A *StuI* polymorphism on chromosome 3p14.1 – 14.2 (D3S622) defined by two polymorphic *StuI* sites 2.4 kb apart

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Source/Description: SS/RB-J4 was randomly isolated during screening of a phage hopping library of human DNA (1). The fragment is a 750 bp *EcoRI*-*MboI* fragment which has been isolated from the original phage clone by PCR amplification using a set of primers derived from flanking vector sequences and the internal supF sequence (2).

Polymorphism: *StuI* (AGG[†]CCT) identifies three alleles (D3S622) with bands at 7.7/1.5 kb (A1 = 0.145), 3.9 kb (A2 = 0.335), and 2.4/1.5 kb (A3 = 0.52) [PIC = 0.512]. The two polymorphic sites may also have an allele which would be 9.2 kb. This band has not yet been observed except in the case of partial digests.

Frequency: Studied in 55 unrelated individuals. Significant linkage disequilibrium was found between the two polymorphic sites ($\chi^2 = 13.448$; $p = 0.01$).

Not Polymorphic For: *Bam*HI, *Ban*I, *Bgl*II, *Bgl*III, *Bst*NI, *Eco*RI, *Hinc*II, *Hind*III, *Hinf*I, *Msp*I, *Pst*I, *Pvu*II, *Rsa*I, *Sac*I, *Taq*I, *Xba*I and *Xmn*I on panels of 6 unrelated individuals.

Chromosomal Localization: SS/RB-J4 has been localized to Chromosome 3 through hybridization to DNA from two independent human-rodent hybrid cell-lines (BIOS and ref. 3).

Mendelian Inheritance: Co-dominant segregation demonstrated in 3, three generation families (41, 19 and 24 individuals from each).

Probe Availability: Contact Richard J. Bartlett.

Other Comments: Normal hybridization and washing conditions.

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