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**Nucleotide sequence of a *Bacillus subtilis* gene homologous to the *dnaK* gene of *Escherichia coli***


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 Submitted September 11, 1989
 

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The *dnaK* gene of *Escherichia coli* codes for a major heat shock protein whose primary sequence is highly homologous to those of 70kDa heat shock proteins from eukaryotes (1). We have cloned the analogous heat shock protein from *Bacillus subtilis*, using a probe from *B. megaterium*, kindly provided by P. Setlow (2). We have determined the nucleotide sequence shown using the dideoxy sequencing method (3). Underlined are the start and stop codons.

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CGGGCTCTTG ACAGTTTGA ACAGCGCCT CAGGTGAAG CCGACAATGA ACAGACGAAA AGTTTGCTCC      70
AGGGAATGGA AATGGTCCAC CGTCAGCTCG TAGAAGCCTT GAAAAAAGAA GCGTCGGAAG CCATCGAAGC      140
TGTAGGGCAG GAATTTGATC CTAATCTGCA CCAAGCTGTT ATGCAGGCTG AAGACGAAA CTACGGCTCC      210
AACATTGTTG TTGAGGAAAT GCAAAAAGGC TATAAGCTGA AGGATCGCGT CATTCCGCCCT TCCATGGTCA      280
AAGTGAATCA ATAATTACAT AGCAGGAGGT TATTCAAGTG AGTAAAGTTA TCGGAATCGA CTTAGGAACA      350
ACAAACTCAT GTGTGGCAGT GCTTGAAGGC GCGAGCCTA AAGTTATTGC TAACGTGAA GGAAACCGCA      420
CAACGCCATC AGTTGTGCA TTTAAAAACG GCGAACGTC AAGTAGGGGAA GTGGCTAAAC GCCAATCTAT      490
TACAAACCCT AACACAATTA TGTCTATCAA ACGTCATATG GGTACTGATT ATAAAGTTGA AATTGAAGGA      560
AAGGATTACA CTCCACAAGA AGTGTCTGCT ATCATCCTC AACACCTTAA ACGATACGCT GAAAGCTATC      630
TTGGCGAAAC AGTATCAAAA GCAGTTATCA CAGTTCCTGC ATACTTTAAC GATGCTGAGC GTCAAGCAAC      700
AAAAAGACGT GGTAAAATG CAGGTCTTGA AGTAGAAGT ATCATCAACG AGCCGATGC AGCACCCGTT      770
GCATACGGAC TTGATAAAAC AGATGAAGAT CAAACGATCC TACTATACGA CCTTGGCGGC GGTACATTGG      840
ACGTTTCCAT CCTTGAGCTT GCGACGGTG TATTCGAAGT TCGTTCAACT GCCCGGACA ACCGCTGGG      910
TGGGACGAT TTTGACCAAG TTATCATCGA TCATCTGGTG TCTGAATC
  
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**References:**

- (1) Bardwell, J. C. and Craig, E. A. (1984) Proc. Nat. Acad. Sci. USA 81: 848-885
- (2) Sussman, M. D. and Setlow P. (1987) Nuc. Ac. Res. 15: 3923
- (3) Sanger, F., Nicklen, S. and Coulson, A. R. (1977) Proc. Nat. Acad. Sci. 74: 5463-5468

**Note added on submission:** The C-Terminal Sequence has been removed from this publication and the EMBL submission following re-analysis of the data.