Isolation and mapping of a polymorphic DNA sequence (pEFD70.2) on chromosome 10 [D10S26]

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SOURCE/DESCRIPTION: A 2.6 kb PstI fragment from the cosmid EFD70 isolated by an HBV-3 oligonucleotide (1) was subcloned into the PstI site of pUC18.

POLYMORPHISM: PvuII identifies a 4 allele VNTR polymorphism with bands between 1.5 - 3.0 kb without a constant band. PstI also identifies the same polymorphism.

FREQUENCY: With PvuII, 52 % heterozygosity was observed in 95 unrelated Caucasians.

NOT POLYMORPHIC FOR: BglII

CHROMOSOMAL LOCALIZATION: pEFD70.2 has been assigned to chromosome 10q by multipoint linkage analysis (2) with loci mapped on chromosome 10 (3).

MENDELIAN INHERITANCE: Co-dominant segregation of the PvuII RFLP was observed in 48 three generation families.

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

OTHER COMMENTS: RFLPs were observed under normal hybridization and washing 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)
3. G.M. Lathrop et al., Genomics 2:157-164 (1988)