Isolation and mapping of a polymorphic DNA sequence (pTHH22) on chromosome 9 [D9S12]

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SOURCE/DESCRIPTION: A 3.1 kb PstI fragment from cosmid THH22 was subcloned into the PstI site of pUC18.

POLYMORPHISM: TaqI identifies a two allele polymorphism (T1 : 12.0 kb, T2 : 8.0 kb). PstI shows a two allele polymorphism showing a high degree of linkage diequilibrium with the TaqI RFLP.

FREQUENCY: Estimated from 105 unrelated Caucasians.

TaqI	T1	: 0.09
	T2	: 0.91

NOT POLYMORPHIC FOR: BamHI, BglII, EcoRI, HindIII, MspI, PvuII and RsaI.

CHROMOSOMAL LOCALIZATION: pTHH22 has been assigned to chromosome 9q by multipoint linkage analysis(1) with loci (ASSP3, D9S1, GALT) known to span this region(2,3).

MENDELIAN INHERITANCE: Co-dominant segregation of the TaqI RFLP was observed in 53 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. M. Smith and A. Spence, Cytogenet. Cell Genet. 40:156-178 (1985)
3. G.M. Lathrop et al., abstract submitted to the Human Gene Mapping Workshop 9