A polymorphic DNA probe, p1-10-2, from chromosome 6

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Source/Description: The clone p1-10-2, a 4 kb single-copy HindIII fragment was obtained from a flow-sorted chromosome 6 library (ATCC). The insert was removed from the recombinant phage and subcloned into pUC19.

Polymorphism: EcoRI identifies a three allele polymorphism with bands at 16.8 kb (allele A1), 14.8 kb (allele A2), and 11.2 kb (allele A3).

Frequency: Studied in 19 unrelated caucasians:
allele A1: 0.52
allele A2: 0.03
allele A3: 0.45

Not Polymorphic For: TaqI, XbaI.

Chromosomal Localisation: Probe was localized to the region between HLA-A and F13A on chromosome 6p in a large kindred (Rich *et al.*, 1987) using the computer package LINKAGE (Lathrop *et al.* 1984 and 1985).

Mendelian Inheritance: Mendelian inheritance has been demonstrated in a large three generation kindred (Rich *et al.*, 1987).

Probe Availability: Freely available. Contact Harry T.Orr.

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References: 1) Lathrop *et al.* (1984) *Proc. Natl. Acad. Sci. USA* **81**, 3443–3446. 2) Lathrop *et al.* (1985) *Am. J. Hum. Genet.* **37**, 482–498. 3) Rich *et al.* (1987) *Am. J. Hum. Genet.* **41**, 524–531.

The anonymous probe DR258 (D7S438) identifies a HindIII polymorphism

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Source/Description: DR258 is a 2.1 kb human DNA fragment subcloned into the PstI site of pBR322.

Polymorphism: HindIII identifies a two allele polymorphism with fragments of 9.3 kb and 7.6 kb. 4 constant bands are observed (11.5 kb, 8.2 kb, 6.5 kb very faint band, 5.7 kb).

Frequency: Studied in 34 unrelated caucasians.
9.3 kb allele 0.65
7.6 kb allele 0.35

Not Polymorphic For: EcoRI, EcoRV, BamHI, MspI, BglII and TaqI with DNA from 9 unrelated caucasians.

Chromosomal Localisation: The polymorphism has been localised to 7p13–7pter using a panel of somatic cell hybrids. Fragments 11.5 kb, 6.5 kb and 5.7 kb have been assigned to the X chromosome. The 8.2 kb fragment has not been assigned yet.

Mendelian Inheritance: Co-dominant segregation shown in 2 informative families (22 individuals) (see figure).

Probe Availability: On request from A.J.Diesel.

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