Isolation and mapping of a polymorphic DNA sequence (pMCA1-1) on chromosome 15 [D15S33]

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SOURCE/DESCRIPTION: A 4.6 kb PvuII fragment from cosmid MCA1-1 was subcloned into the HincII site of pUC18.

POLYMORPHISM: PvuII identifies a two allele polymorphism (P1 : 5.7 kb, P2 : 5.2 kb).

FREQUENCY: Estimated from 47 unrelated Caucasians.

PvuII	P1 : 0.67
	P2 : 0.33

NOT POLYMORPHIC FOR: BamHI, BglIII, EcoRI, HindIII, PstI, RsaI and TaqI.

CHROMOSOMAL LOCALIZATION: pMCA1-1 has been assigned to chromosome 15q by multipoint linkage analysis(1) with loci (D15S1, D15S2, D15S3) known to span this region(2,3).

MENDELIAN INHERITANCE: Co-dominant segregation of the PvuII RFLP was observed in 24 three generation families.

PROBE AVAILABILITY: Contact Y.N.

OTHER COMMENTS: This probe was pre-associated with excess human DNA prior to hybridization. Otherwise, RFLPs were observed under normal hybridization and wash stringencies.

REFERENCES:

1. G.M. Lathrop et al., Am. J. Hum. Genet. **37**:482-498 (1985)
2. D.R. Cox and T. Gedde-Dahl, Cytogenet. Cell Genet. **40**:206-242 (1985)
3. P. O'Connell et al., abstract submitted to Human Gene Mapping Workshop 9. Cytogenet. Cell Genet., in press