A hypervariable minisatellite (pMS400) on chromosome 19 (D19S176)

J.A.L.Armour and A.J.Jeffreys

Department of Genetics, University of Leicester, University Road, Leicester LE1 7RH, UK

Source/Description of Clone: pMS400 was isolated from a library of large human *Sau3AI* fragments cloned directly into the *Bam*HI site of pUC19 (A.J.J., unpublished). The locus detected has the symbol D19S176.

Polymorphism: The probe detects a minisatellite (VNTR) locus, at which at least seven alleles ranging from 4 to 10 kb are detected in genomic DNA digested with *Mbo*I. There is a common allele ($f = 0.34$) of about 7 kb.

Chromosomal Localisation: The locus detected was localised to chromosome 19 using somatic cell hybrid and linkage analysis as described (1).

Mendelian Inheritance: Was observed in 4 pedigrees from the CEPH panel.

Heterozygosity: The heterozygosity was estimated at 62% among 47 unrelated individuals of Caucasian origin.

Hybridization Conditions: The *Sau3AI* insert was oligo-labelled and used to probe human genomic DNA in phosphate/SDS buffer as described (2), but with only 10 μ g/ml sheared human DNA as competitor. Filters were washed to $0.1 \times \text{SSC}$ at 65°C.

Probe Availability: This probe has been deposited with the UK DNA Probe Bank, and may be obtained by writing to Dr Gabrielle Fisher, HGMP Resource Centre, CRC, Watford Road, Harrow Middlesex, HA1 3UJ, UK.

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A hypervariable minisatellite (pMS502) on chromosome 8 (D8S162)

J.A.L.Armour and A.J.Jeffreys

Department of Genetics, University of Leicester, University Road, Leicester LE1 7RH, UK

Source/Description of Clone: Human genomic DNA was digested to completion with *Alu*I, and fragments larger than 2 kb selected. Size-selected DNA was sonicated to an average size of about 400 bp, and after end repair cloned into the *Sma*I site of pUC13. The resulting library was screened by hybridization with probe 33.15 as described (1); pMS502 was isolated from a positively hybridizing clone. The locus detected has the symbol D8S162.

Polymorphism: The probe detects a minisatellite (VNTR) locus, at which *Mbo*I alleles range from 1.5 to 10 kb. At least 10 alleles were detected in a survey of 20 unrelated individuals; *Alu*I and *Hinf*I can also be used to show the polymorphism.

Chromosomal Localisation: The locus detected was localised to chromosome 8 using somatic cell hybrid and linkage analysis as described (1).

Mendelian Inheritance: Was observed in 6 pedigrees from the CEPH panel.

Heterozygosity: The heterozygosity was estimated at 90% among 51 unrelated individuals of Caucasian origin.

Hybridization Conditions: The insert (about 450 bp) was isolated after cleavage with *Bam*HI and *Eco*RI, oligo-labelled and used to probe human genomic DNA in phosphate/SDS buffer as described (2), but with only 10 μ g/ml sheared human DNA as competitor. Filters were washed to $0.1 \times \text{SSC}$ at 65°C.

Probe Availability: This probe has been deposited with the UK DNA Probe Bank, and may be obtained by writing to Dr Gabrielle Fisher, HGMP Resource Centre, CRC, Watford Road, Harrow Middlesex, HA1 3UJ, UK.

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