Isolation and mapping of a polymorphic DNA sequence pYNH24 on chromosome 2 (D2S44)

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SOURCE/DESCRIPTION: A 2.0 kb MspI fragment from cosmid YNH24 isolated by HBV-2 oligonucleotide (GGAGTTGGGGGAGGAG) (1) was subcloned into the AccI site of pUC18.

POLYMORPHISM: MspI identifies a >30 allele VNTR polymorphism with bands between 1.0 - 5.0 kb. TaqI, BglII, PvuII, PstI and BamHI also detect the same polymorphism.

FREQUENCY: With MspI, 97% Heterozygosity was obserbed in 108 unrelated Caucasians.

NOT POLYMORPHIC FOR: RsaI

CHROMOSOMAL LOCALIZATION: pYNH24 has been assigned to chromosome 2 by multipoint linkage analysis(2) with loci (APOB, D2S6) known to span this region(3,4).

MENDELIAN INHERITANCE: Co-dominant segregation of the MspI RFLP was observed in 44 three generation families.

PROBE AVAILABILITY: Contact Y.N.

OTHER COMMENTS: RFLPs were observed under normal hybridization and wash stringencies.

REFERENCES:

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3. S.Povey, N.E. Morton and S.L. Sherman, Cytogenet. Cell Genet.40:67-106 (1985)
4. G.M. Lathrop et al., abstract submitted to Human Gene Mapping Workshop 9. Cytogenet. Cell Genet., in press