Sequence of mouse adenovirus type 1 DNA encoding the amino terminus of protein IVa2

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The nucleotide sequence which is predicted to encode the amino terminus of the mouse adenovirus type 1 (MAV-1) IVa2 gene was determined as previously described (1). The sequence reported here, 13.7−16.5 map units of MAV-1, abuts the previously reported nucleotide sequence predicted to encode the carboxy terminus of the IVa2 gene (1). The IVa2 mRNA is predicted to be transcribed from right to left; the bottom strand corresponds to the protein coding sequence. The predicted amino acid (aa) sequence has 54% identity and 81% similarity to the human Ad2 IVa2 sequence over the entire length of the IVa2 protein sequence (448 aa) (2). The start codon is underlined and the elipsis indicates continuation of the protein sequence toward the C terminus. We propose that like Ad2 IVa2 mRNA, the MAV-1 mRNA is spliced, with an intron from nt 4850−4563, as indicated.

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REFERENCES

1. Ball,A.O., Beard,C.W., Redick,S.D. and Spindler,K.R. (1989) *Virology* **170**, 523−536.
2. van Beveren,C.P., Maat,J., Dekker,B.M.M. and van Ormondt,H. (1981) *Gene* **16**, 179−189.

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...GCACTGG  AGGCGAGGCC  AAAGGAATTG  CAGTTCCTCG  CCTACAAGGC  AATCCAGGTT  GTTTCCCTGT  4400
...CGTGACC  TCCGCTCCGG  TTTCCTTAAC  GTCAAGGAGC  GGATGTTCCG  TTAGGTCCAA  CAAAGGGACA
... C  Q    L  R  P  W    L  F  Q    L  E  E    G  V  L    C  D  L  N    N  G  Q

TCCGGGGATT  GGGGTGGGCA  GTGGAGTATG  GAATTAGACG  ACCGTCCTCC  AGGAGAGCTA  AAGTTGGGTT  4470
AGGCCCCTAA  CCCCACCCGT  CACCTCATAC  CTTAATCTGC  TGGCAGGAGG  TCCTCTCGAT  TTCAACCCAA
 E  P  S    Q  P  P  C    H  L  I    S  N  S    S  R  G  G    P  S  S    F  N  P

CTGCCACGGG  CGAAGAGAGC  GAGTCAGCAC  TGTCTCCGTT  ACGGTGAAAG  CCGATTCTTG  CTTGTTCATG  4540
GACGGTGCCC  GCTTCTCTCG  CTCAGTCGTG  ACAGAGGCAA  TGCCACTTTC  GGCTAAGAAC  GAACAAGTAC
E  A  V  P    S  S  L    S  D  A    S  D  G  N    R  H  F    G  I  R    A  Q  E  H

TTCACCAAGG  TTCTCTTTAG  ACTCTGTCGG  GAAGTGTAGA  AGTTGGGGTC  AGATTCATTA  AGACGGTATG  4610
AAGTGGTTCC  AAGAGAAATC  TGAGACAGCC  CTTCACATCT  TCAACCCCAG  TCTAAGTAAT  TCTGCCATAC
  E  G  L    N  E  K    S
           splice acceptor

CTTCGTAGCA  CGCTAGTAAG  ATGTCGTAGG  ATAACGAAGC  AACAGCATGA  CCCTTGGCCC  GGAGTTTTCC  4680
GAAGCATCGT  GCGATCATTC  TACAGCATCC  TATTGCTTCG  TTGTCGTACT  GGGAACCGGG  CCTCAAAAGG

AGCTCCTTCT  TGACCACAGG  TTGGGCACAC  TAATTTCTGT  AAGGCGTAGA  GTTTTGGAGC  AAGAAAAACC  4750
TCGAGGAAGA  ACTGGTGTCC  AACCCGTGTG  ATTAAAGACA  TTCCGCATCT  CAAAACCTCG  TTCTTTTTGG

GTTCGGGGAC  TAAATGCATC  GCTCCCGCAG  TATTTACACT  GAGTTTCACA  TTCCACTAGC  CATGTAAGAC  4820
CAAGCCCCTG  ATTTACGTAG  CGAGGGCGTC  ATAAATGTGA  CTCAAAGTGT  AAGGTGATCG  GTACATTCTG

TCGGCTTTTC  AGGGTTAAAA  ACGAGCTTAC  CTCCGTTCTT  CTTAAGACGG  TGTTTTCCCC  GGGATTCCAT  4890
AGCCGAAAAG  TCCCAATTTT  TGCTCGAATG  GAGGCAAGAA  GAATTCTGCC  ACAAAAGGGG  CCCTAAGGTA
                                    E  G  N  K    K  L  R    H  K  G    R  S  E  M
                                    splice donor

GAGGTTTCGC  CCCGCTTCGG  TGACAAACAG  GCTATCAGTG  TCACCGTACA  CACTTTTTAT  AAGTCGTTTT  4960
CTCCAAAGCG  GGGCGAAGCC  ACTGTTTGTC  CGATAGTCAC  AGTGGCATGT  GTGAAAAATA  TTCAGCAAAA

TCAAGTTGAA  GACCTCGGTC  ACTTTCGTAG  AGTATGTCAC  TCCACTCACT  CATAAACCCA  CGAGTCCAAG  5030
AGTTCAACTT  CTGGAGCCAG  TGAAAGCATC  TCATACAGTG  AGGTGAGTGA  GTATTTGGGT  GCTCAGGTTC

CGAGCACAAA  AGAGGCAAGG  TGTGAGGCGT  AGCGGTCATT  GTCGACGAGT  GGATTGCTGT  GC  5092
GCTCGTGTTT  TCTCCGTTCC  ACACTCCGCA  TCGCCAGTAA  CAGCTGCTCA  CCTAACGACA  CG
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