATCCAATGAACCTTCTAGAGATAGATTG
GTGCCTTCGGGAACATTGAGACAGGTGCTGCATGGCTGTCGTGAGCTCGTGTGAGATGTTGGGTAA
GTCCCGTAACGAGCGCAACCTTGTCTTAGTTACCAGCACGTCATGGTGGGCACTCTAAGGAGACTGCC
GGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGGCCTGGGCTACACACGT
GCTACAATGGTCGGTACAGAGGGTTGCCAAGCCGCGAGGTGGAGCTAATCCACAAAACCGATCGTAGTC
CGGATCGCAGTCTGCAACTCGACTGCGTGAAGTCGGAATCGCTAGTAATCGCGAATCAGAATGTCGCGGT
GAATACGTTCCCGGGCCTTGTACACACCGCCCGCTCACACCATGGGAGTGGGTGACCAGAAAGTAGCTAG
TCTAACCTTCGGGAGGACGGTTACCACGGTGTGATTCATGACTGGGGTGAA

>78033738|emb|AM111051.1|Carnobacterium|Carnobacterium sp. 7196 partial
16S rRNA gene

AGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCATGCCTAATACATGCAAGTCGAACGCTTTTGT
CACCGGGTGCTTGACCCACCGAGACAAAAGAGTGGCGGACGGGTGAGTAACACGTGGGTAACTGCCCA
TAAGAGGGGGATAACATCCGGAACGGATGCTAATACCGCATATTTCCAATTGTCTCCTGACAGATGGAA
AAAAGGTGGCTTCGGCTACCGCTTATGGATGGACCCGCGGCGTATTAGCTAGTTGGTGAGTAATGGCTC
ACCAAGGCGATGATACGTAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCAGAC
TCCTACGGGGAGGCAGCAGTAGGGAATCTTCCGCAATGGACGAAAGTCTGACGGAGCAATGCCGCGTGAG
TGAAGAAGGTTTTTCGGATCGTAAACTCTGTTGTTAGAGAAGAACAAGGATGAGAGTAAGTGTCTATCCC
CCTGACGGTATCTAACCAGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAA
GCGTTGTCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGGTTCTTTAAGTCTGATGTGAAAGCCCCG
GCTCAACCGGGGAGGGTCATTTGGAAACTGGAGAACTTGAGTGCAGAAAGAGGAGAGTGGAATTCACGT
GTAGCGGTGAAATGCGTAGATATGTGGAGGAACACCAGTGGCGAAGGCGACTCTCTGGTCTGTAAGTAC
GCTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGT
GCTAAGTGTTGGAGGGTTTTCCGCCCTTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTAC
GACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGACCCGCGCAAGCGGTGGAGCATGTGGTTTAATTCG
AAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCTTTGACCACTCTAGAGATAGAGCTTTCCCTTCGG
GGACAAAGTGACAGGTGGTGCATGGTTGTCGTGAGTCTGTCGTGAGAGTGGTAGGTTAAGTCCCGCAA
CGAGCGCAACCTTGTCTTAGTTACCAGCGGTTTGGCCGGGAACCTCTAGTGAGACTGCCAGTGACAAAC
TGGAGGAAGGCGGGGACGACGTCAAGTCCCCATGGCCCTTACGACCAGGGCTACACCGTGCTACAATGGA
TGGTACAGAGGGCAGCTAGGTGCGCATGCCATGCGAATCTCTTAAAGCCATTTCGTAGTCCGGATTGGAGT
CTGCCACTCGACTCCATGAAGTAGGAATAGCTAGTAATCGCGGATCATAATGCCGCGGTGAATACGTTCC
CGGGCCTTGTACACACCGCCCGTAACACCATGGGAGTTTGTAACACCTGAAGTCGGTGAGGTAACCTTT
TGGGAGCCAGCCGCCACGGTGTGACAGATGACTGGGGTGAAAGTCGTAACAAGGTAACC

>AE014295.3|159243-160772|AE014295.3|B.longum|Bifidobacterium longum
NCC2705, complete genome

TTTTTGTGGAGGGTTCGATTCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTCGAACG
GGATCCATCAGGCTTTGCTTGGTGGTGAGAGTGGCGAACGGGTGAGTAATGCGTGACCGACCTGCCCCAT
ACACCGGAATAGCTCCTGGAAACGGGTGGTAATGCCGGATGCTCCAGTTGATCGCATGGTCTTCTGGGAA
AGCTTTCGCGGTATGGGATGGGGTCGCGTCCTATCAGCTTGACGGCGGGGTAACGGCCCCACCGTGGCTTC
GACGGGTAGCCGGCCTGAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAG
GCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCGCGTGAGGGATGGAGGCCT
TCGGGTTGTAAACCTCTTTATCGGGGAGCAAGCGAGAGTGAGTTTACCCGTTGAATAAGCACCGGCTAA
CTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAAGCGTTATCCGGAATTATTGGGCGTAAAGGGCTC
GTAGGCGGTTTCGTGCGGTCCGGTGTGAAAGTCCATCGCTTAACGGTGGATCCGCGCCGGGTACGGGCGGG
CTTGTAGTGCGGTAGGGGAGACTGGAATTCCTGGTGTAAACGGTGGAAATGTGTAGATATCGGGAAGAACC
AATGGCGAAGGCAGGTCTCTGGGCCGTTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTA
GATACCCTGGTAGTCCACGCCGTAAACGGTGGATGCTGGATGTGGGGCCCGTTCCACGGGTTCCGTGTGCG
GAGCTAACGCGTTAAGCATCCCGCCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGAAATTGACGGG

GCCCGCACAAAGCGGCGGAGCATGCGGATTAATTTCGATGCAACGCGAAGAACCTTACCTGGGCTTGACATG
TTCCCCGACGGTCGTAGAGATACGGCTTCCCTTCGGGGCGGGTTCACAGGTGGTGCATGGTCGTCGTCAGC
TCGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTCGCCCCGTGTTGCCAGCGGATTAT
GCCGGGAACACACGGGGGACCGCGGGGTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATCATGCC
CCTTACGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGATGCGACGCGGCGACGCGGAGCG
GATCCCTGAAAACCGGTCTCAGTTCGGATCGCAGTCTGCAACTCGACTGCGTGAAGGCGGAGTCGCTAGT
AATCGGAATCAGCAACGTCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCCGTCAAGTCATGAA
AGTGGGCAGCACCCGAAGCCGGTGGCCTAACCCCTTGTGGGATGGAGCCGTCTAAGGTGAGGCTCGTGAT
TGGGACTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCACCTCCTTTCT
>110436448|gb|DQ796048.1|P.copri|P. copri 88%Uncultured bacterium (fecal)
clone RL202_aai50g03 16S ribosomal RNA gene, partial sequence
AGAGTTTGTATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGATA
TTGGAAGCTTGCTTCCGATGGGCGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCCCATCAC
TTGGGGATAACCTTGCGAAAGTAAGACTAATACCCAATGATATCTCAAGAAGACATCTGAATGAGATTAA
AGATTTATCGGTGATGGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAACGGCCCCACCAAGGCTAC
GATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAAACTCCTACGGGAG
GCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCC
TATGGGTTGTAACTGCTTTTATAAGGGAATAAAGTGAGCCTCGTGAGGCTTTTTGCATGTACCTTATGA
ATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATT
GGGTTTAAAGGGAGCGTAGGCCGGAGATTAAGCGTGTTGTGAAATGTAGATGCTCAACATCTGCACTGCA
GCGCGAAGTGGTTTCCCTTGAGTACGCACAAAGTGGGCGGAATTCGTGGTGTAGCGGTGAAATGCTTAGAT
ATCACGAAGAAGTCCGATTGCGAAGGCAGCTCACTGGAGCGCAACTGACGCTGAAGCTCGAAAGTGCGGG
TATCGAACAGGATTAGATACCCTGGTAGTCCACACTGTAAACGATGAATGCTAGGTTTAGGGGTATCGA
CCCCTTCTGTGCCGAGTCAACACAATAAGCATTCCGCCTGGGGAGTACGGCCGCAAGGTTGAAACTCAA
AGGAATTGACGGGGGGCCCGCACAAAGCAGCGGAGCATGTGGTTTAATTCGACGCAACGCGAAGAACCTTAC
CAGGTCTTGACATCCACTTAAACTTACAGAGAAGTAAGGTGTGCTTGACAAAGTGAGACAGGTGGTGCA
TGGTTGTCGTGAGCTCGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCTTCAGT
TACTAACGCGTAAAGGTGAGGACTCTGAAGAGACTGCCGGGGACAACCTCGGAGGAAGGTGGGGACGACGT
CAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGCCACGACAGAGAGAAGCGAAAT
CGTAAGGTAGAGCGGAACTCAAAAAAGTGGTCCCAGTTCGGATTGTGGGCTGCAACCCGCCACATGAAG
TCGGAGTTGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGCCTTGACACACACCGCCC
GTCAAG

>4406233|gb|AF104671.1|S.intermedius|Streptococcus intermedius strain
ATCC27335 16S ribosomal RNA gene, partial sequence
TTTGATCCTGGTTTCAGGACGAACGCTGGCGGCGTGCCCTAATACATGCAAGTAGAACGCACAGGATGCACC
GTAGTTTACTACACCGTATTCTGTGAGTTGCGAACGGGTGAGTAACGCGTAGGTAACCTGCCTGGTAGCG
GGGGATAACTATTGGAACGATAGCTAATACCGCATAAGAACATTTACTGCATGGTAGATGTTTAAAGG
TGCAAATGCATCACTACCAGATGGACCTGCGTTGTATTAGCTAGTAGGTGAGGTAACGGCTCACCTAGGC
GACGATACATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGCCAGACTCCTACGG
GAGGCAGCAGTAGGGAATCTTCGGCAATGGGGGGAACCCGTGACCGAGCAACGCCGCGTGAGTGAAGAAGG
TTTTCGGATCGTAAAGCTCTGTTGTTAAGGAAGAACGAGTGTGAGAATGGAAAGTTCATACTGTGACGGT
ACTTAACCAGAAAGGGACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTCCCAGCGTGTGCC
GGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTAGATAAGTCTGAAGTTAAAGGCAGTGGCTCAACCAT
TGTAGGCTTTGGAACTGTTTAACTTGAGTGCAGAAGGGGAGAGTGAATTCCATGTGTAGCGGTGAAAT
GCGTAGATATATGGAGGAACACCGGTGGCGAAAGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTCGAA
AGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGTTAGG
TCCTTTCCGGGACTTAGTGCCGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTG
AAACTCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAG
AACCTTACCAGGTCTTGACATCCCGATGCCCGCTCTAGAGATAGAGCTTTACTTCGGTACATCGGTGACA
GGTGGTGCATGGTTGTGCTCAGTCTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTT
ATTGTTAGTTGCCATCATTCAGTTGGGCACTCTAGCGAGACTGCCGTAATAAACCGGAGGAAGGTGGGG
ATGACGTCAAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGCTGGTACAACGAGTC
GCAAGCCGGTGACGGCAAGCTAATCTCTGAAAGCCAGTCTCAGTTCGGATTGTAGGCTGCAACTCGCCTA
CATGAAGTCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACAC

ACCGCCCGTCACACCACGAGAGTTTGTAAACACCCGAAGTCGGTGAGGTAACCGTAAGGAGCCAGCCGCCT
AAGGTGGGATAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCT
CCTTGGTCATAGCTGTTT

>2290269|gb|U88435.1|Rahnella|RSU88435 Rahnella sp. 'CDC 21234' 16S
ribosomal RNA gene, partial sequence

AGATTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAGCGGCAGCGGGAA
GTAGCTTGCTACTTTGCCGGCGAGCGGCGGACGGGTGAGTAATGTCTGGGAAACTGCCTGATGGAGGGGG
ATAACTACTGGAACGGTAGCTAATACCGCATGACCTCGCAAGACCAAAGTGGGGGACCTTCGGGCCTCA
CGCCATCGGATGTGCCAGATGGGATTAGCTAGTAGGTGAGGTAATGGCTCACCTAGGCGACGATCCCTA
GCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTGTGAAGAAGGCCTTAGGGTTG
TAAAGCACTTTTCAGCGAGGAGGAAGGGTTTCAGTGTTAATAGCACTGAACATTGACGTTACTCGCAGAAGA
AGCACC GGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGGG
CGTAAAGCGCACGCAGGCGGTTTGTTAAGTCAGATGTGAAATCCCCGAGCTTAACTTGGAAGTGCATTT
GAAACTGGCAAGCTAGAGTCTTGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATC
TGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACAAAGACTGACGCTCAGGTGCGAAAGCGTGGGGAG
CAAACAGGATTAGATAACCTGGTAGTCCACGCTGTAAACGATGTCGACTTGAGAGTTGTGCCCTTGAGGC
GTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGA
ATTGACGGGGGCCCCGACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTAC
TCTTGACATCCAGAGAATTCGCTAGAGATAGCTTAGTGCTTCGGGAAGTCTGAGACAGGTGCTGCATGG
CTGTGCTCAGCTCGTGTTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTATCCTTTGTGTC
CAGCACGTAATGGTGGGAAGTCAAAGGAGACTGCCGGTGATAAACCGGAGGAAGGTGGGGATGACGTCAA
GTCATCATGGCCCTTACGAGTAGGGCTACACACGTGCTACAATGGCATATACAAAGAGAAGCAAAGTTCGC
GAGAGCAAGCGGACCTCATAAAGTATGTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCG
GAATCGCTAGTAATCGTAGATCAGAATGCTACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTC
ACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGAT
TCATGACTGGGGTGAAGTCGTAACAAGGTAACCGTAGGGGAACCTGCGGCTGGATCACCTCC

>110189035|gb|DQ819169.1|E.coli|Uncultured bacterium clone aab26f06 16S
ribosomal RNA gene, partial sequence (mouse-cecal)

AGAGTTTGATCCTGGGTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAACGGTAACAGGA
AGAAGCTTGCTTCTTTGCTGACGAGTGGCGGACGGGTGAGTAATGTCTGGGAAACTGCCTGATGGAGGGG
GATAACTACTGGAACGGTAGCTAATACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCTC
TTGCCATCGGATGTGCCAGATGGGATTAGCTAGTAGGTGGGGTAACGGCTCACCTAGGCGACGATCCCT
AGCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAG
TGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGGTT
GTAAAGTACTTTTCAGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTGCTCATTGACGTTACCCGCAAG
AAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTGG
GCGTAAAGCGCACGCAGGCGGTTTGTTAAGTCAGATGTGAAATCCCCGGGCTCAACCTGGGAAGTGCATC
TGATACTGGCAAGCTTGAGTCTCGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGAT
ATGGAGGAACACAGTGGCGAAGGCGGCTCTCTGGTCTGTAAGTACGCTGATGTGCGAAAGCGTGGGGA
TCAAACAGGATTAGATAACCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTAGGGGGGTTTCCG
CCCCCTTAGTGCTGCAGCTAACGCATTAAGCACTCCGCTGGGGAGTACGACCGCAAGGTTGAAACTCAA
GGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACC
AAATCTTGACATCCTTTGACCGCTCTAGAGATAGAGTTTCCCCCTTCGGGGACAAAGTGACAGGTGGTG
CATGGTTGTGCTCAGCTCGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTTAAGCTTA
GTTGCCATCATTAAGTTGGGCACTCTAGGTTGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGT
CAAATCATCATGCCCCCTTATGATTTGGGCTACACACGTGCTACAATGGATAATACAAAGGGCAGCGAACC
CGCGAGGTCAAGCAAATCCCATAAAATTATTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAG
CTGGAATCGCTAGTAATCGTAGATCAGCATGCTACGGTGAATACGTTCCCGGGTCTTGTACACACCGCCC
GTCACACCACGAGAGTTTGTAAACACCCGAAGCCGGTGGAGTAACCTT

>66878717|gb|AY959011.1|E.coli|Uncultured bacterium clone rRNA238 16S
ribosomal RNA gene, partial sequence

TCGCCCTTAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTCGAACGG
TAACAGGAATCAGCTTGCTGATTCGCTGACGAGTGGCGGACGGGTGAGTAATGTCTGGGAAACTGCCTGA

TGGAGGGGGATAACTACTGGAAACGGTAGCTAATACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTT
CGGGCCTCTTGCCATCGGATGTGCCAGATGGGATTAGCTAGTAGGTGGGGTAAAGGCTCACCTAGGCGA
CGATCCCTAGCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGA
GGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTCTGAAGAAGGCC
TTCGGGTTGTAAAGTACTTTCAGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTGCTCATTGACGTTACC
CGCAGAAGAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGA
ATTACTGGGCGTAAAGCGCACGTAGGCGGTTTGTAAAGTCAGATGTGAAATCCCCGGGCTCAACCTGGGA
ACTGCATCTGATACTGGCAAGCTTGAGTCTCGTAGAGGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATG
CGTAGAGATCTGGAGGAATACCGGTGGCGAAGGCGGCTCTCTGGTCTGTAAGTACGCTGAGGCTCGAAA
GCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAAGTGTGGAG
GGTTTCCGCCCTTCAGTGCTGCAGCAAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGA
AACTCAAAGGAATTGACGGGGGCGCCGACAAGCGGTGGAGCATGTGGTTTAATTGCAAGCAACGCGAAGA
ACCTTACCAGGTCTTGACATCCTTTGACCACTCTAGAGATGGAGCTTTCCCTTCGGGGACAAAAGTGACAG
GTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATGTTGGGTTAAGTCCCAGCAACGAGCGCAACCCTTA
TTGTTAGTTGCCATCATTTAGTTGGGCACTCTAGCGAGACTGCCGGTGACAGACCGGAGGAAGGTGGGGA
TGACGTCGAATCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGGAAGTACAACGAGTCG
CTAGACCGCGAGGTCATGCAAATCTCTTAAAGCTTCTCTCAGTTCGGATTGCAGGCTGCAACTCGCCTGC
ATGAAGCCGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACA
CCGCCCGTCACACCACGAGAGTTTGTAAACCCGAAGTCGGTGAGGTAACCTTTTTTGAGGCCAGCCGCCT
AAGGTGGGATAGATGATTGGGGTGAA

>4730879|dbj|D89332.1|Scardovia|Scardovia inopinata gene for 16S rRNA,
partial sequence, strain: DSM 10107

TTTCGATTCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTGAACGGGATCCTGCTTG
GTTTTTGCTGGGTGGGTGAGAGTGGCGAACGGGTGAGTAATGCGTGACTAACCTGCCGTGTAGTTGGGTA
TAGCTCCTGGAAACGGGTGGTAATACCGAATGGTCCACTGGGCTGCATGGTCTGGTGGGAAAGTTTTGTG
TGCTATGCGATGGGGTCGCTCCTATCAGCTTGTTGGTGGGGTGATGGCCTACCAAGGCTTCGACGGGTA
GCCGGCCTAAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTACGGGAGGCAGCAGT
GGGGAATATTGCACAATGGGGGGAACCCTGATGCAGCGACGCCGCGTGCGGGATGGAGGCCCTTCGGGTTG
TGAACCGCTTTTATTGGGGAGCAAGCTGGCCCTGTGTGGGTTGGTGAGTGTACTTGGTGAATAAGCACCG
GCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGTGCAAGCGTTGTCCGGATTTATTGGGCGTAAAG
GGCTCGTAGGCGGTTTCGTGCGCTCTGGTGTGAAAGCTTACTGCTTAACGGTGGGTTTTGCGTTGGATACGG
GCGGGCTTGAGTGAGTAGGGGAGACTGGAATTCTCGGTGTAACGGTGGAATGTGTAGATATCGGGAAGA
ACACCTATGGCGAAGGCAGGTCTCTGGGCTGTTACTGACGCTGAGGAGCGAAAGCGTGGGGAGCGAACAG
GATTAGATACCCTGGTAGTCCACGCTGTAAACGGTGACGCTGGATGTGGGGCCTATTTCCACGGGTTCT
GTGTCCGAGCTAACCGCTTAAGCGTCCCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAAGAAATTG
ACGGGGGCGCCGACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGAACCTTACCAGGGCTT
GACATGTGAGCGTTGATCTTAGAGATAGGGTTTCCCTTCGGGGCGCTTTACAGGTGGTGCATGGTCGTC
GTCAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGCCTTGTGTTGCCAGCG
GGTCGTGCCGGGGACTCACAAAGGACCGCCGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCAT
CATGCCCTTACGTCCTGGGCTTCACGCATGCTACAATGGCTGGTACAGCGGGATGCGATACGGTGACGT
GGAGCGGATCCTGTAAAACCGGTCTCAGTTCGGATCGGAGCCTGCAACTCGGCTCCGTGAAGGTGGAGTC
GCTAGTAATCGCGGATCAGCAGTGCCGCGGTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGT
CATGAAAGTGGGCAGCACCCGAAGCCGGTGGCCTAACCTTGTGGGGAGAGCCGTCTAAGGTGAGGTTTCG
CGATTGGGACTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCACCTCCTTA

>255708358|dbj|AB480776.1|E.coli|Escherichia coli gene for 16S ribosomal
RNA, partial sequence, strain: Acj 212

GAGAGTTTGATCCTGGCTCAGATTGAACGCTGGCGGCAGGCCTAACACATGCAAGTGAACGGTAACAGG
AAGAAGCTTGCTTCTTTGCTGACGAGTGGCGGACGGGTGAGTAATGTCTGGGAAACTGCCTGATGGAGGG
GGATAACTACTGGAACGGTAGCTAATACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTTCGGGCCT
CTTGCCATCGGATGTGCCAGATGGGATTAGCTAGTAGGTGGGGTAACGGCTCACCTAGGCGACGATCCC
TAGCTGGTCTGAGAGGATGACCAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCA
GTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGGT
GTAAAGTACTTTTCAGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTGCTCATTGACGTTACCCGCAGAA
GAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCAAGCGTTAATCGGAATTACTG

GGCGTAAAGCGCACGCAGGCGGTTTGTAAAGTCAGATGTGAAATCCCCGGGCTCAACCTGGGAACTGCAT
CTGATACTGGCAAGCTTGAGTCTCGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGA
TCTGGAGGAATACCGGTGGCGAAGGCGGCCCCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCGTGGGG
AGCAAACAGGATTAGATAACCTGGTAGTCCACGCCGTAAACGATGTGACTTGGAGGTTGTGCCCTTGAG
GCGTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAAT
GAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCT
GGTCTTGACATCCACAGAACTTTCCAGAGATGGATTGGTGCCTTCGGGAAGTGTGAGACAGGTGCTGCAT
GGCTGTCGTAGCTCGTGTGTGAAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTATCCTTTGTT
GCCAGCGGTCCGGCCGGGAACCTCAAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCA
AGTCATCATGGCCCTTACGACCAGGGCTACACACGTGCTACAATGGCGCATACAAAGAGAAGCGACCTCG
CGAGAGCAAGCGGACCTCATAAAGTGCCTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTC
GGAATCGCTAGTAATCGTGGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGT
CACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACCTTCGGGAGGGCGCTTACCACCTTTGTGA
TTCATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAG

>8038004|gb|AF257096.1|L.crispatus|Lactobacillus crispatus strain

ATCC33197 16S ribosomal RNA gene, partial sequence

GACGAACGCTGGCGGCGTGCCTAATACATGCAAGTCGAGCGAGCGGAACCTAACAGATTTACTTCGGTAAT
GACGTTAGGAAAGCGAGCGGCGGATGGGTGAGTAACACGTGGGGAACCTGCCCCATAGTCTGGGATACCA
CTTGAAACAGGTGCTAATACCGGATAAGAAAGCAGATCGCATGATCAGCTTTTAAAAGGCGGCGTAAGC
TGTCGCTATGGGATGACCCCGCGGTGCATTAGCTAGTTGGTAAGGCAAAGGCTTACCAAGGCGATGATGC
ATAGCCGAGTTGAGAGACTGATCGGCCACATTGGGACTGAGACACGGCCAAACTCCTACGGGAGGCAGC
AGTAGGGAATCTTCCACAATGGACGCAAGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGTTTTTCGGA
TCGTAAAGCTCTGTTGTTGGTGAAGAAGGATAGAGGTAGTAAGTGGCCTTTATTTGACGGTAATCAACCA
GAAAGTCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGATTTATT
GGGCGTAAAGCGAGCGCAGGCGGAAGAATAAGTCTGATGTGAAAGCCCTCGGCTTAACCGAGGAAGTGA
TCGGAAACTGTTTTTCTTGAGTGCAGAAGAGGAGAGTGGAATCCATGTGTAGCGGTGGAATGCGTAGAT
ATATGGAAGAACACCAGTGGCGAAGGCGGCTCTCTGGTCTGCAACTGACGCTGAGGCTCGAAAGCATGGG
TAGCGAACAGGATTAGATAACCTGGTAGTCCATGCCGTAAACGATGAGTGCTAAGTGTGAGGAGTTTTCC
GCCTCTCAGTGCTGCAGCTAACGCATTAAGCACTCCGCCTGGGGAGTACGACCGCAAGGTTGAAACTCAA
AGGAATTGACGGGGGGCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTAC
CAGGTCTTGACATCTAGTGCCATTTGTAGAGATACAAAGTTCCCTTCGGGGACGCTAAGACAGGTGGTGC
ATGGCTGTCGTAGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTGTTATTAG
TTGCCAGCATTAAGTTGGGCACTCTAATGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTC
AAGTCATCATGCCCCCTTATGACCTGGGCTACACACGTGCTACAATGGGCAGTACAACGAGAAGCGAGCCT
GCGAAGGCAAGCGAATCTCTGAAAGCTGTTCTCAGTTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGC
TGGAATCGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCG
TCACACCATGGGAGTCTGCAATGCCCAAAGCCGGTGGCCTAACCTTCGGGAAGGAGCCGTCTAAGGCAGG
GCAGATGACTGGGGTGAAGTCGTAACAAGGTAGCCGTAGGAGAACTGC

>18958005|gb|AY078425.1|L.amnionii|Leptotrichia amnionii 16S ribosomal
RNA gene, partial sequence

GGTGATCCAGCCGCACCTTCCGGTACGGATACCTTGTTCCNNCTCCACCCCAATCACTATCCACACCTTC
AGTACCTCCCTCCTTACGGTTAGGCCGGTAATTTTCAGGTGCAAACAACCTCTCGTGGTGTGACGGGCGGTG
TGTACAAGGCCCCGAGAACGTATTCACCGTGACATTGCTGATTCACGATTACTAGTGATTCCAACCTTCATG
AAGTCGAGTTGCAGACTTCAATCCGAACCTAAGAATAGCTTTTTTAAGTTTCGCCATGTATCGCTACAAAGC
TTCTCTTTGTACTACCCATTGTAGCACGTGTGTAGCCCAGATCATAAGGGGCATGATGACTTGACGTCAT
CCCCACCTTCCTCCTACTCTTCGTAGGCAGTTTCATTAGAGTCCCCAACTTAATGATGGCAACTAATGAT
AGGGGTTTTCGCTCGTTGCGGGACTTAACCCAAACATCTCACAAACAGAGCTGTGACAGCCATGCACCACC
TGTCTCTCGGTTCCCGAAGGCACAAGTATACTTCTATACTCTCCCGAGGATGTCAAGATCTGGTAAGGTT
CCTCGCGTTGCGTCGAATTAAACCACATGCTCCACCACTTGTGCGGGCCCCCGTCAATTCCCTTGAGTTT
CATTTCTGCAACGTACTCCCCAGGCGGATCACTTATCGCTTTTGCTTCGGCACAGAGACTTCGCATCCC
CACACCCAGTGATCATCGTTTACAGCTAGGACTACCAGGGTATCTAATCCTGTTTGCTCCCCTAGCTTTC
GCACTTCAGCGTCAGTTTCTGTCCAGTGAGTTATCTTCATCATCGGCATTCTTACACATATCTACGAATT
TCACCTCTACTCGTGTAGTTCCACCCACCTTTCCAGTACTCTAGTTCAACAGTTTTGTAGGCAAGCCTAT
GTTTGAGCCACAGGTTTTACCTTCAACTTGTCTTACCGCCTAGATGCCCTTTAAGCCCAATAATTCCGG

ATAACGCTCGCNACATACGTATTACCGCGGCTGCTGGCACGTATTTAGCCGTTGCTTCTTCTGTAGGTAC
CGTCATTTTTTTTCTTCCCTACTAAAAGTGTTTTACAGTCTTAAAACCTTCTTCACACACACAGAATTGCT
GGATCAGAGTTCCCTCCATTGTCCAATATTCCCCACTGCTGCCTCCCGTAGGAGTAAGGGCCGTATCTCA
GTCCCCCTGTGGCCGTCCACCCTCTCAGGCCGGCTACCTATCATCGCCTTGGAAGCTCTTACCTTACCA
ACTAGCTAATAGGACGCAAAGCTCTCCTTTAGTGCCGTAGCTTTCATTTGCATATCATGCGATATACTAA
CTTATCCAGTATTATCAGAAAGTTTCCCCCTGTTATCCCAGTCTAAAGGGCAAGTTCTTTACGCGTTACTC
ACCCGTCCGCCATGAGTCCATTTAGCAAGCTAAACTTCCTCATAGACTTGCATGTGTTAAGCATTCTGTC
AGCGTTTATCCTGAGCCAGGATC

>27530269|dbj|AB089057.1|Mycoplasma|Uncultured Mycoplasma sp. gene for
16S rRNA, partial sequence, clone: Rs-E42

GATTAAACGCTAGCGGTATGCCTAATACATGCAAGTCAAACGGCCAGCAATGGCAGTGGCAAACGGGTGAG
TAATACGTATCTAATCTACCCCTTTAGAGAAGAATAACTGATCGAAAGATTAGCTAATACTTCATAGGAAA
TTAGTTCACATGAATTAATTTTTTAAAGCTCCGTCTGGAGCGCTTTAGGATGAGGGTGCGGCTTATCAGAT
AGTTGGTGAGGTAACGGCCACCAAGTCAATGACGAGTAGCTATGCTGAGAGGTAGAATAGCCACAATGG
AACTGAGAAACGGTCCATACTCCTACGGGAGGCAGCAGTAGGGAATTTTTTACAATGGGCGAAAGCCTGA
TGGAGCAATACCGCGTGGATGATGAAGGTCTTTGGATTGTAAAATCCTTTTATTAGGGACGAACGATACT
AGTAGGAAATGATTAGTATTTGACTGTACCTTTTGAATAAGTAACGGCAAACCTATGTGCCAGCAGCCGCG
GTAATACATAGGTTACAAGCGTTATCCGGATTTACTGGGCGTAAAGCGAGCGCGGGCTGATTTACAAGTC
TGGTGTGAAATGCATTTGCTTAACAAATGTTTGCATTGGAACCTGTAAGTCTAGAGTATGATAGAGAGTT
TTAGAACTCCATGTGGAGCGGTGGAATGCGTAGATATATGGAAGAATACCAGTGGTGAAGACGAAAACCTT
AGGTCATAACTGACGCTTAGGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTAGTCCACAC
TGTAACGATGATCATTAGGTGTTGGTATCACTATAACCAGCGCCGAAGCTAACGCATTAAATGATCCGCC
TGGGTAGTACATTGCAAGAATGAAACTCAAACCGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGT
TGTTTAATTGACATCACACGCAAAACCTTACCAGGGTTTGACATATCTGGCAATGCTATAGAAATATAG
CGGAGGTTAACCGGAATACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGCTGAGATGTTGGGTTAAGTC
CCGCAACGAGCGCAACCCTTATTGCTAGTTACTTTATCTAGCGAGACTGCTAACGCAAGTTAGAGGAAGG
TGGGGATGACGTCAAATCATCATGCCCTTTATACCCTGGGGCTACAAACGTGCTACAATGGTCGGTACAAA
CTGTCGCGAAGCTGTAAAGTGGAGCCAATCAGAAAAAGCCGATCTCAGTTCAGATCGAGGGCTGCAATTC
GTCCTCGTGAAGTTGGAATCACTAGTAATCGCGAATAAGTCATGTCGCGGTGAATACGTTCTCGGGTCTT
GTACACACCGCCCGTCAAACCTATGAGAGCCGTTAATACCTAAAACCGTTTTTGCTAACCGCAAGGAGGCGA
ACGTCTAGGGTAGGAATGGTGATTGGAGTT

