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Nucleotide sequence of a *Lactobacillus delbrueckii* gene encoding a minor (UCG) tRNA^{ser}

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A clone complementing the leuB6 allele of E.coli HB101 (1) was isolated from a Sau3A1 partials genomic library of Lactobacillus delbrueckii. An approximately 0.45 kb DraI fragment containing the leuB6 complementing activity was sequenced in both strands by the dideoxy chain termination method (2). The sequence codes for (UCG) tRNA^{ser}. The tRNA coding sequence (capital letters) is flanked by a putative promoter sequence (underlined, 3) and on the 3'-side by a dyad symmetry potential hairpin structure (doubly underlined) resembling a Rho-independent transcriptional terminator (4). With the exception of a G ⟶ A transition in the extra arm, the coding sequence is identical with the sequence of the Lactobacillus bulgaricus (UCG) tRNA^{ser} (1).

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1                   20                  40                  60
tttcaccatc ttaaaaaata atttgcaaga aacaaaaatt aaggtatact attattgtta atGGAGAGTT
                    ------                  ------
        80                  100                 120                 140
GGCAGAGCGG TAATGCAGCG GACTCGAAAT CCGCCGAGCC AATGTTGAAT TGGTGCGCAG GTTCAAATCC

                160                 180                 200
TGTACTCTCC Ttaatcaaag caaaaagccc cgagaaatca acattctcgg ggctttttct taattttaac
                    ===========         ===========
       220                 240                 260                 280
tagaaattaa ctagaaaagt tagttaatag acggcatcaa ggtgatgatt gcttggccgt tagacgggta

                300                 320                 340
gaccaccacg cctgtgtcgg tggtctgcca caattcgacg gagtactgcc tgctgcaagc caaccaaatt

       360                 380                 400
ggctgaggaa tgcgatcagc gatccgtcct cgtttaccag cgtgtccagg gtagctacct gcttt
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