A four-allele RFLP identified by an anonymous single copy genomic clone at 13q21-13qter [HGM8 assignment no. D13S12]

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SOURCE AND DESCRIPTION OF CLONE: pG18E2.1, a 2.1 kb EcoRI fragment subcloned into pBR329 from the 15.0 kb genomic insert of phage clone 13G18, isolated from a Sau3AI library (vector EMBL4) containing chromosome 13 in duplicate as its only human genetic material (Scheffer et al., 1985).

POLYMORPHISM: MspI (C/CGG)(Boehringer Mannheim) identifies a four-allele polymorphism with bands at 11.2 kb (A1), 8.8 kb (A2), 6.8 kb (A3) and 4.4 kb (A4).

FREQUENCY: Studied 16 Caucasians, 11.2 kb allele (A1): 0.28, 8.8 kb allele (A2): 0.37, 6.8 kb allele (A3): 0.19, 4.4 kb allele (A4): 0.16

NOT POLYMORPHIC FOR: EcoRI, BglII, HindIII, TaqI and PstI with DNA from 10 unrelated Caucasians.

CHROMOSOMAL LOCALISATION: Probe localised to 13q21-13qter using panel of somatic cell hybrids (Buys et al., 1985).

MENDELIAN INHERITANCE: Co-dominant segregation shown in 3 informative families, 20 individuals.

PROBE AVAILABILITY: Available for collaboration. Contact C.H.C.M. Buys.

OTHER COMMENTS: Overnight digestion with 2 units MspI/microgram genomic DNA should be followed by two additional 2 h incubations with 2 units MspI/microgram genomic DNA for digestion to completion.

REFERENCE: Scheffer et al., (HGM8) Cytogenet. Cell Genet. <u>40</u>(1985)738; Buys et al., ibid. (1985)597.

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