Isolation and mapping of a polymorphic DNA sequence (pJCZ67) on chromosome 7 [D7S396]

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SOURCE/DESCRIPTION: A 3.4 kb MspI fragment from the cosmid cJCZ67 identified by the zeta globin oligonucleotide (1) cloned into AccI site of pUC18.

POLYMORPHISM: RsaI identifies 4 allele VNTR polymorphism with a band between 3.0 and 6.0 kb. MspI, PstI, EcoRI, BamHI, PvuII and TaqI also detect the same polymorphism.

HETEROZYGOSITY: With MspI, 80 % heterozygosity was observed in 57 unrelated Caucasians.

NOT POLYMORPHIC FOR: Not detected.

CHROMOSOMAL LOCALIZATION: pJCZ67 has been assigned to chromosome 7 by multipoint linkage analysis (2) with loci (COL1A2, TCRG) known to span this region (3,4).

MENDELIAN INHERITANCE: Co-dominant segregation for the RsaI polymorphisms have been observed in 29 three generation families.

PROBE AVAILABILITY: Contact Y.N..

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

REFERENCES:

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4. G.M. Lathrop et al., abstract submitted to the Human Gene Mapping Workshop 9