
Isolation and mapping of a polymorphic DNA sequence (pMCT108.2) on chromosome 18 [D18S24]

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SOURCE/DESCRIPTION: A 3.2 kb MspI fragment from cosmid MCT108 was subcloned into the MspI site of pUC18.

POLYMORPHISM: MspI identifies a two allele polymorphism with a band at 3.2 kb (M1) or 2.3 kb (M2) without a constant band. TaqI also identifies a two allele polymorphism with a band at 3.8 kb (T1) or 2.3 kb (T2), but this has not verified with family studies.

FREQUENCY: Estimated from 95 unrelated Caucasians.

MspI M1 : 0.88
M2 : 0.12

NOT POLYMORPHIC FOR: RsaI, PstI, PvuII and BglIII

CHROMOSOMAL LOCALIZATION: pMCT108.2 has been assigned to chromosome 18 by multipoint linkage analysis(1) with loci (D18S1, D18S3) known to span this region(2,3).

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

PROBE AVAILABILITY: Contact Y.N.

OTHER COMMENTS: 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. S. Naylor et al., Cytogenet. Cell Genet. 40:242-267 (1985)
3. P. O'Connell et al., abstract submitted to Human Gene Mapping Workshop 9. Cytogenet. Cell Genet., in press