A polymorphic locus [D1S88] is detected by probe LA01.41 on chromosome 1p

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SOURCE AND DESCRIPTION : A single copy clone LA01.41 was isolated from a chromosome 1 specific Charon 21A phage library (LA01NS01)(1) using nick translated total human DNA. The clone contains a 2.4 kb EcoRI insert.

POLYMORPHISM : On TaqI Southern blots, LA01.41 recognizes 4 invariant fragments of 6.0, 4.7, 3.8 and 0.8 kb. The polymorphism is defined by the presence (allele +) or absence (allele -) of a 3.0 kb fragment.

FREQUENCIES : Allele frequencies were calculated on 30 unrelated Belgian individuals:

| Allele | Frequency |
|--------|-----------|
| +      | 0.43      |
| -      | 0.57      |

OTHER ENZYMES TESTED : LA01.41 revealed no polymorphism with BamHI, BclI, BglI, EcoRI, EcoRV, HindIII, MspI, PstI, PvuII, SacI and XbaI on 6 individuals.

CHROMOSOMAL LOCALISATION : Localisation on chromosome 1 was confirmed by hybridisation of LA01.41 to a somatic cell hybrid panel. Conclusive linkage (lod score > 5) was found between D1S88 and D1S16, located on the proximal short arm of chromosome 1 (2).

MENDELIAN INHERITANCE : Mendelian segregation was observed in an extended pedigree of 105 members.

PROBE AVAILABILITY : Contact person P.R.

REFERENCES :
(1) Van Dilla et al. Biotechnology 4, 537-552 (1986)
(2) Dracopoli et al. Am. J. Hum. Genet. 43, 462-470 (1988)