Nucleotide sequence encoding genes for isoleucine- and alanine-accepting tRNA from *Pseudomonas aeruginosa*

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SEQUENCE AND ITS ORIGIN: Fragments of *Pseudomonas aeruginosa* (strain K, ATCC 25102) DNA encoding two tRNA genes have been sequenced as part of a project directed towards sequencing a complete ribosomal RNA operon from this organism. Clones from a BamH1 library of *P. aeruginosa* DNA ligated into plasmid pUC9 were isolated by hybridisation with *P. aeruginosa* 16S and 23S ribosomal RNA molecules that had been labelled with $^{32}$P at the 5'-terminus. A 4.5 kb insert from one of these clones was subfragmented and cloned into M13mp8 and M13mp9 sequencing vectors to enable sequencing by the chain termination method (1). Both DNA strands were sequenced at least twice.

<table>
<thead>
<tr>
<th>TTAGACGATTpGGTCTGTAGCTCAGTTGGTTAGAGCGCACCCCTGATAAGGGTGAGGTCG</th>
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<td>GCAGTTCGAAATCTGCCAGACCCACCAAAATGTTGGTGTTGCTGCCGTGATCCGATAAGGGGC</td>
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<tr>
<td>CATAGCTCAGCTGGGAGGCCCTGCTTTTCGCCACGACCAGGAGGTTCAGGAGTTCCTCCT</td>
<td>180</td>
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<tr>
<td>TGGCTCCACCATCCAAACAA</td>
<td>200</td>
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</tbody>
</table>

FEATURES: The mature tRNA$^{\text{Ile}}$ and tRNA$^{\text{Ala}}$ genes, identified through their homology with the corresponding genes from *Escherichia coli* (2), are boxed. Sequences corresponding to the respective anticodons AUC and GCA are underlined. Both tRNA sequences are clearly *E. coli*-like, both have the -CCA terminus encoded at the DNA level and are of the Class 1 cloverleaf type (3).

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REFERENCES:
