New TaqI allele detected by X-chromosome probe S21 (DXS17)

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Source/Description: S21 (S9 or DXS17) is a 7.2 kb single copy *EcoRI* fragment subcloned into pUC from a Xgt WES.XB X-chromosome specific library.

Polymorphism: A two allele polymorphism was previously detected with TaqI digests. Two constant bands and variant bands at 2.9 kb and 2.7 kb are revealed (Drayna *et al.*, 1984). A third 2 kb allele has been detected in a South African Bantu-speaking population.

Frequency: 36 Negroid females and 11 Negroid males and 20 Caucasoid females and 12 Caucasoid males were studied.

Allele	Size (kb)	Negroid	Caucasoid
A1	2.9	0.42	0.58
A2	2.7	0.41	0.42
A3	2.0	0.17	0.0

The PIC values (Botstein *et al.*, 1980) are 0.548 and 0.368 for Negroid and Caucasoid populations, respectively.

Chromosomal Location: Probe localised to Xq21.33–q22 (Drayna *et al.*, 1984).

Mendelian Inheritance: X-linked segregation pattern observed in 4 families in the present study.

Probe Availability: PHLS centre for Applied Microbiology and Research.

Acknowledgement: We wish to thank Dr Kay E.Davies for supplying the S21 probe.

References: 1) Drayna,D. *et al.* (1984) *Proc. Natl. Acad. Sci. USA* **81**, 2836–2839. 2) Botstein *et al.* (1980) *Am. J. Hum. Genet.* **32**, 314–331.

Probe 87 – 10a identifies a codominantly inherited X chromosome allele polymorphic in three racial populations

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Source/Description: 87–10a is a 1.18 kb *XbaI*/*StuI* fragment cut out from a 7.5 kb insert of plasmid 87–10 (Nakahori *et al.*, Human Gene Mapping 10, A 2007 and in preparation).

Polymorphism: TaqI digestion identifies a two allele polymorphism with band sizes 10.0 kb (A) and 5.0 kb (B).

Frequency:	A	B	
White Males (N = 23)	6	17	
Black Males (N = 21)	13	8	
Japanese Males (N = 34)	9	25	
	AA	AB	BB
White Females (N = 22)	2	5	15
Black Females (N = 15)	3	9	3
Japanese Females (N = 27)	1	13	13

Polymorphic For:

	BamHI	HindIII	PstI	PvuII	XbaI
A	20.0kb	12.0kb	10.0kb	15.0kb	8.5kb
B	21.0kb	18.5kb	4.4kb	9.5kb	3.4kb

Not Polymorphic For: BglII.

Chromosomal Location: Xq.

Mendelian Inheritance: X-linked and codominant inheritance observed in 8 two-generation families.

Probe Availability: Yasuo Nakagome, at the above address.

Other Comments: This RFLP results from an insertion/deletion difference.

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