

Sequence of a cloned cDNA encoding human ribosomal protein S11

John B.Lott and George A.Mackie*

Department of Biochemistry, University of Western Ontario, London, Ontario N6A 5C1, Canada
Submitted December 23, 1987

We have isolated a cloned cDNA that encodes human ribosomal protein (rp) S11 by screening a human fibroblast cDNA library (1) with a labelled 204 bp DNA fragment encompassing residues 212-416 of pRS11, a rat rp S11 cDNA clone (2). The human rp S11 cloned cDNA consists of 15 residues of the 5' leader, the entire coding sequence and all 51 residues of the 3' untranslated region. The predicted amino acid sequence of 158 residues is identical to rat rpS11 (2). The nucleotide sequence in the coding region differs, however, from that in rat in the first position in two codons and in the third position in 44 codons.

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Met Ala Asp Ile Gln Thr Glu Arg Ala Tyr Gln Lys Gln Pro
CAGGCGCCCGGGAAG ATG GCG GAC ATT CAG ACT GAG CGT GCC TAC CAA AAG CAG CCG
3
Thr Ile Phe Gln Asn Lys Lys Arg Val Leu Leu Gly Glu Thr Gly Lys Glu Lys
ACC ATC TTT CAA AAC AAG AAG AGG GTC CTG CTG GGA GAA ACT GGC AAG GAG AAG
60
Leu Pro Arg Tyr Tyr Lys Asn Ile Gly Leu Gly Phe Lys Thr Pro Lys Glu Ala
CTC CCG CGG TAC TAC AAG AAC ATC GGT CTG GGC TTC AAG ACA CCC AAG GAG GCT
114
Ile Glu Gly Thr Tyr Ile Asp Lys Lys Cys Pro Phe Thr Gly Asn Val Ser Ile
ATT GAG GGC ACC TAC ATT GAC AAG AAA TGC CCC TTC ACT GGT AAT GTG TCC ATT
168
Arg Gly Arg Ile Leu Ser Gly Val Val Thr Lys Met Lys Met Gln Arg Thr Ile
CGA GGG CGG ATC CTC TCT GGC GTG GTG ACC AAG ATG AAG ATG CAG AGG ACC ATT
222
Val Ile Arg Arg Asp Tyr Leu His Tyr Ile Arg Lys Tyr Asn Arg Phe Glu Lys
GTC ATC CGC CGA GAC TAT CTG CAC TAC ATC CGC AAG TAC AAC CGC TTC GAG AAG
276
Arg His Lys Asn Met Ser Val His Leu Ser Pro Cys Phe Arg Asp Val Gln Ile
CGC CAC AAG AAC ATG TCT GTA CAC CTG TCC CCC TGC TTC AGG GAC GTC CAG ATC
330
Gly Asp Ile Val Thr Val Gly Glu Cys Arg Pro Leu Ser Lys Thr Val Arg Phe
GGT GAC ATC GTC ACA GTG GGC GAG TGC CGG CCT CTG AGC AAG ACA GTG CGC TTC
384
Asn Val Leu Lys Val Thr Lys Ala Ala Gly Thr Lys Lys Gln Phe Gln Lys Phe
AAC GTG CTC AAG GTC ACC AAG GCT GCC GGC ACC AAG AAG CAG TTC CAG AAG TTC
438

TGAGGCTGGACATTCGGCCCGCTCCCAACAATGAATAAAGTTATTTTCTATTCC
492

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We wish to thank Dr. Paul Berg for the human cDNA library and Dr. Kikuo Ogata for pRS11. This work was supported by the Medical Research Council of Canada.

*To whom correspondence should be addressed

REFERENCES

- (1). Okayama, H. and Berg, P. (1983) Mol. Cell. Biol. 3, 280-289.
- (2). Tanaka, T., Kuwano, Y., Ishikawa, K. and Ogata, K. (1985) J. Biol. Chem. 260, 6329-6333.