Nucleotide sequences of the gene/cDNA coding for anti-murine erythrocyte autoantibody produced by a hybridoma from NZB mouse

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We have determined the nucleotide sequences of the V_H and V_κ genes derived from B13H4C8 hybridoma (μ, κ) producing haemagglutinating autoantibody reactive with the exposed murine erythrocyte autoantigens (1).

The V_H clone was isolated by screening of B13H4C8 λgt10 cDNA library with Cμ probe, and the V_κ clone was obtained by screening Charon 28 genomic library with C_κ probe. The V_H sequence was composed of a V_H segment more than 88% homologous to that of the anti-DNA autoantibody of the J558 family (2), a short D segment with unknown origin, and J_H3 segment. The V_L sequence comrpised a V_κ segment more than 89% homologous to that of the anti-phosphocholine antibody of the $V_\kappa8$ group (3), and $J_\kappa5$ segment.

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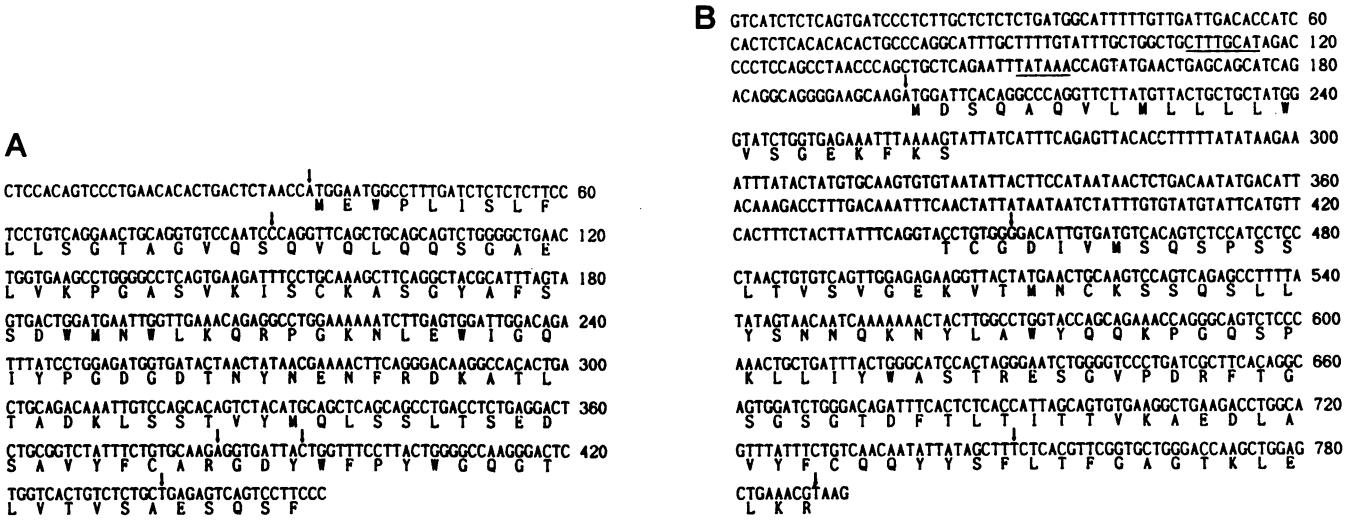

Figure 1. Nucleotide sequences of the V_H(A) and V_κ(B) genes. Junctions of signal sequences, V, D, J and C are shown by arrow heads. Octamer and TATA box of the V_κ gene are underlined.