A dinucleotide repeat for the D1S53 locus

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Source/Description: The 8.25kb plasmid subclone pL673−1 of the phage clone CRI-L673 (D1S53) (1) was hybridized to poly (dC-dA). pL673−1 was partially sequenced and the sequences flanking the repeat were used to design PCR primers.

PCR Primers:
pL673−1A 5′-TCCAGGAATGAAGAGAGATGCT-3′ (CA strand)
pL673−1B 5′-AGCACATCCTGCTTCCTGACA-3′ (GT strand)

Polymorphism/Frequencies: Estimated from 44 chromosomes of 22 unrelated individuals. The plasmid pL673−1 contains allele B10.

Allele	(bp)	Frequency	Allele	(bp)	Frequency
B1:	201	.02	B8:	183	.11
B2:	199	.11	B9:	181	.14
B3:	197	.11	B10:	179	.09
B4:	195	.07	B11:	177	.09
B5:	193	.05	B12:	175	.02
B6:	189	.02	B13:	173	.09
B7:	185	.05	B14:	171	.02

Observed heterozygosity = 91%.

Mendelian Inheritance: Mendelian inheritance was observed in eight families with Van der Woude Syndrome and two CEPH families.

Chromosomal Localization: D1S53 has been localized between SNRPE and D1S65 by multipoint linkage analysis. (2).

PCR Conditions: PCR was performed in 5 μl containing: 20 ng DNA, 20 pmoles each primer, 1.5 mM $MgCl_2$, 10 mM Tris-Cl pH8.3, 50 mM KCl, 0.01% gelatin, 12.5 μM dATP and 125 μM other dNTPS, 25 μl of ^{35}S-dATP at 500 Ci/mmol (Amersham) and 0.2 units Taq polymerase (Perkin-Elmer-Cetus). Amplification is for 35 cycles of denaturation at 94°C for 1 minute, annealing at 62°C for 30 seconds and extension at 72°C for 30 seconds.

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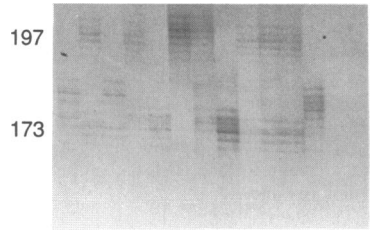
References: 1) Donis-Keller,H. and 32 others (1987) *Cell* **51**, 319−337. 2) Buetow,K.H., Nishimura,D.Y., Green,P., Nakamura,Y., Jiang,O. and Murray,J.C. (1990) *Genomics* **8**, 13−21.



A tetranucleotide repeat for the F13B locus

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Source/Description: Sequence data for the blood coagulation factor XIIIB (F13B) gene (1) was obtained from the GenBank database (accession number: M64554). This sequence was then scanned for repeat sequences using the REPEAT program of the GCG package of sequence analysis programs (2). A tetranucleotide repeat consisting of 10 repeats of TTTA was identified for this locus.

PCR Primers:
F13B-1A 5′-TGAGGTGGTGTACTACCATA-3′ (TTTA strand)
F13B-1B 5′-GATCATGCCATTGCACTCTA-3′ (TAAA strand)

Polymorphism/Frequencies: Estimated from 58 chromosomes of 29 unrelated individuals. The sequence retrieved from GenBank contains allele A2.

Allele	(bp)	Frequency	Allele	(bp)	Frequency
C1:	185	.39	C4:	173	.04
C2:	181	.26	C5:	169	.07
C3:	177	.24			

Observed heterozygosity = 65.5%.

Mendelian Inheritance: Mendelian inheritance was observed in three CEPH families.

Chromosomal Localization: F13B has been localized to 1q31-q32.1 (3).

PCR Conditions: PCR was performed in 5 μl containing: 20 ng DNA, 20 pmoles each primer, 1.5 mM $MgCl_2$, 10 mM Tris-Cl pH 8.3, 50 mM KCl, 0.01% gelatin, 12.5 μM dATP and 125 μM other dNTPS, .25 μl of ^{35}S-dATP at 500 Ci/mmol (Amersham) and 0.2 units Taq polymerase (Perin-Elmer-Cetus). Amplification is for 35 cycles of denaturation at 94°C for 1 minute, annealing at 62°C for 30 seconds and extension at 72°C for 30 seconds.

Acknowledgements: This work was supported by USPHS Grant DE08559 (J.C.M.).

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