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Isolation and mapping of a polymorphic DNA sequence (pYNZ32) on chromosome 4p [D4S125]

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**SOURCE/DESCRIPTION:** A 3.3 kb RsaI fragment from cosmid YNZ32 isolated by zeta globin oligonucleotide (1) was subcloned into the HincII site of pUC18.

**POLYMORPHISM:** MspI identifies a 6 allele VNTR polymorphism with bands between 1.2 - 1.8 kb without a constant band. TaqI, RsaI, BglII, PstI, BamHI, HindIII, EcoRI and PvuII also identify the same polymorphism.

**FREQUENCY:** With TaqI, 58% heterozygosity was observed in 94 unrelated Caucasians.

**NOT POLYMORPHIC FOR:** Not known

**CHROMOSOMAL LOCALIZATION:** pYNZ32 has been assigned to chromosome 4p by linkage analysis(2) with a known locus (D4S10).

**MENDELIAN INHERITANCE:** Co-dominant segregation of the TaqI RFLP was observed in 47 three generation families.

**PROBE AVAILABILITY:** Contact Y.N.

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

**REFERENCES:**

1. Y. Nakamura et al., Science 235: 1616-1622 (1987)
2. G.M. Lathrop et al., Am. J. Hum. Genet. 37:482-498 (1985)