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Nucleotdie Sequence of an Anti-Fluorescyl Hapten Antibody Heavy Chain Variable Region Gene from a BALB/c Mouse Hybridoma Cell Line

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Nucleotide sequence of an anti-fluorescyl hapten antibody heavy chain variable region gene from a BALB/c mouse hybridoma cell line

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We report here the nucleotide sequence of an anti-fluorescyl hapten antibody heavy chain variable region gene from a BALB/c mouse hybridoma cell line 3-13 (1). This gene segment was contained in a 5.0 kb EcoRI fragment isolated by a 700 bp probe 3' to the mouse heavy chain joining minigene region between the XbaI and EcoRI sites. Mature protein starts at *. The first 21 amino acid residues have also been confirmed by direct amino acid sequencing and they are identical to those of immunoglobulin MOPC104E heavy chain (2). Complementarity determining regions (CDRs) are underlined. The third CDR is unusually long and does not match any of the mouse heavy chain diversity minigene sequences (3). However, GGCTAC is found in the $D_{FL16.2}$-minigene, and GTAA in the $D_{SP2.5}$-minigene, suggesting that ten of the 30 nucleotides in CDR3, GGCTACGTAA, may be derived from a D-D joining.

GCTGCTGTCTTGTGAGTCCCCTGCTCTCATTATGGCAAATTACCTGAGTCTATGGTCATTAAAACAGGATGT
CCACACCCTTAAATCAACCGACGATCAGTGTCCTCTCCAAAGTCCCTGAACACACTGACTCTAACC ATG G
AA TGG AGT TGG ATA TTT CTC TTT CTC CTG TCA GGA ACT GCA G GTAAGGGGCTCACCA
GCTTCAAAATCTGAAGTGGAGACAGGACCTGAGGTGACAATGACATCTACTCTGACATTCTCTCCTCAG GT
GTC CAC TCT*GAG GTC CAG CTG CAG CAG TCT GGA CCT GAG CTG GTA AAG CCT GGG
GCT TCA GTG AAG ATG TCC TGC AAG GCT TCT GGA TAC ACA TTC TCT AGC TAT GTT
CTA TAC TGG GTG AAA CAG AAG CCC TGG GCA GGG CTT GAG TGG ATT GGC TTT ATT
TTT CCT TAC AAT GAT GGT ACT AAG TAC AAT GAG AAG TTC AAA CGG CGA GGC ACA
CTG ACT TCA GAC AAA TCC TCA AGC ACA GCC TAC ATG GAA CTC AGC AGC CTG ACC
TCT GAG GAC TCT GCG GTC TAT TAC TGT GCA CGA ACG GGC GCA GAC AGC TCG GGC
TAC GTA AGG GCT ATG GAC TAC TGG GGT CAA GGA ACC TCA GTC ACC GTC TCC TCA
G GTAAGAATGGCCTCTCCAGGTCTTTATTTTTAACCTT

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