

Sequence of a cDNA encoding rat ribosomal protein homologous to *Xenopus laevis* ribosomal protein S8

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A cDNA clone (pRRHIS8) which encodes rat ribosomal protein homologous to *Xenopus laevis* ribosomal protein S8 has been isolated from a lambda gt10 cDNA library constructed using poly(A⁺) mRNA from L6α1 rat myoblasts (1). The cDNA insert includes a 5' non coding sequence of 20 nucleotides, an open reading frame of 585 nucleotides which encodes a putative protein of 195 amino acid residues and a 3' non coding sequence of 36 nucleotides followed by a 3' polyA tail. The polyadenylation signal AATAAA is located at position 621–626 in the 3' non coding region. The poly peptide deduced from the cDNA sequence shows 85% homology with the *Xenopus laevis* ribosomal protein S8 (2). The size of the mRNA which encodes cDNA pRRHIS8 is about 700 nucleotides as revealed by Northern blot and about 10 copies of this gene are present in rat genome.

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REFERENCES

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1  CACTCCGTAA GACGAAGCCA TGTCTAGCTC GAGCGCCAAG ATTGTGAAGC CCAATGGCAA
61  GAAGCGAGAC GAGTTCGAGT CTGGCATCTC TCAGGCGCTG CTCGAGCTGG AGATGAACTC
121 CGAACTGAAG ACGCAGCTGT GGGAACTCAA CATCACCGCG GCAAAGGAAA TCGAAGTCGG
181 TGGTGGTCTGA AAAGCCATCA TAATTTTGT ACCAGTTCT CAGCTGAAAT CTTTCCAGAA
241 AATGGCCAAG TCCGGCAAGG TTCCGCAATT GGAGAAAAAG TTCAAGTGGGA AACACAGTAGT
301 CTTCAATTGCT CAGAGGAGGA TTCTGCCCAA GCCAACCCGA AAAAGCCGTA CGAAAAATAA
361 GCAAAAAGGCC CAGAAGCCGA CCCTGACGAG CAGTGCAGAC CGACGCATCC TTGAGGATTT
421 GGTCTTCCCA AGTGAATTG TGGGCAAGAG GATCCGTGTG AAACCTGTAG CGACGCGCT
481 CATAAAAGTT CATTTAGACA AAGCACAGCA GAACAACGTG GAGCACAAAG TCGAAACTTT
541 TTCTGGCGTG TACAAGAAGC CACTAGGCAA GGATGTTAAC TTTGAATTCC CAGAAGTTTC
601 AGTTTAAAGA AAAATGAAGT AATAAAATGT CATTATAAT AAAAAAAAAA

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Figure 1. Nucleotide sequence of pRRHIS8 cDNA. Start and stop codon are underlined.

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      10      20      30      40      50      60      70
SAKIVKPNKKRDEFESGISQALLEEMNSELKTQLWELNITAAKEIEVGGGRKAIIFVVPVQLKSFQK
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SAKIVKPNGEKPDFESGISQALLEEMNSDLKAQLRELNITAAKEIEVGGGRKAIIFVVPVQLKSFQK
      10      20      30      40      50      60      70
80      90      100     110     120     130     140
MAKSGKVELEKKFSGKHVVVIAQRRILPKPTRKSRTKNKQKQKPK-TLTSSADRRILEDLVFPSEIVGK
-
IQVRL-VRELEKKFSGKHVVVIAQRRILPKPTRKSRTKNKQKQKPRSRILTAVHDA-ILEDLVYPSEIVGR
      80      90      100     110     120     130     140
150     160     170     180     190
RIRVKLVGSRLIKVHLDKAQONNVENKVVETFSGVYKPL-GKDVNFEPFE rat
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RIRVKLDGSRLIKVHLDKAQONNVENKVVETFSGVYK-LTGKDVNFEPFE Xenopus laevis
      150     160     170     180     190

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Figure 2. Amino acid comparison of pRRHIS8 and ribosomal protein S8 from *Xenopus laevis* (2).