An anonymous human single copy genomic clone, D5S6 (M4) on chromosome 5 identifies a three allele RFLP

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SOURCE AND DESCRIPTION OF CLONE: A 7.6kb Bam HI fragment cloned in the phage λ L47.1 isolated from a human genomic library.

POLYMORPHISM: Bam HI (G/GATCC) (Amersham) identifies a three allele polymorphism at 11.0kb (A1), 9.6kb (A2) or 7.6kb (A3) (Figure).

FREQUENCY: 11.0kb allele (A1) 0.33
Studied 29 Caucasians; 9.6kb allele (A2) 0.52
21 female, 8 male. 7.6kb allele (A3) 0.15

NOT POLYMORPHIC FOR: Eco RI, Hind III, Msp I, Taq I, Pst I with a panel of 9 unrelated Caucasians.

CHROMOSOMAL LOCALIZATION: The probe was assigned to chromosome 5 using a panel of somatic cell hybrids (Fox & Retief, in press) and localized to 5q22-q31 by means of in-situ hybridization.

MENDELIAN INHERITANCE: Co-dominant segregation shown in 2 informative families (9 individuals).

PROBE AVAILABILITY: Available for collaborators.

OTHER COMMENTS: No problems on RFLP analysis under normal conditions. Low background at stringency of 0.5 x SSC.

REFERENCE: Fox MF and Retief AE, "Aspects of human chromosome segregation in somatic cell hybrids: establishment of a hybrid mapping panel" SAJ Science (in press).

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