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cDNA and deduced amino acid sequence of acidic ribosomal protein A1 from *Saccharomyces cerevisiae*

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We have cloned recombinant cDNA for acidic ribosomal protein A1 (1) from a cDNA library of yeast Saccharomyces cerevisiae (IFO-40028) using synthetic oligonucleotides synthesized to be complementary to the conserved carboxy-terminal sequence of most acidic ribosomal proteins as probe and deduced the amino acid sequence from the nucleotide sequence in it. The protein product directed by mRNA hybrid-selected by the recombinant cDNA corresponded to "13 kDa-type" acidic ribosomal protein A1 on SDS-PAGE and NEPHGE. The open reading frame contains 106 amino acids with a molecular weight of 10923 and shows high homology to acidic ribosomal proteins eL12' from Artemia salina (52 % identity) (2) and P1 from human cell (47 %) (3).

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  1-                                AGCTTAAACCGATTATCTCTAAAATAGCAAGAAGAA

 37- ATGTCTACTGAATCCGCTTTGTCTTACGCCGCCTTGATTTTGGCTGACTCTGAAATCGAA
  1- MetSerThrGluSerAlaLeuSerTyrAlaAlaLeuIleLeuAlaAspSerGluIleGlu

 97- ATCTCTTCTGAAAAGTTGTTGACTTTGACTAACGCTGCCAATGTCCCAGATGAAAATATC
 21- IleSerSerGluLysLeuLeuThrLeuThrAsnAlaAlaAsnValProAspGluAsnIle

157- TGGGCTGATATTTTTGCTAAGGCTTTGGACGGCCAAAACTTGAAGGACTTATTGGTCAAC
 41- TrpAlaAspIlePheAlaLysAlaLeuAspGlyGlnAsnLeuLysAspLeuLeuValAsn

217- TTCAGCGCTGGTGCTGCTGCCCCAGCTGGTGTCGCTGGTGGTGTCGCTGGTGGTGAAGCC
 61- PheSerAlaGlyAlaAlaAlaProAlaGlyValAlaGlyGlyValAlaGlyGlyGluAla

277- GGTGAAGCCGAAGCTGAAAAGGAAGAAGAAGAAGCTAAAGAAGAATCCGATGACGACATG
 81- GlyGluAlaGluAlaGluLysGluGluGluGluAlaLysGluGluSerAspAspAspMet

337- GGTTTCGGTTTATTTGATTAGAAGTGCCGCACTGTTTAGAAGAAATTGCATATTCTAACA
101- GlyPheGlyLeuPheAsp///

397- TTTAAAATTTTTATAATTTTTCTATATAGTCGCTTTTAATACAATTAGACAGTACTTTCT

457- TTTTGTTCA-polyA
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