
cDNA and deduced amino acid sequence of acidic ribosomal protein A2 from *Saccharomyces cerevisiae*

Kazuhiro Mitsui and Kunio Tsurugi

Department of Biochemistry, Yamanashi Medical College, 1110 Shimokato, Tamaho, Nakakoma, Yamanashi 409-38, Japan

Submitted March 18, 1988

Accession no.X06958

We have determined the nucleotide and deduced amino acid sequence of acidic ribosomal protein A2 (1) from yeast *Saccharomyces cerevisiae* (IFO-40028) as described in the preceding paper. The protein product directed by mRNA hybrid-selected by the recombinant cDNA corresponded to "13 kDa-type" acidic ribosomal protein A2 which is slightly smaller and less acidic than A1 as determined by SDS-PAGE and NEPHGE. The open reading frame contains 106 amino acids with a molecular weight of 10745 and shows high homology to acidic ribosomal proteins eL12 from *Artemia salina* (51 % identity) (2), P2 from human cell (52 %) (3) and those from several other organisms.

1- TAACAGAACCAATCATACAAAA

23- ATGAAGTACTTAGCTGCTTACCTATTATTGAACGCTGCTGGTAACACCCAGATGCCACC
1- MetLysTyrLeuAlaAlaTyrLeuLeuLeuAsnAlaAlaGlyAsnThrProAspAlaThr

83- AAGATTAAGGCTATTTTGAATCCGTCGGTATCGAAATCGAAGACGAAAAGGTTTCCTCC
21- LysIleLysAlaIleLeuGluSerValGlyIleGluIleGluAspGluLysValSerSer

143- GTTTTGTCGCCGCTTTGGAAGGTAAGTCTGTTGACGAATTAATTACTGAAGGTAACGAAAAG
41- ValLeuSerAlaLeuGluGlyLysSerValAspGluLeuIleThrGluGlyAsnGluLys

203- TTGGCTGCTGTTCCAGCTGCTGGTCCAGCTTCTGCTGGCGGTGCTGCTGCTGCCTCTGGT
51- LeuAlaAlaValProAlaAlaGlyProAlaSerAlaGlyGlyAlaAlaAlaAlaSerGly

263- GATGCTGCTGCTGAAGAAGAAAAGGAAGAAGAAGCCGCTGAAGAATCTGACGACGACATG
81- AspAlaAlaAlaGluGluGluLysGluGluGluAlaAlaGluGluSerAspAspAspMet

323- GGTTCGGTTTATTCGACTAAGGTTGAGTAAATTTGTGCAATCTCGTTATATCATATCTT
101- GlyPheGlyLeuPheAsp///

333- GGAAGTTATAGAGGGAAGGGCGCAAAAATAAACCCCTTCTCTTTTTTACGGCGACCATA

443- CTCTTTTTTTCCTAATCCTTTTTCAAGTTTAAATCCATGATTTAATATCTATTTATACATA

503- TAAATAATATAAGTAATGGTTTAAATGCATTTGTTTCA-polyA

References: 1. Mitsui, K. et al. (1987) *J. Biochem.* 102, 1565-1570. 2. Maassen, J. A. et al. (1985) *Eur. J. Biochem.* 149, 609-616. 3. Rich, B. E. and Steitz, J. A. (1987) *Mol. Cell. Bio.* 7, 4065-4074.