Isolation and mapping of a polymorphic DNA sequence (pCMM86) on chromosome 17q [D17S74]

Y.Nakamura, C.Martin, R.Myers, L.Ballard, M.Leppert, P.O'Connell, G.M.Lathrop, J.-M.Lalouel and R.White

The Howard Hughes Medical Institute, University of Utah School of Medicine, Salt Lake City, UT 84132, USA

SOURCE/DESCRIPTION: A 4.3 kb MspI fragment from the cosmid CMM86 isolated by myoglobin-2 oligonucleotide (1) was subcloned into the AccI site of pUC18.

POLYMORPHISM: HinfI identifies a more than ten allele VNTR polymorphism with bands between 1.0 kb and 5.0 kb. TaqI, MspI, RsaI, and BglII also detect the same polymorphism.

HETEROZYGOSITY: 90% heterozygosity was observed in 100 unrelated Caucasians.

NOT POLYMORPHIC FOR: PstI

CHROMOSOMAL LOCALIZATION: This probe was assigned to chromosome 17 by multipoint linkage analysis (2) with loci (D17S1, MYH2, D17Z1) known to span this region (3,4).

MENDELIAN INHERITANCE: Co-dominant segregation has been observed for the pCMM86 VNTR demonstrated in 50 three generation families.

PROBE AVAILABILITY: Contact Y.N..

OTHER COMMENTS: RFLPs were observed under normal conditions of hybridization and washing.

REFERENCES:

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2. G.M. Lathrop et al., Am. J. Hum. Genet. 37:482-498 (1985)
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4. Y. Nakamura et al., abstract submitted to the Human Gene Mapping Workshop 9