

Nucleotide sequence of the 18S rRNA gene from *Arabidopsis thaliana* Col0

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From a genomic library of *Arabidopsis thaliana* constructed in the phage lambda vector EMBL3 we have isolated and subcloned a complete rRNA gene repeat unit and sequenced the 25S-18S intergenic region<sup>(1)</sup>. Here we present the nucleotide sequence of the 18S rRNA gene with its flanking regions. The coding region shows 96.1% homology with soybean 18S rRNA<sup>(2)</sup> and 94.7% homology with the 17S rRNA gene from rice<sup>(3)</sup>.

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1  aaaagatgac  ggtcaagacc  tctctcttcc  tctctttcca  ttgcgtttga  gaggatgtgg  cggggaattg  cegtgatcra
81  tgaatgctac  ctggttgac  ctgccagtag  tcatatgctt  gtcTCAAAGA  TTAAGCCATG  CATGTGTAAG  TATGAACGAA
161  TTCGACTGT  GAAACTGGA  ATGGCTCATT  AAATCAGTTA  TAGTTTGTIT  GATGGTAACT  ACTACTCGGA  TAACCGTAGT
241  AATTCTAGAG  CTAATACGTC  CAACAAACCC  CGACTTATGG  AAGGGACGCA  TTTATTAGAT  AAAAGGTCSA  CGCGGGCTCT
321  GCCTTCCTCT  GATGATTCAT  GATAACTCGA  CGGATCGCAT  GGCCTCTGTG  CTGGCGAGCC  ATCATTCAAA  TTCTCGCCTC
401  ATCAACTTTC  GATGGTAGGA  TAGTGGCCTA  CCATGGTGGT  AACGGGTGAC  GGAGAATTAG  GGTTCGATTG  CGGAGAGGGA
481  GCCTGAGAAA  CGGCTACCAC  TTTCGAGTCT  GGTAAATGGA  ATGAGTACAA  TCTAAATCCC  TTAACGAGGA  TCCATTGGAG
561  TAAATAACAA  TACCGGGCTC  TTTCGAGTCT  GGTAAATGGA  ATGAGTACAA  TCTAAATCCC  TTAACGAGGA  TCCATTGGAG
641  GGCAGCTCTG  GTCCGAGCAG  CCGCGGTAAT  TCCAGCTCCA  ATAGCGTATA  TTTAAGTGTG  TGCAGTTAAA  AACCTCGTAG
721  TTCAGCTTGG  GGATGGTGG  GCGGGTCCGC  CTTTGGTGTG  CAITGGTCCG  CTITGTCCTT  CGGTCGCGGA  TAGCTTCCCTG
801  GTCTTAATGG  GCGGGTCCGT  GCCTCCGGCG  CTGTACTTTT  GAAGAAATTA  GAGTGTCTCA  AGCAAGCCTA  CGCTCTGGAT
881  ACATTAGCAT  GGGATAACAT  CATAGGATTT  CGATCCTATT  GTGTGGCTT  CGGGATCGGA  GTAATGATTA  ACAGGGCAGC
961  TCGGGGGCAT  TCGTATTCCA  TAGTCAGAGG  TGAATTCCTT  GGATTTATGA  AAGAGCAACA  ACTCGGAAG  CATTTGCCAA
1041  GGATGTTTTT  ATTAATCAAG  AACGAAAGTT  GGGGGCTCGA  AGACGATCAG  ATACCGTCC  AGTCTCAACC  ATAAACGATG
1121  CCGACCCAGG  ATCAGCGGAT  GTTGCCTATA  GGACTCCGCT  GGCACCTTAT  GAGAAATCAA  AGTTTTTGGG  TTCCGGGGGG
1201  AGTATGGTCG  CAAGGCTGAA  ACTTAAAGGA  ATTGACGGAA  GGGCACCACC  AGGAGTGGAG  CCTCGGGCTT  AATTTGACTC
1281  AACACGGGGA  AACTTACAG  GTCCAGACAT  AGTAAGGATT  GACAGACTGA  GAGCTCTTTC  TTGATTCAT  GGGTGTGGT
1361  GCATGGCCGT  TCTTAGTTGG  TGGAGCGATT  TGTCTGGTTA  ATTCCGTTAA  CGAAGCGAGC  CTCAGCCTGC  TAACTAGCTA
1441  CGTGGAGGCA  TCCCTCACG  CCGCGCTTCT  TAGAGGGACT  ATGGCCGTTT  AGGCCAAGGA  AGTTTGGAGC  AATAACAGGT
1521  CTGTGATGCC  CTTAGATGTT  CTGGGCCGCA  CGCGGCTTAC  ACTGATGTAT  TCAACGAGTT  CACACCTTGC  CGACAGGCCC
1601  GGTAAATCTT  TGAATTTCCA  TCGTATGGGG  GATAGATCAT  TGCATTTGTT  GGTCTTCAAC  GAGGAATTCC  TAGTAAGGCC
1681  GAGTCATCAG  CTCGGCTTGA  CTACGTCCCT  GCGCTTTGTA  CACACCGGCC  GTCCCTCTTA  COGATTAAT  GATCCGGTGA
1761  AGTGTTCGGA  TCGCGGGCAG  GTGGGTGGTT  CCGCGCCCGC  GACGTGCGGA  GAAGTCCACT  AAACCTTATC  ATTTAGAGGA
1841  AGGAGAAGTC  GTAACAAGGT  TTCCTAGGT  GAACCTGCGG  AAGGATCATT  Gtcgatacct  gt

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Fig.1: 18S rRNA gene from *Arabidopsis thaliana* and flanking regions (printed in lowercase letters). The sequence was determined by the dideoxy method after introduction of nested deletions with ExonucleaseIII/S1 nuclease.

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## References:

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