

The Periplasmic Expression of Recombinant Human Ribosomal Protein L10 (RP L10) in *Escherichia coli*

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Human ribosomal protein L10 (RP L10 or QM), consisting of 214 amino acid residues, is a single chain polypeptide with a molecular weight of about 26,000 Dalton. This is necessary for joining the 60S and 40S subunits in the translation initiation and its homologues have been identified in plants, animals, and fungi.

Human L10 has been recently identified as a tumor suppressor in the research of Wilms´ tumor cells. So far, this protein has been related with the transcript regulator c-Jun, the src family kinase c-Yes, gastric tumor and prostatic adenocarcinoma. Its expression in bacteria is interesting because it makes possible studies of structure and function.

The objective of this study was cloning and expression of soluble QM human protein in bacteria periplasmic space. The cDNA of human QM was cloned into pET-26a vector and expression in *E. coli* BL21 (DE3) in periplasmic space. The expression of QM protein was satisfactory, 0.1 g/L. The recombinant protein expression analysis was in SDS-PAGE and Western blotting in which its identity was confirmed in soluble form. Conclusion: In the present study, the QM protein was cloned and expressed in periplasmic space.