>343202531|ref|NR_042880.1|Pasteurella|Pasteurella bettyae strain CCUG
2042 16S ribosomal RNA, partial sequence

ATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAACGGTAGCACAGGGGAGCTTGCTCCCTGGGTG
ACGAGTGGCGGACGGGTGAGTAATGCTTGGGAATTTGGCTTTRTGGAGGGGGATAACTACGGGAAACTGTA
GCTAATACCGCGTAATGTCTACGGACTAAAGGGTGGGACTATTTGGCCACCTGCCATGAGATGAGCCCAA
GTGGGATTAGGTAGTTGGTGGGGTAAAGGCCTACCAAGCCGACGATCTCTAGCTGGTCTGAGAGGATGAC
CAGCCACACTGGAAGTGAAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
GGGGAACCCTGATGCAGCCATGCCGCGTGAATGAAGAAGGCCCTTCGGGTGTAAAGTTCTTTCGGTGATG
AGGAAGGCAGGTATTTTAATAGAATACTTGATTGACGTTAATCACAGAAGAAGCACCGGCTAACTCCGTG
CCAGCAGCCGCGGTAATACGGAGGGTGCGAGCGTTAATCGGAATAACTGGGCGTAAAGGGCATGCAGGCG
GTTGTTTAAGTGAGATGTGAAAGCCCCGGGCTTAACCTGGGAATTGCATTTTCAGACTGGACAGCTAGAGT
ACTTTAGGGAGGGGTAGAATTCACGCTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAATACCGAAGGCG
AAGGCAGCCCCTTGGGAATGTACTGACGCTCATATGCGAAAGCGTGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCTGTAAACGATGTGATTTGGGGATTGAGCAATAAGCTTGGTGCTCGAAGCTAACGTG
ATAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCGCAAG
CGGTGGAGCATGTGGTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCATAGAAGAAC
TCAGAGATGAGTTTGTGCCCTTCGGGAGCTATGAGACAGGTGCTGCATGGCTGTGCTCAGCTCGTGTGTG
AAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTATCCTTTGTTGCCAGCGACATGGTCGGGAACCTC
AAAGGAGACTGCCAGTGATAAAGTGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGTA
GGGCTACACACGTGCTACAATGGTGCATACAGAGGGAAGCGAGCCTGCGAGGGGGAGCGAATCTCAGAAA
GTGCATCTAAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGCAAATC
AGAATGTTGCGGTGAATACGTTCCCGGCCTT

>38260405|gb|AY362929.1|Actinobacillus|Actinobacillus arthritidis strain CCUG 24862 16S ribosomal RNA gene, partial sequence

ATTGAACGCTGGCGGCAGGCTTAACACATGCAAGTCGAACGGTAACAGGGATTAGCTTGCTAATTTGCTG
ACGAGTGGCGGACGGGTGAGTAATGCTTGGGAATCTGGCTCATGGAGGGGGATAACTACGGGAACTGTA
GCTAATACCGCGTAATATCTTCGGATTAAAGTGTGGGACCGCAAGGCCACATGCCATGAGATGAGCCCAA
GTGGGATTAGGTAGTTGGTGGGGTAAAGGCCTACCAAGCCGACGATCTCTAGCTGGTCTGAGAGGATGAC
CAGCCACACTGGAAGTACGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
GGGGAACCCTGATGCAGCCATGCCGCGTGAATGAAGAAGGCCTTCGGGTTGTAAAGTTCTTTCGGTAGCG
AGGAAGGTATCAAATTTAATAGATTTGGTAATTGACGTAACTACAGAAGAAGCACCGGCTAACTCCGTG
CCAGCAGCCGCGGTAATACGGAGGGTGCAGCGTTAATCGGAATAACTGGGCGTAAAGGGCACGCAGGCG
GTTGATTAAAGTGAAGTGTGAAAGCCCCGGGCTTAACCTGGGAATTGCATTTTCATACTGGTCAACTAGAGT
ACTTTAGGGAGGGGTAGAATTCCACGTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAATACCGAAGGCG
AAGGCAGCCCCCTTGGGAATGTACTGACGCTCATGTGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCTGTAAACGCTGTGATTTGGGGATTGGACTTTAAGTTTGGTGCCCGAAGCTAACGTG
ATAAATCGACCGCCTGGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGCCCGCACAAAG
CGGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTACTCTTGACATCCAAAGAAGAAC
TCAGAGATGAGTTTGTGCCTTCGGGAACCTTGAGACAGGTGCTGCATGGCTGTCGTCAGCTCGTGTGTG
AAATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCCTTATCCTTTGTTGCCAGCGGTTTCGGCCGGGAAC
AAAGGAGACTGCCAGTGATAAACTGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGAGTA
GGGCTACACACGTGCTACAATGGCGTATACAGAGGGAAGCAATATGGCGACATGGAGCGAATCTCACAAA
GTACGTCTAAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTCGGAATCGCTAGTAATCGCAAATC
AGAATGTTGCGGTGAATACGTTCCCGGGCCTT

>302129321|dbj|AB547683.1|P.disiens|Prevotella disiens gene for 16S ribosomal RNA, partial sequence, strain: JCM 6333 (88%)

TGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGAAACGGCAGAGAGTGCTTGC
ACACTTTGGACGTCGACCGGCGCACGGGTGAGTAACCGGTATCCAACCTGCCCTTTACTTGGGGATAACC
CGTTGAAAGACGGACTAATACCCAATGATATTCATTGATGACATCTGATTTGAATTAAAGATTTATCGGT
ATAGGATGGGGATGCGTCTGATTAGCTTGTGGTGGTGGTAAACGGCTCACCAAGGCTACGATCAGTAGGGG
TTCTGAGAGGAAGATCCCCACATTGGAAGTACGACACGGTCCAAACTCCTACGGGAGGCAGCAGTGAGG
AATATTGGTCAATGGACGAGAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTTGTAA
ACTGCTTTTGTGGGAATAATCGACATTACGTGTAATGTTTTGCATGTACCATTTCGAATAAGGACCGGC
TAATTCGCTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTAAAGGG
AGTGTAGGCGGTTGGTTAAGCGTGTGTGAAATGTAGATGCTCAACATCTGACTTGCAGCGCGAACTGGC
TGACTTGAGTACACACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGAAGAAC
TCCGATTGCGAAGGCAGCTTACGGGAGTGTTACTGACGCTTAAAGCTCGAAGGTGCGGGTATCGAACAGGA
TTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCACCTGGTGTAGCGGCTAAG
CGAAAGCATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCC
CGCACAAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAATTGTAG
GAGCACGATACAGAGATGTTGAGGTCCTTCGGGATTCTATGAAGGTGCTGCATGGTTGTCGTCAGCTCG
TGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTTTCCTTAGTTGCCATCAGGTAATGCT
GGGCACTCTGAGGATACTGCCACCCTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCT
TACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAATGTTGGTTGCATGTAAATGTAATCTAAT
CTTTAAAGCCGGTCCCAGTTCGGACTGAGGTCTGCAACCCGACCTCACGAAGCTGGATTTCGCTAGTAATC
GCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCC
GGGGGTGCCTGAAGTTTCGTAACCGCAAGGAGCGACCTAGGGCAAACCTGGTAATTGGGGCTAAGTCGTAA
CAAGGTAACC

>S002290667|PG21|FP236530|M.hominis|Mycoplasma hominis

TTTTATAAGAGTTTGATCTTGGCTCAGGATGAACGCTGGCTGTGTGCCTAATACATGCATGTCGAGCGAGGTT
AGCAATA
ACCTAGCGGCGAATGGGTGAGTAACACGTGCTTAATCTACCTTTTAGATTGGAATACCCATTGGAACAATGG
CTAATGC
CGGATACGCATGGAACCGCATGGTTCCGTTGTGAAAGGCGCTGTAAGGCGCCACTAAAAGATGAGGGTGCGGA
ACATTAG

TTAGTTGGTGAGGTAATGGCCCACCAAGACTATGATGTTTAGCCGGGTCGAGAGACTGAACGGCCACATTGGG
ACTGAGA
TACGGCCCAAACCTCTACGGGAGGCAGCAGTAGGGAATATTCACAATGAGCGAAAGCTTGATGGAGCGACAC
AGCGTGC
ACGATGAAGGTCTTCGGATTGTAAAGTGCTGTTATAAGGGAAGAACATTTGCAATAGGAAATGATTGCAGACT
GACGGTA
CCTTGTCAGAAAGCGATGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGTGCGAAGCGTTATCCGGAA
TTATTGG
GCGTAAAGCGTTTCGTAGGCTGTTTGTAAAGTCTGGAGTTAAATCCCGGGGCTCAACCCCGGCTCGCTTTGGAT
ACTAGCA
AACTAGAGTTAGATAGAGGTAAGCGGAATTCCATGTGAAGCGGTGAAATGCGTAGATATATGGAAGAACACCA
AAGGCGA
AGGCAGCTTACTGGGTCTATACTGACGCTGAGGGACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGT
AGTCCAC
GCCGTAAACGATGATCATTAGTCGGTGGAGAATCACTGACGCAGCTAACGCATTAAATGATCCGCCTGAGTAG
TATGCTC
GCAAGAGTGAACTTAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTTGAAGATAC
ACGGA
ACCTTACCCACTCTTGACATCCTTCGCAAAGCTATAGAGATATAGTGGAGGTTATCGGAGTGACAGATGGTGC
ATGGTTG
TCGTCAGCTCGTGTGCTGAGATGTTTGGTCAAGTCCTGCAACGAGCGCAACCCCTATCTTTAGTTACTAACAT
TAAGTTG
AGGACTCTAGAGATACTGCCTGGGTAAGTGGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCTCTTACGA
GTGGGGC
CACACACGTGCTACAATGGTTCGGTACAAAGAGAAGCAATATGGCGACATGGAGCAAATCTCAAAAAGCCGATC
TCAGTTC
GGATTGGAGTCTGCAATTTCGACTCCATGAAGTCGGAATCGCTAGTAATCGCAGATCAGCTATGCTGCGGTGAA
TACGTTT
TCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGCTGGTAATACCCAAAGTCGGTTTGCTAACCTCGGAG
GCGACCG
CCTAAGGTAGGACTGGTGACTGGGGTGAAGTCGTAACAAGGTATCCCTACGAGAACGTGGGGATGGATCACCT
CCTTT
>7008166|gb|AF221119.1|M.spermatophilum|Mycoplasma spermatophilum isolate
AH159(T) 16S ribosomal RNA gene, partial sequence
CTGGCTGTGTGCCTAATACATGCATGTCGAGCGAAGTAGCAATACTTAGCGGCGAATGGGTGAGTAACAC
GTGCTCAACGTGCCCTCAAGATTGGGATAGCAACTGGAAACAGTTGATAATACCAATACTTATATTTTT
CGCATGAAGAATATATAAAAGGAGCGTTTGTCTCCGCTCGAGGATCGGGGTGCGTAACATTAGCTAGTTGG
TGAGGTAACGGCCACCAAGGCGATGATGTTTAGCGGGGTTGAGAGACTGAACCGCCACACTGGGACTGA
GATACGGCCAGACTCCTACGGGAGGCAGCAGTAGGGAATATTCACAATGAACGAAAGTTTGATGGAGC
GACACAGCGTGCAGGATGAAGGTCCTATGGATTGTAACTGCTGTGGTAAGGGAAGAAAAAGTAGCTTAG
GAAATGAAGTTACATTGACGGTACCTTATTAGAAAGCAACGGCTAACTATGTGCCAGCAGCCGCGGTAAT
ACATAGGTTGCAAGCGTTATCCGGAATTATTGGGCGTAAAGCATCTGTAGGTTGTTTGTAAAGTCTGGCG
TCAAATTTTGGGGCTCAACCCCAAATCGCGTTGGTAACTGGCAGACTAGAGTTATGTAGAGGTTAGCAGA
ATTCTTGTGAAGCGGTGAAATGCGTAGATATAAGGAAGAATATCAATATGGCGAAGGCAGCTAACTGGA
CATACACTGACACTGAGAGATGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCCT
AAACGATGATCATTAGCTGATGGAGAATTCATCGGCGCAGCTAACGCATTAAATGATCCGCCTGAGTAGT
ACGTTTCGCAAGAATAAACTTAAAGGAATTGACGGGGATCCGCACAAGCGGTGGAGCATGTGGTTTAATT
TGAAGATACGCGTAGAACCTTACCCACTCTTGACATCTTCTGCAATGCTATGGAGACATAGCGGAGGTTA
ACAGAATGACAGATGGTGCATGGTTGTCGTGAGCTCGTGTGCTGAGATGTTTGGTTAAGTCCTGCAACGA
GCGCAACCCTTATCCTTAGTTACCATCATTTAGTTGGGGACTCTAGGGAGACTGCCCCGAGTAATCGGGAG
GAAGGTGGGGATGACGTCAAATCATCATGCCTCTTACGAGTGGGGCAACACACGTGCTACAATGGACGGT
ACAAAGAGAAGCGAAGTGGTGACATGGAGCAAACCTCAAAAAACCGTTCTCAGTTCGGACTGTAGTCTGC
AACTCGACTACACGAAGTCGGAATCGCTAGTAATCGTAGATCAGCTACGCTACGGTGAATACGTTCTCGG
GTCTTGTACACACCGCCCGTCAAACCATGGGAGCTGGTAATGCCCGAAGTCGGTTTATAAACAACTGCC

TAAGGCAGGACTGGTGACTGGGGTTAAGT

>281186793|gb|GU227398.1|U.diversum|Ureaplasma diversum strain ATCC 49783
16S ribosomal RNA gene, partial sequence

