Isolation and mapping of a polymorphic DNA sequence (pMHZ21) on chromosome 9q [D9S30]

Y.Nakamura, M.Hoff, J.Gill, P.O.'Connell, M.Leppert, G.M.Lathrop, J.-M.Lalouel and R.White

The Howard Hughes Medical Institute, University of Utah Medical School, Salt Lake City, UT 84132, USA

SOURCE/DESCRIPTION: A 2.8 kb HindIII fragment from cosmid MHZ21 isolated by the Z22 oligonucleotide (1) was subcloned into the HindIII site of pGEM3.

POLYMORPHISM: PvuII identifies a 2 allele VNTR polymorphism with a band at 1.9 kb or 1.6 kb. HindIII, RsaI and TaqI also detect this polymorphism.

HETEROZYGOSITY: Estimated from 43 unrelated Caucasians.

P1 : 0.40

P2 : 0.60

NOT POLYMORPHIC FOR: none detected

CHROMOSOMAL LOCALIZATION: pMHZ21 has been assigned to distal chromosome 9q by multipoint linkage analysis(2) with loci (ABO, AK1, ABL) known to span this region(3).

MENDELIAN INHERITANCE: Co-dominant segregation of the PvuII VNTR polymorphism was observed in 22 three generation families.

PROBE AVAILABILITY: Freely available (contact Y.N.) or will be available from ATCC.

OTHER COMMENTS: RFLPs were observed after competitive hybridization with total human DNA.

REFERENCES:

1. Y. Nakamura et al., Science **235**:1616-1622 (1987)
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3. G.M. Lathrop et al., Cytogenet. Cell Genet. **46**:644 (1988)