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A fragment of the *Pseudomonas aeruginosa* genome contains five tRNA genes, four of which are linked to an EF-Tu gene

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A 5 kb fragment obtained by *Eco*RI digestion of *Pseudomonas aeruginosa* DNA and cloning into pBR322 contains, in a cluster, 4 tRNA genes followed by an open reading frame (ORF). Below is shown the complete nucleotide sequence of 3 of the tRNA genes and the coding region of the first 12 amino acids of the ORF. Partial nucleotide sequence data also show that the fourth upstream tRNA gene is that for $tRNA^{Thr}$(TGT), and the sequence of the ORF is closely homologous to that of the *tuf*B gene in *E. coli*. The gene organization in *Ps. aeruginosa* would, therefore, appear to be 5'-Thr(TGT)-Tyr(GTA)-Gly(TCC)-Thr(GGT)-EF-Tu which is similar to the gene arrangement in *E. coli* (2,3). The two Thr tRNA genes are different from the *Ps. aeruginosa* Thr(CGT) gene previously reported (3). Downstream of the EF-Tu gene is a fifth tRNA gene which we have identified as $tRNA^{Trp}$ (CCA). This gene has putative promoter sequences immediately upstream and, unlike the location of the $tRNA^{Trp}$ gene in *E. coli*, it is not associated with a rRNA operon.

$tRNA^{Tyr}$
GGAGGGATCC CTTAGTGGCC AAAGGATCAG ACTGTAAATC TGACGTCATA

GACTTCGAAG GTTCGAATCC TTCTCCCTCC ACCAGTTTAA AAGCGTGAGC

$tRNA^{Gly}$
TTCGGGCTCC GCGGGTATAG TTCAGTGGTA GAACCTCAGC CTTCCAAGCT

GATGATGCGG GTTCGATTCC CGCTACCCGC TCCAGTCAAG TTGCTTGTGT

$tRNA^{Thr}$
TTCGCTCATG TAGCTCAGTT GGTAGAGCAC ACCCTTGGTA AGGGTGAGGT

CAGCGGTTCA AATCCGCTCA TGAGCTCCAT TTATCCAGGG GCAGATATGA

AAATATCTGC CCTTGTTCTA ATGGTAGCGT GATCCGCTCA ATTCCTTGAA

ORF
GGGGATGGTC TCCATGGCTA AAGAAAAATT TGAACGGAAC AAGCCGCAC

tRNA genes and the ORF are in bold print.

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