Isolation and mapping of a polymorphic DNA sequence pMHZ9 on chromosome 14 [D14S18]

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SOURCE/DESCRIPTION: A 4.8 kb TaqI fragment from cosmid MHZ9 was subcloned into the AccI site of pGEM4.

POLYMORPHISM: EcoRI identifies a two allele polymorphism (E1 : 4.0 kb, E2 : 2.7 kb, with a constant band at 2.3 kb). TaqI, BglII and MspI also appear polymorphic, but these observations have not been confirmed by pedigree studies.

FREQUENCY: Estimated from 114 unrelated Caucasians.

EcoRI	E1 : 0.91
	E2 : 0.09

NOT POLYMORPHIC FOR: BamHI, HindIII, PstI, PvuII and RsaI.

CHROMOSOMAL LOCALIZATION: pMHZ9 has been assigned to distal chromosome 14q by multipoint linkage analysis(1) with loci (D14S1, GM, PI) known to span this region(2,3).

MENDELIAN INHERITANCE: Co-dominant segregation of the EcoRI RFLP was observed in 57 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. D.R. Cox and T. Gedde-Dahl, Cytogenet. Cell Genet. 40:206-242 (1985)
3. Y. Nakamura et al., abstract submitted to Human Gene Mapping Workshop 9. Cytogenet. Cell Genet., in press