

Nucleotide sequence of a soybean mitochondria tRNA Glu (TTC) gene

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A putative tRNA^{Glu} (TTC) gene is located on a 5.4 kb BglII fragment in the soybean mitochondrial genome. Cloning and restriction mapping of the 5.4 kb Bgl II fragment have been described elsewhere (1). We report here the nucleotide sequence of a 266 bp EcoRI-HindIII sub-fragment which contains the putative tRNA^{Glu}(TTC) gene (underlined). The sequence can be folded into the clover-leaf structure characteristic of the tRNAs, with all invariant and semi-invariant nucleotides present (2). The tri-nucleotide CCA present at the 3' end of the functional tRNAs is not encoded. The gene presents 74%, 71% and 65-66% homology with the tRNA Glu (TTC) genes from E.coli, yeast mitochondria and higher-plant chloroplasts respectively. (All the tRNA Glu gene sequences compared can be found in reference 3).

EcoRI	60
GAATTCACATCAGAAATCGCCAGAACACAAACGAAATCTTGAATTGCGTATAGAAACAAA	
ACGAACCACCTCTATTCTGGAGCTGAGGTATATGAAGAATGGCTTTTGG <u>TCCCCTTCG</u> I	120
<u>CCAGTGGTTAGGACATCGTCTTICATGTCGAAAGACACGGGTTCGATTCGGTAAGGGAI</u>	180
<u>GGCTACTCTTCCGGCCGCTTCAAGTTAGTGTTCAATTGCTGAGTGATCGCTCGCTATCT</u>	240
266	
GGCTGGAAAAGGTGGTCCGGAAAGCTT	
HindIII	

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