ATACATGCAATCGAACGAAGCCTTTTTGGCTTAGTGGTGAACGGGTGAGTAACACGTATCCAATCTACCC
TTAAGATTGGGATAACTAGTCGAAAGATTAGCTAATACCGAATAATGACATTCTTTTGCATGAAAGAATG
TAGAAAGTTGCGTTTGCACGCTTTTGGATGAGGGTGCGACGTATCAGATAGTTGGTGAGGTAACGGCTC
ACCAAGTCATTGACGCGTAGCTGTACTGAGAGGTAGAACAGCCACAATGGGACTGAGACACGGCCCATAC
TCCTACGGGAGGCAGCAGTAGGGAATTTTTACAATGGGCGAAAGCCTTATGAAGCAATGCCGCGTGAAC
GATGAAGGTCTATAAGATTGTAAAGTTCTTTTATTTGGGAAGAACCACTAAAATAGGAAATGATTTTAGT
TTGACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGATGCAAG
CGTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGATTTGTAAGTTTGGTATGAAATCTAGATGC
TTAACGTCTAGCTGTATCAAAAACCTACGAATCTAGAGTGTAGCAGAGAGTTGGGGAACCTCCATGTGGAGC
GGTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGCCAACCTTGGACTATTACTGACGCTTA
GGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATCATCATTA
ATGTCCGGCTCGATTATGAGTCGGTGTTGTAGCTAACGCATTAAATGATGTGCCTGGGTAGTACATTCGCA
AGAATGAAACTCAAACCGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTTGACAATA
CACGTAGAACCTTACCTAGGTTTGAATCTATTGCAATGCTATAGAAATATAGCGGAGGTTACAATATGA
CAGTGGTGCATGTTGTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCT
TTCGCTAGTTAATTTATCTATCGATACTGCTACCGCAAGGTAGAGGAAGGTGGGGATGACGTCAAATCAT
CATGCCCCCTTATATCTAGGGCTGCAAACGTGCTACAATGGCTAATACAAACAGCTGCAATTCCGCAAGGT
TGAGCGAATCTGATAAAGTTAGTCTCAGTTCGGATAGAGGGCTGCAATTCGCCCTCTTGAAGTTGGAATC
ACTAGTAATCGCGAATCAGACATGTCGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCAAAC
TATGGGAGCCGGAATATCTGAAACCGTACTGTAACCTTTTTG

>281186792|gb|GU227397.1|U.diversum|Ureaplasma diversum strain ATCC 49782
16S ribosomal RNA gene, partial sequence

ATACATGCAATCGAACGAAGCCTTTTTGGCTTAGTGGTGAACGGGTGAGTAACACGTATCCAATCTACCC
TTAAGTTTGGGATAACTAGTCGAAAGATTAGCTAATACCGGATAATAACATTTACTTGCATGAGTGAATG
TAGAAAGTTGCGTTTGCACGCTTTTGGATGAGGGTGCGACGTATCAGATAGTTGGTGAGGTAACGGCTC
ACCAAGTCATTGACGCGTAGCTGTACTGAGAGGTAGAACAGCCACAATGGGACTGAGACACGGCCCATAC
TCCTACGGGAGGCAGCAGTAGGGAATTTTTACAATGGGCGAAAGCCTTATGAAGCAATGCCGCGTGAAC
GATGAAGGTCTATAAGATTGTAAAGTTCTTTTATTTGGGAAGAACCACTAAAATAGGAAATGATTTTAGT
TTGACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGATGCAAG
CGTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGATTTGTAAGTTTGGTATGAAATCTAGATGC
TTAACGTCTAGCTGTATCAAAAACCTACGAATCTAGAGTGTAGCAGAGAGTTGGGGAACCTCCATGTGGAGC
GGTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGCCAACCTTGGACTATTACTGACGCTTA
GGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATCATCATTA
ATGTCCGGCTCGATTATGAGTCGGTGTTGTAGCTAACGCATTAAATGATGTGCCTGGGTAGTACATTCGCA
AGAATGAAACTCAAACCGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTTGACAATA
CACGTAGAACCTTACCTAGGTTTGAATCTATTGCAATGCTATAGAAATATAGCGGAGGTTACAATATG
ACAGGTGGTGCATGGTTGTGTCGTCAGCTCGTGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACC
CCTTTCGCTAGTTAATTTATCTATCGATACTGCTACCGCAAGGTAGAGGAAGGTGGGGATGACGTCAAAT
CATCATGCCCCCTTATATCTAGGGCTGCAAACGTGCTACAATGGCTAATACAAACAGCTGCAATTCCGCAA
GGTTGAGCGAATCTGATAAAGTTAGTCTCAGTTCGGATAGAGGGCTGCAATTCGCCCTCTTGAAGTTGGA
ATCACTAGTAATCGCGAATCAGACATGTCGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCA
AACTATGGGAGCCGGTAATATCTGAAACCGTACTGTAACCTTTTTG

>281186787|gb|GU227392.1|Ureaplasma|Ureaplasma sp. USP45 16S ribosomal
RNA gene, partial sequence

ATACATGCAATCGAACGAAGCCTTTTTGGCTTAGTGGTGAACGGGTGAGTAACACGTATCCAATCTACCC
TTAAGTTTGGGATAACTAGTCGAAAGATTAGCTAATACCGGATAATAACATTTGCTTGCATGAGTGAATG
TAGAAAGTTGCGTTTGCACGCTTTTGGATGAGGGTGCGACGTATCAGATAGTTGGTGAGGTAACGGCTC
ACCAAGTCATTGACGCGTAGCTGTACTGAGAGGTAGAACAGCCACAATGGGACTGAGACACGGCCCATAC
TCCTACGGGAGGCAGCAGTAGGGAATTTTTACAATGGGCGAAAGCCTTATGAAGCAATGCCGCGTGAAC
GATGAAGGTCTATAAGATTGTAAAGTTCTTTTATTTGGGAAGAACCACTAAAATAGGAAATGATTTTAGT
TTGACTGTACCATTTGAATAAGTATCGGCTAACTATGTGCCAGCAGCCGCGGTAATACATAGGATGCAAG

CGTTATCCGGATTTACTGGGCGTAAAACGAGCGCAGGCGGATTCGTAAGTTTGGTATGAAATCTAGATGC
TTAACGTCTAGCTGTATCAAAAACCTACGAATCTAGAGTGTAGCAGAGAGTTGGGGAACCTCCATGTGGAGC
GGTAAAATGCGTAGATATATGGAAGAACACCGGTGGCGAAGGCGCCAACCTGGACTATTACTGACGCTTA
GGCTCGAAAGTGTGGGGAGCAAATAGGATTAGATACCCTAGTAGTCCACACCGTAAACGATCATCATTAA
ATGTCGGCTCGATTATGAGTCGGTGTGTAGCTAACGCATTAAATGATGTGCCTGGGTAGTACATTCGCA
AGAATGAAACTCAAACGGAATTGACGGGGACCCGCACAAGTGGTGGAGCATGTTGCTTAATTTGACAATA
CACGTAGAACCTTACCTAGGTTTGACATCTATTGCAATGCTATAGAAATATAGCGGAGGTTAACAATATG
ACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTGCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACC
CCTTTCGCTAGTTAATTTATCTATCGATACTGCTACCGCAAGGTAGAGGAAGGTGGGGATGACGTCAAAT
CATCATGCCCCCTTATATCTAGGGCTGCAAACGTGCTACAATGGCTAATACAAACAGCTGCAAAACCGTAA
GGTGGAGCGAATCTGATAAAGTTAGTCTCAGTTCGGATAGAGGGCTGCAATTGCCCCCTCTTGAAGTTGGA
ATCACTAGTAATCGCGAATCAGACATGTCGCGGTGAATACGTTCTCGGGTCTTGTACACACCGCCCGTCA
AACTATGGGAGCCGGTAATATCTGAAACCGTACTGTTAACCTTTTG

>164460338|gb|EU188962.1|Pv.123b-95|

CCCTATGGGTGTAAACTGCTTTTATGTGGGGATAAAGTGCGTGACGTGTCATGCATTGCAGGTACCACA
TGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTT
ATTGGGTTTTAAAGGGAGCGTAGGCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGCTT
GCAGCGCGAAGTGGTCGACTTGAGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTA
GATATCATGACGAACCTCCGATTGCGCAGGCAGCTTACTGTAGCATAACTGACGCTGATGCTCGAAAGTGC
GGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCTCGCTATTCGTCCTAT
TTGGATGAGTGGCCAAGTGAAAACATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAA
AGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTAC
CCGGGCTTGAAGTGC CGGCGAACGATCCAGAGATGGTGAGGCCCTCGGGGCGCCGGTGGAGGTGCTGCA
TGGTTGTCGTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTCTCCGTAGT
TGCCATCAGGTAGTGCTGGGCACCTGCGGACACTGCCACCGCAAGGTGCGAGGAAGGTGGGGATGACGT
CAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGCACAGCGAGTCGGCCGCG
CGCAAGCTCGGTCCAATCAAGAAATCCCCCTCAGTTTCGGACTGGGGTCTGCAACCCGAC

>164460319|gb|EU188943.1|Pv.123f3-83|

GCAGGATGACGGCCCTATGGGTGTAAACTGCTTTTATGTGGGGATAAAGTGCGTGACGTGTCATGCATT
GCAGGTACCACATGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCG
TTATCCGGATTTATTGGGTTTTAAAGGGAGCGTAGGCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTC
AACCGGTGGCTTGACAGCGCGAAGTGGTCGACTTGAGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCG
GTGAAATGCTTAGATATCATGACGAACCTCCGATTGCGCAGGCAGCTTACTGTAGCATAACTGACGCTGAT
GCTCGAAAGTGC GGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCG
TGTTAGCACCTAGTGTTAGCGGCTAAGCGAAAGCATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGG
TGAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGA
GGAACCTTACCCGGGCTTGAATTGCAGATGTTTATATCAGAGATGATATATTCCCTTCGGGGCATTTGTG
AAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCC
CTTTTTTTAGTTGCCATCAGGTAGTGCTGGGCACTCTAGAGATACTGCCACCGTAAGGTGTGAGGAAGGT
GGGGATGACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGAG
AGTTGGTTGTACGCAAGTGCAATCTAATCCTAAAAACCATTTCTCAGTTTCGGAAGTGGGGTCT

>164460332|gb|EU188956.1|Pv.6BV-87|

TACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTTAAAGGGAGCGTAGGCTGTTTGTTAAGCGTGTT
GTGAAATGTAAGAGCTCAACTTTTAGATTGCAGCGCGAAGTGGCAGACTTGAGTGCGCACAACGTAGGCG
GAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGACGAACCTCCGATTGCGAAGGCAGCTTACGGGA
GCGCAACTGACGCTAAAGCTCGAAGGTGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGT
AAACGATGGATGCCCCGTGTTAGCACCTAGTGTTAGCGGCTAAGCGAAAGCATTAAGCATCCCACCTGGG
GAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTT
AATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAGTGCAGCGAACGATACAGAGATGTTGAGGCC
CTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCC
ATAACGAGCGCAACCCCTTTCTTTAGTTGCCATCAGGTAATGCTGGGCACTCTATGGATACTGCCACCGT
AAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTAC
AATGGGGCATACAGAGTGTTGGCTTAACGCAAGTTTGGTCTAATCTTCAAAGTGTCTCCAGTTTCGGATT
GGGGTCTGCAACCCGACCCCATGAAGCTGGATTGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATA

CGTTCCCGGG

>164460316|gb|EU188940.1|Pv.127b-13|

AAATGTACCGGCTCAACCGGTGAATTGCAGCGCGAACTGTTTGGCTTGAGTGCACGGTAAGCAGGCGGAA
TTCATGGTGTAGCGGTGAAATGCTTAGATATCATGAAGAACTCCGATTGCGAAGGCAGCTTGCTGCAGTG
CGACTGACGCTGATGCTCGAAGGTGCGGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAA
CGATGGATGCCCCGCTGTCCGCCTTTTGTGGCGGGTGGCCAAGCGAAAGCGTTAAGCATCCCACCTGGGGA
GTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAA
TTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAGTGCAGGTAACGATACAGAGATGTTGAGGCCCT
TCGGGGCGCCGGTGGAGGTGCTGCATGGTTGTCGTGAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCAT
AACGAGCGCAACCCCTTTTTTTCAGTTGCCATCAGGTAATGCTGGGCACTCTGGAGATACTGCCACCGCAA
GGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAA
TGGGGCATAACAGAGTGTGGCTTAACGCAAGTTTGGTCTAATCTTCAAAGTGTCTCCAGTTTCGGACTGG
GGTCTGCAACCCGACCCACGAAGCTGGATTTCGTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACG
TTCCCGGG

>164460321|gb|EU188945.1|Pv.136b-68|

TCATGAAGAACTCCGATTGCGAAGGCAGCTTGCTGCAGTGCGACTGACGCTGATGCTCGAAGGTGCGGGT
ATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTCCGCCTTTTGTGG
CGGGTGGCCAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAA
TTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGG
CTTGAAGTGCAGTGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTT
GTCGTGAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTCAGTTGCCA
TCAGGTAATGCTGGGCACTCTGGAGATACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAAT
CAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTTAACGCAA
GTTTGGTCTAATCTTCAAAGTGTCTCCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGAT
TCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGG

>164460379|gb|EU189003.1|Pv.123b-4|

TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAGTGTCTTTTATGTGGGGATAAAGTGCAGCGACGTGTCGTGCATTGCAGGTACCACATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGTAGGCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGCTTGACGCGCGAA
CTGGTTCGACTTGAGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
GGAAGTCCGATTGCGAAGGCAGCTTGCTGCAGTGCGACTGACGCTTAGGCTCGAAGGTGCGGGTATCAAA
CAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTCCGCCCATTCTGTGGCGGGT
GGCCAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGAC
GGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGA
ACTGCCGGCGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCCGGTGGAGGTGCTGCATGGTTGTCGT
CAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTCTCTTCAGTTGCCATCAGG
TGATGCTGGGCACTCTGGAGACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCA
CGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAACGTTCGGTTCAA

>164460361|gb|EU188985.1|Pv.123b-9|

GTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAG
GCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGCTTGACGCGCGAACTGGTGCAGTTG
AGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGACGAACTCCGATT
GCGCAGGCAGCTTACTGTAGCATAACTGACGCTGATGCTCGAAAGTGCGGGTATCAAACAGGATTAGATA
CCCTGGTAGTCCGCACGGTAAACGATGGATGCTCGCTATTCGTCTCTATTGAGTGGTGGCCAAAGTAAA
ACATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGGCCCGCAC
AAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAGTGCAGCGAA
CGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGTGAGCTCGTGCCG
TGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTTTCTTTAGTTGCCATCAGGTAATGCTGGGCA
CTCTATGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGT
CCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTTAACGCAAGTTTGGTCTAATCTTCA
AAGTGTCTCCAGTTTCGGATTGGGGTCTGCAACCCGACCCCATGAAGCTGGATTTCGTAGTAATCGCGCA
TCAGCCATGGCGCGGTGAATACGTTCCCGGG

