

Complete nucleotide sequence of a 23S ribosomal RNA gene from *Rhodobacter capsulatus*

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Part of a ribosomal (rRNA) operon from the photosynthetic *Rhodobacter capsulatus* has been cloned (1). For the first time the primary structure of a 23S rRNA gene from a representative of the purple bacteria alpha group (2) is presented. DNA sequence determination was done employing the dideoxy method (3) in combination with 23S rRNA specific synthetic oligonucleotide primers. The termini have not been determined experimentally but are shown in analogy to those of *E. coli* (4).

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1   AATCAAGCCGAGAGGGCG   TTTGTGGATGCCTTGGGAG   CAAGAGCCGATGAAGGACGT   GATACCTCGCGATAAGTCAT   GGGGAGCTGAGAATAAGCTT
101  TGATCCATGAATTTCCGAAT   GGGGAAACCACCTGAGACC   TTATTTGTGTTCTTCGGAAC   GGACCTCCGCGCCGGCTCAA   TCCCGGAGCCGCTGCGCCGA
201  CTCGGAGACAGTCAACAGTA   GGGTTAAACAGGTACTTTAC   TCCTGAATACATAGGGGGTT   TAGAGCGAACCCGGGAACT   GAACATCTAAGTACC CGGA
301  GGAAGGAAATCAACGATAC   TCCCTTAGTAGTGGCGAGCC   AACCCGACCCAGCCGAGCCG   TGAGAACGAGTGGAAATGGT   TGGAAAGCCAGCGATATGG
401  GTGACAGCCCGTACACGAA   GTTTGATCGGACGATTAAG   TAGGGCGGACACGCTGTAAT   CCTGTCTGAAGATCGGGGA   CCACCTCGAAGGCTTAGTA
501  CTCCTTGTGACCGATAGCC   AACCACTACCGTGAGGAAA   GGTGAAAAGCACCCCGACGA   GGGGAGTGAACAGTTTCTG   AAACCGGACCGCTACAAGCA
601  CTCGGAGCTTCTTAGAAG   TGACGGCGTACCTTTGTAT   AATGGGTCAACGACTTGGTC   TTACGAGCAAGCTTAAGCCG   ATAGCTGTAGCGGACGGAA
701  AGCGAGTCTTAAAGGGCGA   CGAGTTCGTGGGATCAGACC   CGAAACCAAGATGATCTAGCC   ATGTCCAGGATGAAGTTGG   GTAACCAACCACTGGAGTCC
801  GAACCGACACCCCTTGAAA   GGTCCGGATGAGATGTGGC   TAGGGGTGAAAGGCCAATCA   AATCTGGAGATAGCTGTGTC   TCCCGGAAAGCTATTAGGT
901  AGCCCTCGGACGAATACCT   CGGGGGTAGACACTACAT   GGATGATGGGGCCACAGC   CTTACTGAGTCTAAGTAAAC   TCCGAATACCGCAGAGTACT
1001  ATCCGGGAGACACACGGCGG   GTGCTAACCTCCCTGCTGAA   GAGGGAACCAACCTGACCA   ACAGCTAAGCCCCCAATTC   GTGGCTAAGTGGGAAAGCAT
1101  GTGGGATTTCCAAAACAACC   AGGAGGTTGGCTTAGAAGCA   GCCATCCTTTAAAGATAGCC   TAACAGCTCACTGGTCTAGT   CAAGAGATCCTGCGGCGAAG
1201  ATGTAACGGGGCTCAAGCCA   CGAGCCGAGCTTTGGATGT   GCAGAAATGCACCTGATAGC   GGAGCCTTCTGTATATAGC   ACCGCCGACTTTAGTCTCTC
1301  CTTCCGGAAAGCCTTGGTGG   GACAGGTGCTGACTGTGAAG   CCGGCTGTGAGGGATCCGG   TGGAGTATCAGAAAGCGAGA   ATGTGACATGAGTAGCGAT
1401  AAAGAGGGTGAGAGCCCTC   TCCCGAAAGTCCAAGGGTT   CCTGCTTAAAGCTAATCTGA   GCAGGGTAAAGCCGCGCTTA   AGCGGAGGCGAAAGGCGTA
1501  CTCGATGGAAACCAAGCTTAA   TATTCGTGGGCCAGGAGGAT   GTGACGGATGCTCACTGTTG   TTCGACCTTATCGGATTTGGT   CGGGCAGCTCGGGTGTCCCA
1601  GGAATAGCCCTCCATATGA   CCGTACCCATAACCGACACA   GGTGGACAGGTAGACTATAC   CAAGCCCTTGAAGAGAACCA   CGTTAAGAACTCGGCAAAA
1701  ATGCTTCCGTAAAGTCCGGA   GAAGGAGGCCCATTCGAC   GCAAGTGTGGGTGGGGGGG   ACAAACTAGGGGGTGGCCG   TGTTACTTAAACACAGGG
1801  CTCGCAAGCCGTAAGCGG   ACGTATAGGCTGTGACCCCT   GCCCGGTGCTGGAAGGTTAA   AAGGAGGGTCCAAGCTCCG   AATTGAAGCCCGATAAAGC
1901  CGCGCGAATCCGTCTTAGG   CCTAAGTGGCAAAAAGCTGCC   TGTCCGGTAAAGTTCGACCT   GCACGAATGGCGTAACGATC   TCCCGCTGTCTCAAACGTG
2001  GACTCAGCGAAATGAACCTG   TGTGTCAAGATGCACACTAC   CCGCGGTTAGACGGAAGAC   CCCATGAACCTTTACTCCAG   CTTTGCACCTGGCATCAGGAT
2101  TGTGATGTGCAGGATAGGTG   GTAGCCTTTGAAACCGTGAC   GCCAGTTGCGGTGGAGGCTC   CTTTGAATACCCCTTTCG   CACTCTGTATGTCTAACCGC
2201  GGTCCGTCATCCGGATCCGG   GACCTGCAATGGTGGGAGT   TTGACTGGGGCGGTCCGCTC   CCAAACTGTAACGGAGGCGC   GCGAAGGTAGGCTCAGACCG
2301  CTCGGAATCCGCTCTTAGG   TCAATGGCAAAAAGCTGCG   TGACTCAAGACTGACAAGT   CGAGCAGAGACGAAAGTCGG   TCATAGTATCCGGTGGTCC
2401  CAAGTGGGAGGGCCATCGCT   CAACGGATAAAAGGTACTCT   GGGGATAACAGGCTGATGAT   GCCCAAGACTCCATATCGAC   GGCATCCTTTGGCACCTCGA
2501  TGTCCGCTCATCTCATCTG   GGGCTGTGAGCAGGTCCCAAG   GGTATGGCTGTTCCGCCATT   AAGAGGTACGTAGCTGGG   TTTAGAAGCTGTGTGAGACG
2601  TTCGTTCCCTATCTGCGGTG   GGTGTAGGATACCTGAGAG   AGTTGCCCTAGTACGAGAG   GACCGGGGTGAACGTTCCAC   TGTGGACCAAGTTATCGTGC
2701  CAACGGTATGTCTGGTAGC   TATGAACGGACAGGATAAAC   CTTGAAGGCATCTAAGCGTG   AAGCCCCCTCAAACCCAGG   TATCCCTTGAAGGCCGCTGGA
2801  AGACCACCACGCTGATAGCC   CGGAGATGTAGTGCAGCAA   TGCATTCAAGTTGACCGGTAC   TAATTGCCGATTTGGCTTGA   TTTG

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