Isolation and mapping of a polymorphic DNA sequence (pMHZ13) on chromosome 9q [D9S13]

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SOURCE/DESCRIPTION: A 3.3 kb PvuII fragment from cosmid MHZ13 isolated by the Z22 oligonucleotide (1) was subcloned into the HincII site of pGEM4.

POLYMORPHISM: PstI identifies a three allele VNTR polymorphism with alleles between 1.6 - 2.3 kb. HindIII, RsaI and TaqI also resolve this polymorphism.

HETEROZYGOSITY: With PstI, 56% heterozygosity was observed from 72 unrelated Caucasians.

NOT POLYMORPHIC FOR: MspI does not adequately resolve this polymorphism.

CHROMOSOMAL LOCALIZATION: pMHZ13 has been assigned to chromosome 9q by multipoint linkage analysis(2) with loci (ABO, AK1, ABL) known to span this region(3,4).

MENDELIAN INHERITANCE: Co-dominant segregation of the PstI VNTR polymorphism was observed in 31 three generation families.

PROBE AVAILABILITY: Contact Y.N.

OTHER COMMENTS: This probe was pre-associated with excess human DNA prior to hybridization. Otherwise, RFLPs were observed under normal hybridization and wash stringencies.

REFERENCES:

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