>164460393|gb|EU189017.1|Pv.113s1-20|
TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGACGACGGCCCTATGGGT
TGTAAGTACTGCTTTTATGTGGGGATAAAGTGCCTGACGTGTCATGCATTGCAGGTACCACATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGTAATACGGAAGGTCCGGGCGTTATCCGGATTATTGGGTTTA
AAGGGAGCGTAGGCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGCTTGCAGCGCGAA
CTGGTCGACTTGAGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
CGAACTCCGATTGCGCAGGCAGCTTACTGTAGCATAACTGACGCTGATGCTCGAAAGTGCGGGTATCAAA
CAGGATTAGATACCTGGTAGTCCGCACGGTAACGATGGATGCTCGCTATTTCGTCCGTTTAGGATGAGT
GGCCAAGTGAAGAACATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGAC
GGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGA
ACTGCCAGCGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGT
CAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCTTTTCTTTAGTTGCCATCAGG
TGATGCTGGGCACTCTATGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCA
CGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTTGGCTTAA
>99907986|gb|DQ518919.1|P.timonensis|
GATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGCAGGGTAACATGAGGAAAGCTTGCTTTCCCTTGA
TGACGACTGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCCATAACTACGGGATAACCCGTTGAAAGA
CGGCCTAATACCGTATGAYATCGTTTGCTGACATCAAATAACGATTAAAGGTTTAGCGGTTATGGATGGG
GATGCGTCTGATTAGCTTGTTGGCGGGGTAACGGCCACCAAGGCTACGATCAGTAGGGGTTCTGAGAGG
AAGGTCCCCACATTGGAAGTGAAGACACGGTCCAACTCCTACGGGAGGCAGCAGTGAGGAATATTGGTC
AATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTTGTAAACTGCTTTTA
TGTGGGGATAAAGTGCCTGACGTGTCATGCATTGCAGGTACCACATGAATAAGGACCGGCTAATTCCGTG
CCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTAAAGGAGCGTAGGCT
GTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGCTTGCAGCGCGAACTGGTCGACTTGAGT
ATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGACGAACTCCGATTGCG
CAGGCAGCTTACTGTAGCATAACTGACGCTGATGCTCGAAAGTGCGGGTATCAAACAGGATTAGATACCC
TGGTAGTCCGCACGGTAACGATGGATGCTCGCTATTTCGTCTATTTGGATGAGTGGCCAAGTGAAGACA
TTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCGCACAAG
CGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAGTCCAGCGAACGA
TACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTGCTCAGCTCGTGCCGTGA
GGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCTTTTCTTTAGTTGCCATCAGGTGATGCTGGGCACTC
TATGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCG
GGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTTGGCTTAACGCAAGTTTGGTCTAATCTTCAAAG
TGTCTCCCAGTTCCGATTGGGGTCTGCAACCCGACCCCATGAAGCTGGATTTCGCTAGTAATCGCGCATCA
GCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCTGGGGGTGC
CTGAAGTCCGTAACCGTTAAGGAGCGGCCTAGGGCAAACTGGTGATTGGGGCT
>294430|gb|L16476.1|P.buccalis|
TACAATGTAGAGTTTGATCCTGGCTCAGGATNAACGCTAGCTACAGGCTTAACACATGCAAGTCGCAGGG
TAACGTGAGGGAAGCTTGCTTCCCTTGACGACGACTGGCGCACGGGTGAGTAACGCGTATCCAACCTTCC
CATGACCACGGGATAACCCGTTGAAAGACGGACTAATACCGTATGACGTCGTTTGCTGACATCAAATAAC
GATTAAAGGTTTAGCGGTGATGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAACGGCCACCAA
GGCGACGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAAGACACGGTCCNAACTCCTA
CGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGA
CGGCCCTATGGGTTGTAAACTGCTTTTATGCGGGGATAAAGTGYGCGACGTGTCGTGCATTGCAGGTACC
GCATGAATAAGGACCGGCTNATTCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCNGGCGTTATCCGGA
TTTATTGGGTTTNNAGGGAGCGTAGGCCGCCAGGTAAGCGTGTTGTGAAATGTACCGGCTCAACCGGTNA
ATTGCAGCGCGAACTGTCTGGCTTGAGTGCACGGTAAGCAGGCGGAATTCATGGTGTAGCGGTGAAATGC
TTAGATATCATGAAGAACTCCGATTGCGAAGGCAGCTTGCTGCAGTGCAGTGCAGCTGATGCTCGAAGG
TGCGGGTATCAAACAGGATTAGATACCTGGTAGTCCGCACGGTAACGATGGATGCCCCCTGTTCCGCCT
TTTTGTGGCGGNTGGCCAAGCGAAAGCGTTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACT
CAAAGGAATTGACGGGGGCGCCACAAGCGGAGGAACATGTGGTTTAATTCGATGNTACGCGAGGAACCT
TACCCGGGCTTGAAGTGCAGTGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTG
CATGGTTGTGCTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCNNTTTTCA
GTTGCCATCAGGTAATGCTGGGCACTCTGGAGATACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGAC

GTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTT
AACGCAAGTTTGGTCTAATCTTCAAAGTGTCTCCAGTTCCGACTGGGGTCTGCAACCCGACCCACGAA
GCTGGATTGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGC
CCGTCAAGCCATGAAAGCCGGGGTGCCTGAAGTCCGTAACCGTCAAGGAGCGGCCTAGGGCAAACTGG
TGAT

>294419|gb|L16465.1|P.corporis|

TACAATGGAGAGTTTGATCCTGGCTCAGGATNAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGG
AAACGGCATTAAAGTGCTTGCACTTTTTGGACGTGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTG
CCCCTTACCAGGGAATAACCCGTTGAAAGACGGACTAATGCCCTATGGAGTCCTTTGACGGCATCAGATT
AGGACTAAAGATTTCATCGGTATGGGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAACGGCCACC
AAGGCATCGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATAGGAAGTGAACACGGTCCTAACTCC
TACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGCTAGCCTGAACCAGCCAAGTAGCGTGCAGGAT
GACGGCCCTATGGGTTGTAACTNCTTTTATGCGGGGATAAAGTCACCCACGTGTGGGTNTTTCAGGTA
CCGCATGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCG
GATTTATTGGGTTTAAAGGGAGTGTAGGCGGCCTGTTAAGCGTGTGTGAAATGTAGATGCTCAACATCT
GAACTGCAGCGCGAACTGGCTGGCTTGAGTACACGCAACGTGGGCGGAATTCATGGTGTAGCGGTGAAAT
GCTTAGATATCATGAGGAACTCCTATTGCGAAGGCAGCTCACGGGAGTGTCACTGACGCTTAAGCTCGAA
GGTGCGGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTTGGC
GCTTTGCGTCAGCGGCTAAGCGAAAGCATTAAAGCATCCNACCTGGGGAGTACGCCGGCAACGGTGAAACT
CAAAGGAATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCT
TACCCGGGCTTGAATTGCAGAGGAAAGATCCAGAGATGGTGATNCCCTTCGGGGTCTCTGTGAAGGTGCT
GCATGGTTGTGCTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCNNTTTC
GGTTGCCATCAGGTGATGCTGGGCACTCCGGGGACACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGA
CGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGGGCAGGTG
CAATGCAAATTGCATCAAATCTATAAATCCGGTCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGA
AGCTGGATTGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCG
CCCGTCAAGCCATGAAAGCNGGGGGTGCCTGAAGTTCGTAACCGCAAGGAGCGACCTAGGGCAAACTGG
TGA

>66878632|gb|AY958926.1|Pv.rRNA153|

CGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGA
AACGGCATTAAAGTGCTTGCACTTTTTGGACGTGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGC
CCCTTACCAGGGAATAACCCGTTGAAAGACGGACTAATGCCCTATGCAGTCCTTTGACGGCATCAGATTA
GGACTAAAGATTTATCGGTATGGGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAACGGCCCACCA
AGGCATCGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATAGGAAGTGAACACGGTCCTAACTCCT
ACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGCTAGCCTGAACCAGCCAAGTAGCGTGCAGGACG
ACGGCCCTATGGGTTGTAACTGCTTTTATGCGGGGATAAAGTCACCCACGTGTGGGTGTTTGCAGGTAC
CGCATGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGG
ATTTATTGGGTTTAAAGGGAGTGTAGGCGGCCTGTTAAGCGTGTGTGAAATGTAGATGCTCAACATCTG
AACTGCAGCGCGAACTGGCTGGCTTGAGTACACGCAACGTGGGCGGAATTCATGGTGTAGCGGTGAAATG
CTTAGATATCATGAGGAACTCCTATTGCGAAGGCAGCTCACGGGAGTGTCACTGACGCTTAAGCTCGAAG
GTGCGGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTTGGCG
CTTTGCGTCAGCGGCTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTC
AAAGGAATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTT
ACCCGGGCTTGAATTGCAGAGGAAAGATCCAGAGATGGTGATGCCCTTCGGGGCCTCTGTGAAGGTGCTG
CATGGTTGTGCTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTTTTCCG
GTTGCCATCAGGTGATGCTGGGCACTCCGGGGACACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGAC
GTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGGGCAGGTGC
AATGCAAATTGCATCAAATCTATAAATCCGGTCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAA
GCTGGATTGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGC
CCGTCAAGCCATGAAAGCCGGGGTGCCTGAAGTTCGTAACCGCAAGGAGCGACCTAGGGCAAACTGGT
GATTGGGGCTAAGTCGTAACAAGGTAACCGTAAAGG

>164460360|gb|EU188984.1|Pv.112Q-24|

ACGAACTCCGATTGTGAAGGCAGCTTACGGGAGNGCAACTGACGCTAAAGCTCGAAGGTGCGGGTATCGA
ACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCACCTAGTGTTAGCG

GCTAAGCGAAAGCATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACG
GGGGCCCGCACAAGCGGCGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAA
TTGCAGATGTTTATATCAGAGATGATATATTCCCTTCGGGGCATTGTGAAGGTGCTGCATGGTTGTCGT
CAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTAGTTGCCATCAGG
TAGTGCTGGGCACTCTAGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCA
CGGCCCTTACGTCCGGGGCTACACACGTGTTNCAATGGGTGGTACAGAGAGTTGGTTGTACGCAAGTGCG
ATCTAATCCTAAAAACCATTTCTCAGTTCGGAAGTGGGGTCTGCAACCCGACCCACGAAGCTGGATTGCT
AGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGG

>164460359|gb|EU188983.1|Pv.112Q-3|

CTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTGTAAACTGCTTTTATATGGGAATAAAG
TGAGGGACGTGTCCCTTATTGCATGTACCATAACGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGG
TAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAGGCTGTTTGTAAAGCGT
GTTGTGAAATGTAGGAGCTCAACTTTTAGATTGCAGCGCAACTGGCAGACTTGAGTGCGCACAACGTAG
GCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGACGAACTCCGATTGCGAAGGCAGCTTACG
GGAGCGCAACTGACGCTAAAGCTCGAAGGTGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCAC
AGTAAACGATGGATGCCCCGTGTTAGCACCTAGTGTTAGCGGCTAAGCGAAAGCATTAAGCATCCCACCT
GGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGGCCGCACAAGCGGAGGAACATGTGG
TTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAATTGCAGATGTTTATATCAGAGATGATATA
TTCCCTTCGGGGCATTGTGAAGGTGCTGCATGGTTGTCTCAGCTCGTGCCGTGAGGTGTCGGCTTAAG
TGCCATAACGAGCGCAACC

>164460348|gb|EU188972.1|Pv.1BV-42|

CAGTGAGGAATATTGCCAATGGGCGAGAGCCTGAACCAGCCAAGTAGTCGTGCAGGATGACGGCCCTATG
TGCGTTGTAAACTGCTTTTATATGGCGAATAAATGTGAGGGACGTGTCCCTTATTGCATGTACCATAACGA
ATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATT
GGGTTTAAAGGGAGCGTAGGCTGTTTGTAAAGCGTGTTGTGAAATGTAAGAGCTCAACTTTTAGATTGCA
GCGGAACTGGCAGACTTGAGTGCGCACAACGNAGGCCGGAATTCATGGTGTAGCGGNGAAATGCTTAGA
TATCATGACGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCNTATAGCTCGAAGGTGCG
GGTATCCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGTGTTAGCACCTA
GTGTTAGCGGCTAAGCGAAAGNCATTAAGCATCCCACCTGGGGAGTACNCCGGCAACGGTGAAACTCAAA
GGAATTGACGGGGGGCCGCACTAGCGGAGGAACATGTGGTTTAAATTCGATGATNNGCAAGGAACCTTACC
GGGGCTTGAATTGCATATGTTTATATCAGANATGATATATTCCCTTCGGGNCATTTTGTGAANGGGCTGC
ATGNNTGTNCTACANCNCGTGCCACGAGNGTCCGCTTTAAGNCCCATAAACGAGCCCNACCCTTTTTNT
TNTATTTGCCATTNCGGGTAATGNC

>164460326|gb|EU188950.1|Pv.123Q-10|

TGAGGAATATTGNTCANTGGACGAGAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAACTGCTTTTGTGTTGGGAATAATCGACATTACGTGTAATGTTTTGCATGTACCATTGCAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGTGTAGGCGGTTGGTTAAGCGTGTTGTGAAATGTAGATGCTCAACATCTGACTTGCAGCGCGAA
CTGGCTGACTTGAGTACACACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
AGAACTCCGATTGCGAAGGCAGCTTACGGGAGTGTTACTGACGCTTAAGCTCGAAGGTGCGGGTATCGAA
CAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGTGTTAGCACCTGGTGTTAGCGG
CTAAGCGAAAGCATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGG
GGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAT
TGTAGGAGCACGATACAGAGATGTTGAGGTCCTTCGGGACTCCTATGAAGGTGCTGCATGGTTGTCTCA
GCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTCCTTAGTTGCCATCAGGTA
ATGCTGGGCACTCTGAGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACG
GCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAATGTTGGTTGCATG

>294437|gb|L16483.1|P.diensi|

TACAATGGAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGG
AACGGCAAAGAGTGCTTGCACACTTTGGACGTGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCC
CTTTACTTGGGGATAACCCGTTGAAAGACGGACTAATACCCAATGATATTCAATTGATGACATCTCATTTG
AATTAAAGATTTATCGGTATAGGATGGGGATGCGTCTGATTAGCTTGTGGTGAGGTAACGGCTCACCAA
GGCAACGATCAGTAGGGGTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAACTCCTA
CGGGAGGCAGCAGTGAGGAATATTGGTCAATGGACGAGAGTCTGAACCAGCCAAGTAGCGTGCAGGATGA

CGGCCCTATGGGTTGTAAACTGCNNTTGTGGGNATAATCGACATTACGTGTAATGTCTTTGCATGTAC
CATTTCGAATAAGGACCGGCTNATTCGGTGCCAGCAGCCGCGTAATACGGAAGGTCCAGGCGTTATCCGG
ATTTATTGGGTTTAAAGGGAGTGTAGGCGGTTGGTTAAGCGTGTGTGAAATGTAGATGCTCAACATCTG
ACTTGACGCGCAACTGGCTGACTTGAGTACACACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATG
CTTAGATATCATGAAGAACTCCGATTGCGAAGGCAGCTTACGGGAGTGTTACTGACGCTTAAGCTCGAAG
GTGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCA
CCTGGTGTAGCGGCTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTC
AAAGGAATTGACGGGGGCCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTT
ACCCGGGCTTGAATTGTAGGAGCACGATACAGAGATGTTGAGGTCCTTCGGGACTCCTATGAAGGTGCTG
CATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTATCCTTA
GTTGCCATCAGGTAATGCTGGGCACTCTGAGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGAC
GTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAATGTTGGTTT
CATGTAAATGTAATCTAATCTTTAAAGCCGGTCCCAGTTCGGACTGAGGTCTGCAACCCGACCTCACGAA
GCTGGATTTCGTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGACACACCGC
CCGTCAAGCCATGAAAGCCGGGGGTGCCTGAAGTTCGTAACCGCAAGGAGCGACCTAGGGCAAACCTGGT
AATTGGGGC

