Nucleotide sequence of cDNA to yeast M2−1 dsRNA segment

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The nucleotide sequence of cDNA to *Saccharomyces cerevisiae* M2−1 dsRNA segment containing the K2 type killer toxin and immunity gene is presented. Dideoxynucleotide chain-termination sequencing of both strands of 14 overlapping cDNA clones was done. Nucleotides 1 to 15 were determined by direct RNA sequencing. All but three bases (31, 68, 189) correspond in the overlapping region published earlier (1). The sequencing reveals the single large open reading frame (bases 7 to 1092) coding for a protein of 362 amino acids of calculated molecular weight 38.7 kd. The expression of cDNA clone, provided with synthetic start ATG codon, in yeast confers both killer and immunity phenotypes (A.Mešauskas, in press).

REFERENCE

1. Hannig,E.M. and Leibowitz,M.J. (1985) *Nucl. Acids Res.* 13, 4379−4400.

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   1 GAAAAAATGA AAGAGACTAC CACCAGCCTG GTGCAAGACG AGCTGACACT AGGTGAGCCG
  61 GCCACCCGAG CAAGGATGTG CGTACGTCTA TTACGTTTTT TCATAGGTCT GACTATAACC
 121 GCATTTATTA TAGCAGCCTG TATTATTAAA AGTGCGACAG GCGGTTCGGG ATATTCTAAT
 181 GCAGTTGCTG TTCGGGGAGA AGCGGACACC CCTTCCACAA TTGTGGGCCA GCTCGTCGAG
 241 CGTGGCGGCT TCCAAGCTTG GGCAGTGGGG GCTGGTATCT ATTTGTTTGC CAAGATAGCA
 301 TATGATACAT CTAAGGTTAC CGCAGCTGTA TGTAATCCGG AGGCGCTCAT TGCTATCACA
 361 TCGTATGTGG CATATGCCCC TACACTGTGT GCTGGTGCAT ACGTTATTGG TGCCATGAGT
 421 GGGGCAATGT CGGCGGGCCT TGCTCTGTAT GCCGGTTACA AAGGATGGCA GTGGAGCGGC
 481 CCCGGGGGCA TGGCAGAGAG AGAGGACGTG GCCTCTTTTT ATTCACCACT CCTGAACAAC
 541 ACTCTGTACG TGGGTGGGGA CCACACTGCA GACTACGACA GTGAATTGGC TACTATATTA
 601 GGTAGCGTAT ATAATGATGT GGTCCACCTG GGGGTGTATT ACGATAACAG CACTGGAATT
 661 GTCAAGAGGG ATTCGAGACC TAGCATGACC TCATGGACGG TGTTGCATGA CAACATGATG
 721 ATAACATCAT ACCATAGGCC AGACCAGCTG GGCGCAGCCG CGACAGCCTA CAAAGCTTAT
 781 GCCACAAACA CAACACGGGT CGGTAAGAGG CAGGACGGTG AGTGGGTGTC ATACTCGGTC
 841 TACGGTGAGA ATGTTGACTA TGAAAGATAC CCTGTAGCAC ATCTGCAAGA GGAGGCCGAC
 901 GCGTGTTACG AGAGTTTAGG TAATATGATT ACGAGCCAGG TACAGCCCTG TACTCAGAGA
 961 GAATGTTATG CTATGGATCA GAAAGTATGC GCAGCTGTCG GCTTCTCATC AGATGCGGGT
1021 GTTAACTCCG CAATGGTCGG TGAGGCCTAC TTCTATGCCT ATGGTGGGGT TGATGGTGAA
1081 TGTGACAGCG GCTAGGATAG GATATAAATA ATATATTAAT AAAACAAAAT AATAAAAATA
1141 TAAAAAAAAA AAAAAAAAAA AAA
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