

Nucleotide sequence of *Thermus thermophilus* HB8 gene coding 16S rRNA

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Clones with 16S rRNA genes of *Thermus thermophilus* HB8 were identified in a genomic library in  $\lambda$ L47.1 by blot hybridization with labeled *T. thermophilus* ribosomal RNA. Fragments of the 16S rRNA gene were subcloned into M13 mp18 and mp19 vectors and their nucleotide sequences were determined by the dideoxy chain termination method (1). The 5'- and 3'-ends of the *T. thermophilus* 16S rRNA were allocated according to the homologous sequence of the *E. coli* 16S rRNA gene (2). The 16S rRNA has 1515 nucleotides, and fits to the model of the 16S rRNA secondary structure suggested by Woese *et al.* (3).

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1 TTGTTGGAGA GTTTGATCCT GGCTCAGGGT GAACGCTGGC GGCGTGCCTA
51 AGACATGCAA GTCGTGCGGG CCGCGGGGTT TTA CTCCGTG GTCAGCGGCG
101 GACGGGTGAG TAACGCGTGG GTGACCTACC CGGAAGAGGG GGACAACCCG
151 GGGAAACTCG GGCTAATCCC CCATGTGGAC CCGCCCTTG GGTGTGTGCC
201 AAAGGGCTTT GCCCGCTTCC GGATGGGCC CCGTCCCATC AGCTAGTTGG
251 TGGGGTAATG GCCCACCAAG GCGACGACGG GTAGCCGGTC TGAGAGGATG
301 GCCGGCCACA GGGGCACTGA GACACGGGCC CCACTCCTAC GGGAGGCAGC
351 AGTTAGGAAT CTTCCGCAAT GGGCGCAAGC CTGACGGAGC GACGCCGCTT
401 GGAGGAAGAA GCCCTTCGGG GTGTAAACTC CTGAACCCGG GACGAAACCC
451 CCGACGAGGG GACTGACGGT ACCGGGGTAA TAGCGCCGGC CAACTCCGTG
501 CCAGCAGCCG CCGTAATACG GAGGGCGCGA CCGTACCCTG GATTCATGG
551 GCGTAAAGGG CGTGTAGGCG GCCTGGGGCG TCCCATGTGA AAGACCACGG
601 CTAACCGTG GGGGAGCGTG GGATACGCTC AGGCTAGACG GTGGGAGAGG
651 GTGGTGGAA TCCCGGAGTA GCGGTGAAAT CGGCAGATAC CGGGAGGAAC
701 GCCGATGGCG AAGGCAGCCA CCTGGTCCAC CCGTGACGCT GAGGCGCGAA
751 AGCGTGGGGA GCAAACCGGA TTAGATACCC GGGTAGTCCA CGCCCTAAAC
801 GATGCGCGCT AGGTCTCTGG GTCTCCTGGG GGCCGAAGCT AACGCGTTAA
851 GCGCGCCGCG TGGGGAGTAC GGCCGCAAGG CTGAAACTCA AAGGAATTGA
901 CGGGGGCCCG CACAAGCGGT GGAGCATGTG GTTTAATTCT AAGCAACCGG
951 AAGAACCTTA CCAGGCCCTG ACATGCTAGG GAACCCGGGT GAAAGCCTGG
1001 GGTGCCCGCG AGGGAGCCCT AGCACAGGTG CTGCATGGCC GTCGTACAGT
1051 CGTGCCCGTG GGTGTTGGGT TAAGTCCCGC AACGAGCGCA ACCCCGCGCG
1101 TTAGTTGCCA GCGGTTCTGG CCGGCACTCT AACGGGACTG CCCCGGAAAG
1151 CGGGAGGAAG GAGGGGACGA CGTCTGGTCA GCATGGCCCT TACGGCCTGG
1201 GCGACACACG TGCTACAATG CCCTACAAGC CGATGCCACC CCGCAACGGG
1251 GAGCTAATCG CAAAAAGGTG GGCCCACTT GATTGGGGT CTGCAACCCG
1301 ACCCCATGAA GCCGGAAATG CTAGTAATCG CCGATCAGCC ATGCCCGGGT
1351 GAATACGTT CCGGGCCTTG TACACACCGC CCGTACGCG ATGGGAGCGG
1401 GCTCTACCC AAGTCGCCGG GAGCCTACGG CAGGGCGCG AGGGTAGGGC
1451 CCGTGACTGG GGCGAAGTCT TAACAAGGTA GCTGTACCG AAGGTGCGGG
1501 TGGATCACCT CCTTT

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2. Brosius J., Palmer M.L., Kennedy P.J., Noller H.F. (1978) Proc. Natl. Acad. Sci. USA **75**, 4801-4805.
3. Woese C.R., Gutell R.R., Gupta R., Noller H.F. (1983) Microbiol. Rev. **47**, 621-669.