>2108320|emb|Y13105.1|P.pallens|

CGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGAAACGGCATTATGTGCTTGACATTTTGGACGTC
GACCGGCGCACGGGTGAGTATCGCGTATCCAACCTGCCCTTTACTTGGGGGATAACCCCGTTGAAAGACG
GCCTAATAACCCGATGTAATTCATTGATGGCATCAGATATGAATAAAAGATTTATCGGTAAAGGATGGGG
ATGCGTCTGATTAGCTTGTGGTGAGGTAAAGGCTCACCAAGGCNACGATCAGTAGGGGTTCTGAGAGGA
AGGTCCCCCACATTGGAAGTGAACACGGTCCAAACTCCTACGGGAGGCAGCAGTGAGGAATATTGGTCA
ATGGGCGCAAGCCTGAACCAGCCAAGTAGCGTGCAGGAAGACGGCCCTATGGGTTGTAAACTGCTTTTAT
ACGAGAATAATTTGATGCACGTGTGCGTTATTGCATGTATCGTATGAATAAGGACCGGCTAATTCGGTGC
CAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGTGTAGGCGG
TTTGTTAAGCGTGTGTGAAATTTAGGTGCTCAACATTTAACTTGCAGCGCGAACTGTCAAACCTGAGTA
CACGCAACGTATGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGAAGAACTCCGATTGCGA
AGGCAGCATACGGGAGTGTAAGTACGCTTAAGCTCGAAGGTGCGGGTATCGAACAGGATTAGATACCCT
GGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCGCCTGGCGTTAGCGGCTAAGCGAAAGCATT
AGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGG
AGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAATTGCAGAGGAATTTT
AGAGATAAATATGCCCTTCGGGGTCTCTGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGT
GTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTCTTAGTTGCCATCAGGTAATGCTGGGCACTCTGG
GAACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCGGGG
CTACACACGTGTTACAATGGCCGGTACAGAGGGATGGTGTAATGTAAATTGCATCAAATCTTAAAGCCG
GTCCCAGTTCGGACTGAGGTCTGCAACCCGACCTCACGAAGCTGGATTTCGTAGTAATCGCGCATCAGCC
ATGGCGCGGTGAATACGTTCCCGGGCCTTGACACACCGCCCCGTCAAGCCATGAAAGCCGGGGGTGCCCT
GAAGTTTCGTAACCGTAAGGAGCGACCTANGGGCAAAACTGGTAATTGGGGCTA

>164460325|gb|EU188949.1|Pv.123f-82|

TGAGGAATATTGGTCAATGGACGCAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
GTAAACTGCTTTTATATGGGGATAAAGTGGGGAACGTGTTCCCTTTTGCAGGTACCATATGAATAAGGA
CCGGCTAATTCGGTGCCAGCAGCCGCGGTAATACGGAAGGTTCCGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGTAGGCCGTTTGGTAAGCGTGTGTGAAATGTAGGAGCTCAACTTCTAGATTGCAGCGCGAA
CTGTCAGACTTGAGTGCGCACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
AGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTGAAGCTCGAAGGTGCGGGTATCGAA
CAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCACCTAGTGTTAGCGG
CTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGG
GGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAT
TGCAGATGAACGATTTAGAGATAATGAGGTCCTTCGGGACATCTGTGAAGGTGCTGCATGGTTGTCGTCA
GCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTCTTTAGTTGCCATCAGGTT
CTGCTGGGCACTCTGGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACG
GCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGATAGTTGGTTCGTGTG

>294429|gb|L16475.1|P.bivia|

ACAATGGAGAGTTTGATCCTGGCTCAGGATNAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGGC

AGCGAATAGATAGCTTGCTATTTATGTCTGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTACCC
ATAACTAAGGGATAACCCAGCGAAAGTTGGACTNATACCTNATGTATTTCGTTTGATCTCATGAGATTNCG
AATAAAGATTTATCGGTTATGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAACGGCCCACCAAG
GCAACGATCAGTAGGGGTCTGAGAGGAAGGTCCCCACATTGGAAGTACGACACGGTCCNAACTCCTAC
GGGAGGCGAGCTGAGGAATATTGGTCAATGGACGCAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGAC
GGCCCTATGGGTGTAACTNCTTTTATATGGGGATAAAGTGGGGAACGTGTTCCCNNTTGCAGGTACCA
TATGAATAAGGACCGGCTNATCCGTGCCAGCAGCCGCGGTAATACGGAAGGTTCCGGCGTTATCCGGAT
TTATTGGGTTTTAAAGGGAGCGTAGGCCGTTTGGTAAGCGTGTTGTGAAATGTAGTAGCTCAACTTCTAGA
TTGCAGCGCGAACTGTCAGACTTGAGTGCGCACAACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCT
TAGATATCATGAAGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTGAAGCTCGAAGGT
GCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCGCTGTTAGCACC
TAGTGTTAGCGGCTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAA
AGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTAC
CCGGGCTTGAATTGCAGATGAACGATTTAGAGATAATGAGGTCCTTCGGGACATCTGTGAAGGTGCTGCA
TGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCNNTCTTTAGT
TGCCATCAGGTTCTGCTGGGCACTCTGGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGT
CAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGATAGTTGGTCGTG
TGCAAATACGATCTAATCCTTAAACCATTTCTCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGC
TGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTTACACACCGCCC
GTCAAGCCATGAAAGCCGGGGGTGCCTGAAGTTCGTGACCGTAAGGATCGACCTAGGGCAAACCTGGTAA
T

>164460358|gb|EU188982.1|Pv.112Q-53|

CGTCTGCATNGCAGCGCGAACTGGAACGCTTGAGTACGCGCAACGTTGGCGGAATTNGTCGTGTAGCGGT
GAAATGCTTAGATATGACGAAGAACTCCGATTGCGAAGGCAGCTGACGGGAGCGGCACTGACGCTTAAGC
TCGAAGGTGCGGGTATCAAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCTCGCTG
TGTGCCTTTTGTGGTACGCGGCTAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGT
GAAACTCAAAGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAG
GAACCTTACCCGGGCTTGAAGTCCCGGCGAACGATCCAGAGATGGTGAGGCCCTTCGGGGCGCCGGTGGA
GGTGCTGCATGGTTGTGCTCAGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCT
CTCCGTAGTTGCCATCAGGTAGTGCTGGGCACTCTGCGGACACTGCCACCGCAAGGTGCGAGGAAGGTGG
GGATGACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGCACANCGAG
TCGGCCGCGCGCAAGCTCGGTCCAATCAAGAAATCCCCCTCAGTTCGGACTGGGGTCTGCAACCCGACC
CCACGAAGCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGG

>164460378|gb|EU189002.1|Pv.123b-5|

TGAGGAATATTGGTCAATGGGCGGGAGCCTGAACCAGCCAAGTAGCGTGCAGGAAGACGGCCCTATGGGT
TGTAAGTCTTTTATGCGGGGATAAAGGAGTCCACGTGTGGGCTTTTGCAGGTACCGCATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGTAGGCCGCGTTTTAAGCGTGTTGTGAAATGTAGGCGCCCAACGTCTGCATCGCAGCGCGAA
CTGGAACGCTTGAGTACGCGCAACGTTGGCGGAATTCGTTCGTGTAGCGGTGAAATGCTTAGATATGACGA
AGAACTCCGATTGCGAAGGCAGCTGACGGGAGCGGCACTGACGCTTAAGCTCGAAGGTGCGGGTATCAAA
CAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCTCGCTGTGTGCCTTTTGTGGTACGCG
GCTAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACG
GGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAA
CTGCCGGCGAACGATCCAGAGATGGTGAGGCCCTTCGGGGCGCCGGTGGAGGTGCTGCATGGTTGTGCTC
AGCTCGTGCCGTGAGGTGTGCGCTTAAGTGCCATAACGAGCGCAACCCCTCTCCGTAGTTGCCATCAGGT
AGTGCTGGGCACTCTGCGGACACTGCCACCGCAAGGTGCGAGGAAGGTGGGGATGACGTCAAATCAGCAC
GGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGCACAGCGAGTCGGCCGCGC

>164460323|gb|EU188947.1|Pv.123f2-17|

TGAGGAATATTGGTCAATGGGCGTGAGCCTGAACCAGCCAAGTAGCGTGCAGGAAGACGGCCCTATGGGT
TGTAAGTCTTTTATGCGGGGATAAAGGAGTCCACGTGTGGATTTTGCAGGTACCGCATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGTAGGCCGCGTTTTAAGCGTGTTGTGAAATGTAGACGCCCAACGTCTGCATCGCAGCGCGAA
CTGGGACGCTTGAGTACGCGCAACGTTGGCGGAATTCGTTCGTGTAGCGGTGAAATGCTTAGATATGACGA
GGAAGTCCGATTGCGAAGGCAGCTGACGGGAGCGGCACTGACGCTTAAGCTCGAAGGTGCGGGTATCAAA

CAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGCTGTGTGCCATTTATGGTACGCG
GCTAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACG
GGGGCCCCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAA
CTGCCGGTGACGATCCAGAGATGGTGAGGCCCTTCGGGGCGCCGGTGGAGGTGCTGCATGGTTGTCGTC
AGCTCGTGCCGTGAGGTGTGGCTTAAGTGCCATAACGAGCGCAACCCCTCTCCGTAGTTGCCATCAGGT
AATGCTGGGCACTCTGCGGATACTGCCACCGCAAGGTGCGAGGAAGGTGGGGATGACGTCAAATCAGCAC
GGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGCACAGCAAGTAGGCCGCGC
>40363455|dbj|AB108826.1|P.salivae|
AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGACA
TTGAAGCTTGCTTCGATGGGCGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCCTCTGACTA
AGGGATAACCCGGCGAAAGTCGGACTAATACCTTATGAGGTTTTTCAGCAGACATCTAACGAAAACGAAAG
ATTTATCGGTTCAGTGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAACGGCCCCACCAAGGCAACGA
TCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTACGACACGGTCCAAACTCCTACGGGAGGC
AGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGACGGATGACGGCCCTA
TGGGTTGTAACTGCTTTTATGTGGGGATAAAGTGAGCTACGTGTAGTTTATTGCAGGTACCACATGAAT
AAGGACCGGCTAATTCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGG
GTTTAAAGGGAGCGTAGGCCGTGGATTAAGCGTGTTGTGAAATGTAGACGCTCAACGTCTGAATTGCAGC
GCGAACTGGTTCACTTGAGTATGCACAACGTAGGCGGAATTCGTCTGTAGCGGTGAAATGCTTAGATAT
GACGAAGAACTCCGATTGCGAAGGCAGCTTACGGGAGCACAACCTGACGCTGAAGCTCGAAGGTGCGGGTA
TCAAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGTTGTAGTTCACTTATGA
ATTAGCGACCAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGA
ATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGG
GCTTGAATTGCAGACGAACGATTAGAGATGATGAGGCCCTTCGGGGCGTCTGTGAAGGTGCTGCATGGT
TGTCGTGAGCTCGTGCCGTGAGGTGTGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTCAGTTGCC
ATCAGGTGATGCTGGGCACTCTGGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAA
TCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGCGTTGGTCGTGTGCA
AATACGATCTAATCCTTAAAGCCGGTCCCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGA
TTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCA
AGCCATGAAAGCCGGGGGTGCCTGAAGTCTGTGACCGCAAGGAACGGCCTAGGGCAAAACTGGTGATTGG
GGCTAAGTCGTAACAAGGTAACC
>58339332|gb|AY880055.1|Pv.T05-04|
CGGCATTAAGTGCTTGCACCTTTTTGGACGTGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCC
ATGACTAAGGGATAACCTGCCGAAAGGCAGACTAATACCTTATGGTCTTCACTGACGGCATCAGATGTGA
AGTAAAGATTTATCGGTTATGGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAACGGCCCACCAAG
GCAACGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTACGACACGGTCCAAACTCCTAC
GGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGACGGATGAC
GGCCCTATGGGTTGTAACTGCTTTTGTATGGGGATAAAGTCAATCACGTGTGATTGTTTGCAGGTACCA
TACGAATAAGGACCGGCTAATTCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGAT
TTATTGGGTTTAAAGGGAGCGTAGGCTGGAGATTAAGTGTTGTGAAATGTAGACGCTCAACGTCTGAC
TTGCAGCGCATACTGGTTTCCCTTGAGTACGCACAACGTGGCGGAATTCGTCTGTAGCGGTGAAATGCT
TAGATATGACGAAGAACTCCGATTGCGAAGGCAGCTGACGGGAGCGCAACTGACGCTGAAGCTCGAAGGT
GCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGCTGTTGGTACT
TGGTATCAGCGGCTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAA
AGGAATTGACGGGGGGCCCGCACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTAC
CCGGGCTTGAATTGCAGAGGAAGGATTTAGAGATAATGACGCCCTTCGGGGTCTCTGTGAAGGTGCTGCA
TGGTTGTCTGTCAGCTCGTGCCGTGAGGTGTGGCTTAAGTGCCATAACGAGCGCAACCCCTGTCTTTAGT
TGCCATCAGGTTAAGCTGGGCACTCTGGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGT
CAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGGGACGGTGTA
TGTAATTCATCTAATCTTGAAAGCCGGTCCCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGC
TGGATTTCGTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCC
>66878726|gb|AY959020.1|Pv.rRNA247|
GCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAA
ACGGTATTTAGTGCTTGACCCGAATGGACGTGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTTCC
CATAACTAAGGGATAACCTGCCGAAAGGCAGACTAATACCTTATGTAATCCTTTGATGGCATCAGATAAG

GATAAAAGATTTATCGGTTATGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAACGGCCCCACCAA
GGCAACGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAACTCCTA
CGGGAGGCAGCAGTGAGGAATATTGGTCAATGGACGGAAGTCTGAACCAGCCAAGTAGCGTGCAGGATGA
CGGCCCTATGGGTTGTAACTGCTTTTGTATGGGGATAAAGTCAATCACGTGTGATTGTTTGCAGGTACC
ATACGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTTGGGCGTTATCCGGA
TTTATTGGGTTTAAAGGGAGCGTAGGCCGGAGATTAAGTGTGTTGTGAAATGTAGACGCTCAACGTCTGA
CTTGCAGCGCATACTGGTTTCCTTGAGTACGCACAACGTTGGCGGAATTCGTTCGTGTAGCGGTGAAATGC
TTAGATATGACGAAGAACTCCGATTGCGAAGGCAGCTGACGGGAGCGCAACTGACGCTGAAGCTCGAAGG
TGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGCTGTTGGTAC
CTAGTATCAGCGGCTAAGCGAAAGCATTAAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCA
AAGGAATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTTCGATGATACGCGAGGAACCTTA
CCCGGGCTTGAATTGCAGAGGAAGGATTTAGAGATAATGACGCCCTTCGGGGTCTCTGTGAAGGTGCTGC
ATGGTTGTCGTGAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTCTCTTCAG
TTGCCATCAGGTTAAGCTGGGCACTCTGGAGACACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACG
TCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGGGACGGTGTA
ATGTAAATTGCATCTAATCTTGAAAGCCGGTCCCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAG
CTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCC
CGTCAAGCCATGAAAGCCGGGGGTGCCTGAAGTCCGTGACCGGAAGGATCGGCCTAGGGCAAACTGGTA
ATTGGGGCTAAGTCGTAACAAGGTAACCGTAAAGGG

>6942139|gb|AF218617.1|P.ruminicola|

AGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGTAACGACA
GCGAAAGCTTGCTTTTGTCTGGGCGACGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCCATAAC
TAAGGGATAATCCGTAGAAATGCGGTCTAATACCTTATGTGTTCCGACGAAGACATCTGAATTGGAATAA
AGATTTATCGGTTATGGATGGGGATGCGTCTGATTAGATTGTTGGCGGGGCAACGGCCCCACCAAGTCTAC
GATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAACTCCTACGGGAG
GCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGAWGACGGCCC
TATGGGTTGTAACTGCTTTTGTATGGGRATAAAGTGCTCCACGTGTGGAGTTTTGTAGGTACCATACGA
ATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATT
GGGTTTAAAGGGAGCGTAGGCCGTGGATTAAGTGTGTTGTGAAATGTAGGCGCTCAACGTCTGACTTGCA
GCGCATACTGGTCCACTTGAGTGCGCACAACGCGGGCGGAATTTGTCGTGTAGCGGTGAAATGCTTAGAT
ATGACGAAGAACCCCGATTGCGAAGGCAGCTCGCGGGAGCGCAACTGACGCTGAAGCTCGAAAGTGCGGG
TATCGAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTTTTCGGTCATTAGA
CCGTGAGGCCAAGTGAAAACATTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGA
ATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTTCGATGATACGCGAGGAACCTTACCCGG
GCTTGAATTGCAGATGAAGGATCCAGAGATGGTGACGCCCTTCGGGGCATCTGTGAAGGTGCTGCATGGT
TGTCGTGAGCTCGTGCCGTGAGGTGTCGGCTCAAGTGCCATAACGAGCGCAACCCCTCTCTTCAGTTGCC
ATCAGGCTATGCTGGGCACTCTGGAGACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAA
TCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGTACAGAAAGCCGGTGCCCGCA
AGGTGAGTCCAATCAAGAAAGCCCTCCTCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGA
TTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCA
AGCCATGAAAGCCGGGGGTGCCTGAAGTCCGTGACCGCAAGGATCGGCCTAGGGCAAACTGGTAATTGG
GGCTAAGTCGTAACAAGGTAGCCGT

