Isolation and mapping of a polymorphic DNA sequence (pTHI54) on chromosome 1p [D1S62]

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SOURCE/DESCRIPTION: A 13.0 kb HindIII fragment from the phage THI54 isolated with the insulin oligonucleotide (1) was subcloned into the HindIII site of pBR322.

POLYMORPHISM: PvuII identifies a 2 allele polymorphism (P1 : 6.0 kb, P2 : 5.0 kb). BamHI, BglII, EcoRI, HindIII, MspI, PstI, PvuII, RsaI, and TaqI also detect the same polymorphism.

FREQUNCY: Estimated from 92 unrelated Caucasians. PvuII P1: 0.51 P2: 0.49

NOT POLYMORPHIC FOR: None detected.

CHROMOSOMAL LOCALIZATION: pTHI54 has been assigned to chromosome lp by multipoint linkage analysis (2) with loci (FY, NRAS, NGFB, RH) known to span this region (3,4).

MENDELIAN INHERITANCE: Co-dominant segregation of this polymorphism was observed in 46 three generation families.

PROBE AVAILABILITY: Contact Y.N.

<u>OTHER COMMENTS</u>: RFLPs were observed under normal conditions of hybridization and washing.

REFERENCES:

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- 4. P. O'Connell et al., abstract sumbitted to the Human Gene Mapping Workshop 9