A polymorphic DNA marker at the D10S106 locus

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Source and Description: G2-2 E is a single copy 200 bp subfragment of G2 cloned into the EcoRV site of Bluescript KSII(+). Clone G2 was isolated from a library highly enriched for (TTAGGG)_n-associated sequences (1).

Polymorphisms:

TaqI identifies a two allele polymorphism as assessed in 29 unrelated Caucasians.

Allele	Size	No. of Chromosomes	Frequency
A1	900 bp	31	(0.54)
A2	700 bp	27	(0.46)

PstI identifies a two allele polymorphism as assessed in 34 unrelated Caucasians and 25 unrelated East Indians, respectively. There is an invariant band at 2.0 kb.

Allele	Size	Caucasians		East Indians	
		No.	Chromosomes Frequency	No.	Chromosomes Frequency
A1	2.5 kb	36	(0.53)	30	(0.60)
A2	2.3 kb	32	(0.47)	20	(0.40)

Also Polymorphic For: BglII, HincII.

Not Polymorphic For: BglII, EcoRI, MspI, SstI, RsaI, all tested on a panel of 8 unrelated individuals.

Chromosomal Localisation: 10q22.1-10q24.3 by PCR-mapping using a somatic cell hybrid panel (BIOS Inc., New Haven) and hybrids containing various fragments of chromosome 10 (2).

Mendelian Inheritance: Codominant segregation has been shown for the TaqI polymorphism in five and for the PstI polymorphism in four families.

Probe Availability: Contact B.Weber or M.R.Hayden.

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References: 1) Weber, B. *et al.* (1990) *Nucl. Acids Res.* **18**, 3353-3361. 2) Weber, B. *et al.* (1991) *Mammalian Genome* (in press).

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A polymorphic DNA marker at the D8S131 locus

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Source and Description: Y19-1D is a single copy 836 bp subclone of Y19. Y19 was isolated from a library highly enriched for (TTAGGG)_n-associated sequences (1). The subclone is ligated into the EcoRV site of Bluescript KSII(+) and is free of any telomeric repeats.

Polymorphism: BamHI digestion yields two polymorphic bands as assessed in 28 unrelated Caucasians and 77 parents from the CEPH panel.

Allele	Size	No. of Chromosomes	Frequency
A1	7 kb	170	(0.81)
A2	6 kb	40	(0.19)

Not Polymorphic For: AccI, AvaII, BclI, BglI, BglII, BstEII, EcoI, EcoRV, HaeIII, HindIII, KpnI, MboI, MspI, NcoI, NsiI, PstI, RsaI, SphI, SstI, StuI, TaqI, XbaI, all tested on a panel of 8 unrelated individuals.

Chromosomal Localisation: Y19-1D has been localised using a somatic cell hybrid panel (BIOS Inc., New Haven) to chromosome 8 (1). Screening a total genomic cosmid library (Stratagene) with Y19-1D yielded one positive cosmid cY19. Competitive fluorescent in situ hybridisation mapped cosmid clone cY19 to 8p21 (2).

Mendelian Inheritance: Codominant segregation has been shown in 15 CEPH families.

Probe Availability: Contact B.Weber or M.R.Hayden.

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Reference: 1) Weber, B. *et al.* (1990) *Nucl. Acids Res.* **18**, 3353-3361. 2) Weber, B. *et al.* (1991) *Mammalian Genome* (in press).

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