>33943622|gb|AY350613.1|P.bergensis|

GATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGGCATTGTTGGTGCTTGCACCATTTG
GACGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCCATAAGTAGGGTATAACCCGCAGAAA
TGCGGACTAATCCCTATGTTGTTCAAAGACGGCATCAGATTTGAACCAAAGGCTTGCCGCTTATGGATG
GGGATGCGTCCGATTAGCTTGTTGGTGAGGTAACGGCTCACCAAGGCTTCGATCGGTAGGGGTTCTGAGA
GGAAGGCCCCCACATAGGAACTGAGACACGGTCCTAACTCCTACGGGAGGCAGCAGTGAGGAATATTGG
TCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGACGAGACGACGGCCCTATGGGTGTAACTGCTTT
TATGCGGGGATAACCGGCCCTCACGTGTGAGGCCCTGCAGGTACCGCATGAATAAGGACCGGCTAATTCCG
TGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAGG
CCGTGGGTAAAGTGTGTTGTGAAATCCGGTTGCTCAACATCCGGTTTGCAGCGCATACTGTCCCCTTGA
GTGCGCACAACGCAGGCGGAATTCGTTCGTGTAGCGGTGAAATGCTTAGATATGACGAGGAACCCCGATTG
CGAAGGCAGCTTGCGGGAGCGCAACTGACGCTTAAGCTCGAAGGTGCGGGTATCAAACAGGATTAGATAC

CCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTTTGCCCTATTTTGGGCATGCGGCCAAGCGAAA
GCATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGCAC
AAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAACGCCAGTGAA
CGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCG
TGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTCCACAGTTGCCATCAGGTCATGCTGGGCA
CTCTGTGGATACTGCCGCCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGT
CCGGGGCTACACACGTGTTACAATGGGGGGCACAGCGTGCCGTACGTGCGNAAGCACGTCCAATCATGA
AATCCCCCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATTTCGCTAGTAATCGCGCA
TCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCCGGGGG
TGCCTGAAGTCCGTAAACGCAAGGGGCGGCCTAGGGCAAGACCGGTGATTGGGGCT

>30908827|gb|AY278625.1|P.genomosp|

GATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGGGAGAATAGCTTGCTATTCTTTG
TCGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCCATAACTAAGGAATACCCCGTAGAAAT
GCGGCCTAATCCCTTATGGTCTCTTACGCTGAGATCGGAATAAGAGTAAAGATTTATCGGTTATGGATGG
GGATGCGTCTGATTAGCTTGCTGGCGGGGTAACGGCCCCACCAGGGCATCGATCAGTAGGGGTTCTGAGAG
GAAGGTCCCCCACATTGGAACCTGAGACACGGTCCAACTCCTACGGGAGGCAGCAGTGAGGAATATTGGT
CAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTTGTAAACTGCTTTT
TAAGGGGAATAAAGAGGGGACACGCGTGTCTGTTGCATGTACCCTTAGAATAAGGACCGGCTAATTCGCT
GCCAGCAGCCGCGGTAATACGGAAGGTCCAGGTGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAGGC
CGCAGGTTAAGTGTGTTGTGAAAAGCAGTCGCCCCACGTCTGCCTTGCAGCGCAAACCTGTCTGCTTGAG
TGCGCACAAACGCAGGCGGAATCCGTGCTGTAGCGGTGAAATGCTTAGATATGACGAAGAACTCCGATTGC
GAAGGCAGCTTGCGGGAGCGCAACTGACGCTGAAGCTCGAAAGTGCGGGTATCGAACAGGATTAGATACC
CTGGTAGTCCGCACGGTAAACGCTGGATGCCCCGTTTTTGGCTTATTTTAAGTCAGAGACCAAGCGAAAGC
ATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAA
GCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAATTGCCAGAGACGG
CTCCAGAGATGGAGCTTCCCTTCGGGGCTTTGGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTG
AGGTGTGCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTCTTCAGTTGCCATCGGGTAATGCCGGGCACT
CTGTAGATACTGCCGCCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCC
GGGGCTACACACGTGTTACAATGGGGGGCACAGCGAGCGGGATGCACGCAAGGTCAATCAAATCAATAAA
TCCCCCTCAGTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATTTCGCTAGTAATCGCGCATC
AGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCCGGGGGTG
CCTGAAGTCCGTGACCGCAAGGATCGGCCTAGGGCAAACTGGTAATTGGGGCTAAGTCGTAACAAGGTA
GCCGTACCGGAAGGTGC

>32492914|gb|AY323522.1|P.oralis|

GATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGCGGGGCATCATGGAGGTGTTTTCAACTTTTGA
TGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCCATTACTACGGCATACCCCGTTGAAAGG
CGGCCTAATTCCGTATGCAGTCCGAAGCAGTCATCTAATTTGGACGAAAGGTATATTCTATCGGTAATGG
ATGGGGATGCGTCCGATTAGCCAGCCGGCGGGGTAACGGCCCCACCGGGGCATCGATCGGTAGGGGTTCTG
AGAGGAAGGTCCCCACACTGGAACCTGAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGAGGAATAT
TGGTCAATGGGCGTAAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTTGTAAACTGC
TTTTATGCGGGGATAAAGTTGGGGACGTGTCCCTTTTTGTCAGGTACCGCATGAATAAGGACCGGCTAATT
CCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGT
AGGCAGTTTTTTAAGCGTGCTGTGAAATGTACCGGCTCAACCGGTGATGTGCAGCGCGAACTGGGAATCT
TGAGTACGCAGTAAGCAGGCGGAATTCGTGGTGTAGCGGTGAAATGCTTAGATATCACGAAGAACTCCGA
TTGCGTAGGCAGCTTGCTGTAGCGTAACTGACGCTGAAGCTCGAAAGTGCGGGTATCGAACAGGATTAGA
TACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGTGTCGGCCTTTTTTGGTCGGTGGCCAAGCGAA
AGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGCA
CAAGCGGAGGAACATGTGGTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAACGCCATTGA
CTTGAATAGAGATATTCATTCCTTCGGGGCATTGGTGGAGGTGCTGCATGGTTGTCGTCAGCTCGTGCC
GTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTCAGTTGCCATCGGTTAAAGCCGGGC
ACTCTGTGAATACTGCCGCCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACG
TCCGGGGCTACACACGTGTTACAATGGCGCGTACAGCGAGTCGGCCGTATGTAAATGCGGTCCAATCCTT
AAAACGTGCCTCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATTTCGCTAGTAATCGCGC
ATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCCGGGG

GTGCCTGAAGTCCGTGACCGCAAGGGTCGGCCTAAGGCAATACTGGTAATTGGGGCTAAGTCGTAACAAG
GTAGCCGTACCGGAAGGTGCGGCTGGAACACCTCCTTTCT
>146142527|gb|EF534315.1|P.maculosa|
GATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGATGAGAGAGCTTGCTCTCTCAGG
CGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCCTCTGACCAAGGGATAACCCGTCGAAAGT
CGGACTAATACCTTATGCAGTCGTCGGAAGTCATCTGATGACGACGAAAGATTTTCATCGGTGAGAGATGG
GGATGCGTCTGATTAGCTTGTTGGCGGGGTAACGGCCCCACCAAGGCGACGATCAGTAGGGGTTCTGAGAG
GAAGGTCCCCCACATTGGAACCTGAGACACGGTCCAAACTCCTACGGGAGGCAGCAGTGAGGAATATTGGT
CAATGGGCGCGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTTGTAAACTGCTTTT
ATGCGGGGATAAAGTGAGGGACGTGTCCTTCATTGCAGGTACCGCATGAATAAGGACCGGCTAATTCGGT
GCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAGGC
CGTGGATTAAGCGTGTTGTGAAATGTAGACGCTCAACGTCTGACTTGACGCGCGAACTGGTCCACTTGAG
TGTGCACAACGCAGGCGGAATTCGTCGTGTAGCGGTGAAATGCTTAGATATGACGAAGAACCCCGATTGC
GAAGGCAGCTTGCGGGAGCACGACTGACGCTGAAGCTCGAAAGTGCGGGTATCGAACAGGATTAGATACC
CTGGTAGTCCGCACGGTAACGATGGATGCCCCTTGTCAGGCTGTATCAGTCTGGTGACCAAGCGAAAGC
ATTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAA
GCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGGCTTGAATTGCAGACGTACG
ATTCAGAGATGAAGAGGCCCTTCGGGGCGTCTGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTG
AGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTATCCTCGGTTGCCATCGGGTAATGCCGGGCACT
CCGTGGGAGACTGCCACCGTAAGGTGTGAGGAAGGTGGGGACGACGTCAAATCAGCACGGCCCTTACGTCC
GGGGCTACACACGTGTTACAATGGCCGGTACAGCGAGTCGGCCGCATGCAAATGCGGTCCAATCCTGAAA
GCCGGTCCCAGTTCGGACCGGGGTCTGCAACCCGACCCCGCGAAGCCGGATTTCGCTAGTAATCGCGCATC
AGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCCGGGGGTG
CCTGAAGTCCGTTACCGCGAGGGTCGGCCTAAGGCAAAACCGGTGATTGGGGCT
>164460384|gb|EU189008.1|Pv.113f4-12|
TGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGTTGTAAACTGCTTTTATG
CGGGGATAAAGTGAGGGACGTGTCCTTCATTGCAGGTACCGCATGAATAAGGACCGGCTAATTCGGTGCC
AGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAGGCCGT
GGATTAAGCGTGTTGTGAAATGCAGGTGCTCAACGTCTGCACTGCAGCGCGAACTGGTCCACTTGAGTGT
GCGCAACGCAGGCGGAATTCGTCGTGTAGCGGTGAAATGCTTAGATATGACGAAGAACTCCGATTGCGAA
GGCAGCTTGCGGGAGCACAACTGACGCTGAAGCTCGAAAGTGCGGGTATCGAACAGGATTAGATACCCTG
GTAGTCCGCACGGTAAACGATGGATGCCCCTTGTCAGGCTGTTTCAGCCTGGTGACCAAGCGAAAGCATT
AAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCG
GAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGGCTTGAATTGCAGACGAAGGCTT
CAGAGATGAAGCGGCCCTTCGGGGCGTCTGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGG
TGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTCTTCAGTTGCCATCAGGTGATGCTGGGCACTCTG
GAGACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCGGG
GCTACACACGTGTTACAATGGCCGGTACAGAGAGTTGATTTTGTGCAAACACGATCTAAT
>294428|gb|L16474.1|P.oris|
TACNATGGAGAGTTTGATCCTGGCTCAGGATNAACGCTGGCTACAGGCTTAACACATGCAAGTCGAGGGG
AAACGACGGGGAAGCTTGCTTCCCCGGGCGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTGCC
TCTGACTGAGGGATAACCCGTCGAAAGTCGGCCTAATACCTCATGGCATCGTCTGCGGGCATCCAACGAC
GATTAAAGATTTTCATCGGTGAGGATGGGGATGCGTCTGATTAGCTTGTTGGCGGGGTAAACGGCCCCACCA
AGGCGNCGATCAGTAGGGGTCTGAGAGGAAGGTCCCCACATTGGAACCTGAGACACGGTCCAAACTCCT
ACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATG
ACGGCCCTATGGGTTGTAAACTNCTTTTATGCGGGGATAAAGTGAGGGACGTGTCCTTCATTGCAGGTAC
CGCATGAATAAGGACCGGCTNATTCGCTGCCAGCAGCCGCGGTAATACGGAAGGTCCNNGCGTTATCCGG
ATTTATTGGGTTTAAAGGGAGCGTAGGCCGTGGATTAAGCGTGTTGTGAAATGCAGGTGCTCAACGTCTG
CACTGCAGCGCGAACTGGTCCACTTGAGTGTGCGCAACGCAGGCGGAATTCGTCGTGTAGCGGTGAAATG
CTTAGATATGACGAAGAATCCGATTGCGAAGGCAGCTTGCGGGAGCACAACTGACGCTGAAGCTCGAAA
GTGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCGTTGTCAGGC
TGTTTCAGCCTGGTGACCAAGCGAAAGCATTAAAGCATCCNACCTGGGGAGTACGCCGGCAACGGTGAAAC
TCAAAGGAATTGACGGGGGCCCCGCACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACC
TTACCCGGGCTTGAATTGCAGACGAASGMTTCAGAGATGATGACGGCCTTCGGGGCGTCTGTGAAGGTGC

TGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTNAAGTGCCATAACGAGCGCAACCCNTNTCTT
CAGTTGCCATCAGGTGATGCTGGGCACTCTGGAGACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATG
ACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGAGTTGAT
TTTGTGCAAACACGATCTAATCCTTAAATCCGGTCCCAGTTCCGACTGGGGTCTGCAACCCGACCCACG
AAGCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGACACACC
GCCCCGTAAGCCATGAAAGCCGGGGGTGCCTGAAGTCTGTGACCGCAAGGAACGGCCTAGGGCAAACCG
GTGATTGGGG

>164460396|gb|EU189020.1|Pv.113f4-94|

CCGCATGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCG
GATTTATTGGGTTTAAAGGGAGCGTAGGCCGTGGATTAAGCGTGTTGTGAAATGCAGGTGCTCAACGTCT
GCACTGCAGCGCGAACTGGTTCACTTGAGTGTGCGCAACGCAGGCGGAATTCGTCTGTGTAGCGGTGAAAT
GCTTAGATATGACGAAGAACTCCGATTGCGAAGGCAGCTTGCGGGAGCACAACCTGACGCTGAAGCTCGAA
AGTGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCTTGTCAGG
CTGTTTCAGCCTGGTGACCAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGCGCAACGGTGAAA
CTCAAAGGAATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAAC
CTTACCCGGGCTTGAATTGCAGACGAAGGCTTCAGAGATGAAGAGTCCCTTCGGGGCGTCTGTGAAGGTG
CTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTCT
TCAGTTGCCATCAGGTGATGCTGGGCACTCTGTAGACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGAT
GACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGAGTTGA
TTTTGTGCAAACACGATCTAATCCTTAAATCCGGTCCCAGTTCCGACTGGGGTCTGCAACCCGACCCAC
GAAGCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTTAATACGTTCTCCG

>3176095|emb|AJ006457.1|P.bryantii|

TTGAATTCGTGACAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTC
GAGGGGTAACATGAAGAAAGCTTGCTTTCTTTGATGACGACCGGCGCACGGGTGAGTATCGCGTATCCAA
CCTGCCCATAAAGTAGGGAATAGCCTTGCGAAAGTAAGATTAATGCCCTATGGTTTCCATTAAAGACATCT
GAGATGGAATAAAGATTTATCGCTTATGGATGGGGATGCGTCTGATTAGGTAGTAGGCGGGGTAACGGCC
CACCTAGCCGACGATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAACCTGAGACACGGTCCAAA
CTCCTACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGACGGAAGTCTGAACCAGCCAAGTAGCGTGCA
GGATGACGGCCCTATGGGTTGTAAACTGCTTTTTTAGGGGAATAAAGTTAGCCACGTGTGGTTATTTGCA
TGTACCCTACGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTA
TCCGGATTTATTGGGTTTAAAGGGAGCGCAGGCCGTTTGGTAAGCGTGTTGTGAAATGTCCGGGCTCAAC
CTGGGCACTGCAGCGCGAACTGTCAGACTTGAGTGCACAGGAAGCGGGCGGAATTCGTGGTGTAGCGGTG
AAATGCTTAGATATCACGAAGAACTCCAATTGCGAAGGCAGCTCGCTGTAGTGTTACTGACGCTAAAGCT
CGAAAGTGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCTGT
TTGCCCTTCGGGGTGAGTGGCTAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTG
AAACTCAAAGGAATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGG
AACCTTACCCGGGCTTGAATTGCAGATGACGGATCTAGAGATAGTGACTTCCTTCGGGACATCTGTGAAG
GTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTC
TCTTCAGTTGCCATCAGGTAGAGCTGGGCACTCTGGAGACACTGCCACCGTAAGGTGTGAGGAAGGTGGG
GATGACGTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAAAGT
CGGATGCCCGTAAGGTCAATTCTAATCAAGAAAGCCGGTCCCAGTTCGGAAGTCTGCAACCCGACCT
CACGAAGCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTA
CACCGCCCGTCAAGCCATGAAAGCCGGGGGTGCCTGAAGTCCGTGACCGCAAGGGTCGGCTAGGGCAA
ACTGGTAATTGGGGCT

>26324275|gb|AY158021.1|Pv.RS2|

AGGGTTTGATCATCGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGACA
TTGGAAGCTTGCTTCCTTTGGGCGTCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTTCCCGCAAG
TAAGGGATAACCCGTAGAAATGCGGCCTAATACCTTATGTTTTCTTAGATGGCATCTGATGAGGAACAA
AGATCCGTCGCTTGCGGATGGGGATGCGTCTGATTAGTTAGTCGGCGGGTAACGGCCCACCGAGACGAC
GATCAGTAGGGGTTCTGAGAGGAAAGTCCCCACATTGGAACCTGAGACACGGTCCAACTCCTACGGGAG
GCAGCAGTGAGGAATATTGGTCAATGGGCGGAAGCCTGAACCAGCCAAGTAGCGTGCAGGACGACGGCCC
TATGGGTTGTAAACTGCTTTTATGCGGGGATAAAGTGGGCCACGTGTGGCCTTTTGCAGGTACCGCATGA
ATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATT
GGGTTTAAAGGGAGCGCAGGCCGCCGGGCAAGCGTGTTGTGAAATGCAGTCGCTCAACGTCTGCACTGCA

GCGCGAACTGCCCAGCTTGAGTGCGCGCAACGTTGGCGGAATTCGCCGTGTAGCGGTGAAATGCTTAGAT
ATGGCGAAGAACTCCGATTGCGAAGGCAGCTGACGGGTGCGTAACTGACGCTCATGCTCGAAAGTGC GGG
TATCGAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCGCTATTCGGCCCCCTGCG
GTTGAGTGGCCAAGCGAAAGCGTTAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGG
AATTGACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCG
GGCTTGAATTGCAGCCGAACGATCCAGAGATGGTGAGGCCCTTCGGGGCGGCTGTGAAGGTGCTGCATGG
TTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTCTCCCCAGTTGC
CATCGGGTAATGCCGGGCACTCCAGGGACACTGCCACCGTAAGGTGCGAGGAAGGTGGGGATGACGTCAA
ATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCCGGTACAGAGAGCCGGGTCTGCGC
AAGCAGTCTCCAATCCCAAAAGCCGGCCTCAGTTCGGA CTGGGGTCTGCAACCCGACCCACGAAGCTGG
ATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTAACACCCGCCCGTC
AAGCCATGAAAGCCGGGGGTGCCTGAAGTCCGTGACCGCAAGGATCGGCCTAGGGCAAAACTGGTAATTG
GGGCTAAGTCGTAACAAGGTATC

>3724160|emb|AJ011683.1|P.albensis|

AGAGTTTGTATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCAAGTCGAGGGGAAACGACA
GAGAGTGCTTGACACTTTGGGCGTGCACCGGCGAATGGGTGAGTAACGCGTATCCAACCTGCCCTTGAC
AGAGGGATAGCCCAGTGAAAAGTGAATTAATACCTCATGTCTCCTCCGACGGCATCAGACGAGGAGTAA
AGATTTATCGGTCAAGGATGGGGATGCGTCTGATTAGGTAGTAGGGCGGGTAACGGCCCCACCTAGCCGAC
GATCAGTAGGGGTTCTGAGAGGAAGGTCCCCACATTGGTACTGAGACACGGACCAAACCTCTACGGGAG
GCAGCAGTGAGGAATATTGGTCAATGGGCGGAAGCCTGAACCAGCCAAGTAGCGTGCAGGACGACGGCCC
TATGGGTTGTAAACTGCTTTTATAGGGGAATAAAGTTATCCACGTGTGGATATTTGCATGTACCCTATGA
ATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATT
GGGTTTAAAGGGAGCGTAGGCGGTATATTAAGCGTGTTGTGAAATGTAGGTGCTCAACATCTGACTTGCA
GCGCGAACTGGTTTACTTGAGTACGCACAACGTAGGCGGAATTCGTCTGTAGCGGTGAAATGCTTAGAT
ATGACGAAGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCCACTGACGCTGAAGCTCGAAAGTGC GGG
TATCGAACAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCGCTCTGAGTCCTTTTGG
ATTTGGGGCCAAGCGAAAGCATTAAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGA
ATTGACGGGGGCCCCGACAAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGG
GCTTGAATTGCAGGAGAACGATCCAGAGATGGTGAGGCCCTTCGGGGCTCCTGTGAAGGTGCTGCATGGT
TGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTCTCCTTAGTTGCC
ATCAGGTAATGCTGGGCACTCTGGGGACACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAA
TCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGCGTGTACAGAGAGTTGGTGACATGCA
AATGTCATCTAATCCTAAAAGCACGTCTCAGTTCCGACTGGGGTCTGCAACCCGACCCACGAAGCTGGA
TTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTAACACCCGCCCGTCA
AGCCATGAAAGCCGGGGGTGCCTGAAGTCCGTGACCGGAAGGATCGGCCTAGGGCAAAACTGGTAATTGG
GGCTAAGTCGTAACAAGGTAGCCGT

>164460363|gb|EU188987.1|Pv.113f4-66|

CAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTCCGGGTGTGAAACTGCTTTT
AGTTGGGAATAAAAAAAGGGACTTGTCTCTTCTTGATGTACCTTCAGAAAAAGGACCGGCTAATTCGGT
GCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTAAAGGGAGCGTAGGC
GGATTGTTAAGTCAGCGGTTAAAGGGTGTGGCTCAACCATGCATTGCCGTTGAAACTGGCGATCTTGAGT
GCAGACAGGGATGCCGGAATTCGTGGTGTAGCGGTGAAATGCTTAGATATCACGAAGAACTCCGATCGCG
AAGGCAGGTGTCCGGGCTGCAACTGACGCTGAGGCTCGAAAGTGTGGGTATCAAACAGGATTAGATACCC
TGGTAGTCCACACAGTAAACGATGTATACTCGCGGTTTGCGATAGACAGTAAGCCGCCAAGCGAAAGCAT
TAAGTATACCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGCCCCGACAAAGC
GGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAACTAACGGTGACGAAT
CTAGAGATAGATTTTTCTTCGGACACCGTTGGAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGT
GTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTCTCCTCGGTTGCCATCGGGTAATGCCGGGCACTCCGT
GGACACTGCCATCGTAAGATGTGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCGGGG
CTACACACGTGTTACAATGGGGGTACAGAAGGCCGCTACCCGGCGACGGGATGCTAA

>5222167|gb|AY738678.1|Pv.123-b-46|

TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAGTGTCTTTTATGTGGGGATAAAGTGCGTGACGTGTCATGCATTGCAGGTACCACATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTA

AAGGGAGCGTAGGCTGTCTATTAAGCGTGTTGTGAAATTTACCGGCTCAACCGGTGGCTTGCAGCGCGAA
CTGGTCGACTTGAGTATGCAGGAAGTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
CGAACTCCGATTGCGCAGGCAGCTTACTGTAGCATAACTGACGCTGATGCTCGAAAGTGCGGGTATCAAA
CAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCTCGCTATTTCGTCTATTTGGATGAGT
GGCCAAGTGAAAACATTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGAC
GGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGGCTTGA
ACTGCCAGCGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGT
CAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCTTTTCTTTAGTTGCCATCAGG
TAATGCTGGGCACTCTATGGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCA
CGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTTAACGCAAGTTTG
GTCTAATCTTCAAAGTGCTCCCAGTTCGGATTGGGGTCTGCAACCCGACCCCATGAAGCTGGATTCGCT
AGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCT

>66878797|gb|AY959091.1|Pv.rRNA318|

TCGCCCTTAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTATAGGCTTAACACATGCAAGTCGAGGGG
CAGCATATAGATTGCTTGCAATTTATGATGGCGACCGGCGCACGGGTGAGTAACGCGTATCCAACCTACC
CATTACTAGGGAATAACCCAGCGAAAGTTGGCCTAATGCCCTATGTAGTCGTTTGATCGCCTGAGATTTTC
GACGAAAGATTTATCGGTATTGGATGGGGATGCGTCTGATTAGCTTGTGGCGGGGTAAAGGCCACCAA
GGCAACGATCAGTAGGGGTTCCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAAACTCCTA
CGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGA
CGGCCCTATGGGTTGTAAACTGCTTTTATATGGGAATAAAGTGAGGGACGTGTCCCTTATTGCATGTACC
ATATGAATAAGGACCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGA
TTTATTGGGTTTAAAGGGAGCGTAGGCTGTTTGTGTAAGCGTGTTGTGAAATGTAAGAGCTCAACTTTTAG
ATTGCAGCGCAACTGGCAGACTTGAGTGCGCACACGTAGGCGGAATTCATGGTGTAGCGGTGAAATGC
TTAGATATCATGACGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTAAAGCTCGAAGG
TGCGGGTATCGAACAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGTGTTAGCAC
CTAGTGTTAGCGGCTAAGCGAAAGCATTAAAGCATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCA
AAGGAATTGACGGGGGCCCCGACAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTA
CCCGGGCTTGAATTGCAGATGTTTATATCAGAGATGATATATTCCTTCGGGGCATTTGTGAAGGTGCTG
CATGGTTGTCGTACGCTCGTGCCGTGAGGTGTTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTA
GTTGCCATCAGGTAGTGCTGGGCACTCTAGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGAC
GTCAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGAGAGTTGGTTG
TACGCAAGTGCAATCTAATCCTAAAAACCATTTCTCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAA
GCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGC
CCGTCAAGCCATGAAAGCCGGGGGTGCCTGAAGTTTCGTGACCCTAAGGATCGACCTAGGGCAAACCTGGT
AATTGGGGCTAAGTCGTAACAAGGTAGCCGTAAAGGGCG

>52222166|gb|AY738677.1|Pv.123-f2-42|

TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAACTGCTTTTATATGGGAATAAAGTGAGGGACGTGTCCCTTATTGCATGTACCATACGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCAGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGTAGGCTGTTTGTGTAAGCGTGTTGTGAAATGTAAGAGCTCAACTTTTAGATTGCAGCGCGAA
CTGGCAGACTTGAGTGCGCACAACTAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
CGAACTCCGATTGCGAAGGCAGCTTACGGGAGCGCAACTGACGCTAAAGCTCGAAGGTGCGGGTATCGAA
CAGGATTAGATACCCTGGTAGTCCGCACAGTAAACGATGGATGCCCCGTGTTAGCACCTAGTGTTAGCGG
CTAAGCGAAAGCATTAAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGG
GGGCCCCGACAAGCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGGCTTGAAT
TGCAGATGTTTATATCAGAGATGATATATTCCTTCGGGGCATTTGTGAAGGTGCTGCATGGTTGTCGTC
AGCTCGTGCCGTGAGGTGTTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTTAGTTGCCATCAGGT
AATGCTGGGCACTCTAGAGATACTGCCACCGTAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCAC
GGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGTGGTACAGAGAGTTGGTTGTACGCAAGTGCAA
TCTAATCCTAAAAACCATTTCTCAGTTTCGGACTGGGGTCTGCAACCCGACCCACGAAGCTGGATTTCGCTA
GTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCT

>52222168|gb|AY738679.1|Pv.123-f-110|

TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAACTGCTTTTACGCGGGGATAAAGTGCGTGACGTGTCTCGCATTGCAGGTACCGCGTGAATAAGGA

CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGCAGGCCGCCCCGATAAGCGTGTTGTGAAATGTACCGGCTCAACCGGTGAGTTGCAGCGCGAA
CTGTCAGGCTTGAGTGCACGGTAAGCAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
GGAAGTCCGATTGCGAAGGCAGCTTGCTGCAGTGCAGCTGACGCTTAGGCTCGAAGGTGCGGGTATCAAA
CAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTCCGCCCATTCGTGGCGGGC
GGCCAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGAC
GGGGGGCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGA
ACTGCCAGTGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGT
CAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTCTCTTCAGTTGCCATCAGG
TGATGCTGGGCACTCTGGAGACACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCA
CGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGCGTCGGTTCAACGCAAGTTGG
ACCCAATCTTCAAAGTGCTCCCAGTTCGGAAGTGGGGTCTGCAACCCGACCCACGAAGCTGGATTTCGT
AGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCT
>5222174|gb|AY738685.1|Pv.136-b-40|
TGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAAGTAGCGTGCAGGATGACGGCCCTATGGGT
TGTAAGTGCCTTTTATGCGGGGATAAAGTGCGTGACGTGTCATGCATTGCAGGTACCGCATGAATAAGGA
CCGGCTAATTCCGTGCCAGCAGCCGCGGTAATACGGAAGGTCCGGGCGTTATCCGGATTTATTGGGTTTA
AAGGGAGCGTAGGCCGCCAGATAAGCGTGTTGTGAAATGTACCGGCTCAACCGGTGAATTGCAGCGCGAA
CTGTTTGGCTTGAGTGCACGGTAAGCAGGCGGAATTCATGGTGTAGCGGTGAAATGCTTAGATATCATGA
AGAAGTCCGATTGCGAAGGCAGCTTGCTGCAGTGCAGCTGACGCTGATGCTCGAAGGTGCGGGTATCAAA
CAGGATTAGATACCCTGGTAGTCCGCACGGTAAACGATGGATGCCCCGCTGTCCGCCCTTTTGTGGCGGGTG
GCCAAGCGAAAGCGTTAAGCATCCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACG
GGGGCCCGCACAAGCGGAGGAACATGTGGTTTAATTCGATGATACGCGAGGAACCTTACCCGGGCTTGAA
CTGCCAGTGAACGATACAGAGATGTTGAGGCCCTTCGGGGCGCTGGTGGAGGTGCTGCATGGTTGTCGTC
AGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCCTTTTTTCAGTTGCCATCAGGT
AATGCTGGGCACTCTGGAGATACTGCCACCGCAAGGTGTGAGGAAGGTGGGGATGACGTCAAATCAGCAC
GGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGCATAACAGAGTGTGGCTTAACGCAAGTTTGG
TCTAATCTTCAAAGTGTCTCCCAGTTCGGAAGTGGGGTCTGCAACCCGACCCACGAAGCTGGATTTCGCTA
GTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCCT