Isolation and mapping of a polymorphic DNA sequence (pTHIZ53) on chromosome 12 [D12S18]

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SOURCE/DESCRIPTION: A 2.3 kb EcoRI/SalI fragment from cosmid THIZ53 was subcloned into the ClaI site of pBR322.

POLYMORPHISM: RsaI resolves a 2 allele insertion/deletion. (R1 : 2.4 kb, R2 : 2.2 kb). BamHI, BglII, EcoRI, HindIII, MspI, PstI, PvuII and TaqI all detect the same polymorphism.

FREQUENCY: Estimated from 106 unrelated Caucasians.
RsaI R1 : 0.15
R2 : 0.85

NOT POLYMORPHIC FOR: None known

CHROMOSOMAL LOCALIZATION: pTHIZ53 has been assigned to the pericentric region of chromosome 12 by multipoint linkage analysis (1) with loci (D12S4, COL2A1, D12S2, KRAS2) known to span this region(2,3).

MENDELIAN INHERITANCE: Co-dominant segregation of the RsaI RFLP was observed in 53 families.

PROBE AVAILABILITY: Contact Y.N.

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

REFERENCES:

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2. K.-H. Grzeschik and K.K. Kazazian, Cytogenet. Cell Genet.**40**:179-205 (1985)
3. P. O'Connell et al., Genomics, **1**:93-102 (1987)