

The nucleotide sequence of gene *rplJ* encoding ribosomal protein L10 of *Salmonella typhimurium*

E.B.Paton*, S.B.Zolotukhin, M.I.Woodmaska, I.V.Kroupskaya and A.N.Zhyvoloup
Institute of Molecular Biology and Genetics, Ukrainian SSR Academy of Sciences, Kiev 252627,
USSR

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Gene *rplJ* of *S. typhimurium* LT2 was isolated from recombinant pNL1 (1) plasmid in the EcoRI-E- fragment and further cloned on vector plasmid pUC19 (2). The *rplJ* gene carried by the resultant pMW12 plasmid was sequenced according to the procedure (3). Maintenance of pMW12 showed it to be growth-detrimental for normal JM101 (2) *E. coli* host cells due to superexpression of the cloned *rplJ* gene. This feature demonstrated thus the ability of the heterologous L10 protein of *S. typhimurium* to feedback *rplJL* genes expression in *E. coli*. Nucleotide sequence determined confirmed the striking homology of *S. typhimurium* and *E. coli* (4) *rplJ* genes. The secondary structure providing for the coupled translation of L10 and L12

cistrons in *E. coli* L10–L12 mRNA (5) according to the nucleotide sequence determined is restored in *S. typhimurium*. Three a.a. (Val-62, Gln-67 and Thr-74) differ in L10 of *S. typhimurium* from that of *E. coli* (4).

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ATGGCTTTAAATCTTCAAGACAAACAAGCGATTGTTGCTGAAAGTCAGCGAAGTAGCCAAAGGCGCGCTG 70
M A L N L Q D K Q A I V A E V S E V A K G A L
TCTGCAGTAGTTGCCGATTCCCCTGGCGTAACTGTAGATAAAATGACTGAACTGCGTAAAGCAGCTCGT 140
S A V V A D S R G V T V D K M T E L R K A G R
GAAGCTGGCGTATACATGCGTGTGTTGTTTCGTAACACCCTGCTGCGCCGCGTTCGTTGAAGGTAAGTTC 210
E A G V Y M R V V R N T L L R R V V E G T Q F
GAGTGCCTGAAAGACACGTTTGTGTTGGTCCGACCCTGATTGCATACTCTATGGAACACCCGGGCGCTGCT 280
E C L K D T F V G P T L I A Y S M E H P G A A
GCTCGTCTGTTCAAAGAGTTCCGCGAAAGCGAATGCAAAATTTGAGGTCAAAGCTGCAGCCTTTGAAGGT 350
A R L F K E F A K A N A K F E V K A A A F E G
GAGCTGATCCCGGCGTCTCAGATCGACCGCCTGGCAACTCTGCCGACCTACGAAGAAGCAATTGCACGC 420
E L I P A S Q I D R L A T L P T Y E E A I A R
CTGATGGCAACCATGAAAGAAGCTTCGGCTGGCAAACTGGTTCCGACACTGGCTGCTGTACGCGATGCA 490
L M A T M K E A S A G K L V R T L A A V R D A
AAAGAAGCTGCGTAA 505
K E A A

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* To whom correspondence should be addressed