Three allele *TaqI* RFLP for probe 3-21 [D15S10] on chromosome 15q

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SOURCE/DESCRIPTION: p3-21, a 2.2 kb fragment subcloned into PBR322 (1,2), originally isolated from a flow-sorted library enriched for proximal 15q sequences.

POLYMORPHISM: *TaqI* reveals a three allele polymorphism with band sizes 9.0, 8.9 or 8.2 kb (Figure), and a constant fragment at 0.6 kb.

FREQUENCIES: Estimated from 28 unrelated Caucasians

ALLELE	FREQUENCY
9.0 kb	0.75
8.9 kb	0.11
8.2 kb	0.14

Observed PIC value = 0.37

CHROMOSOMAL LOCALIZATION: p3-21 has been assigned to 15q11.2-15q12, a segment missing in one #15 chromosome of a Prader-Willi syndrome patient with a prominent cytological deletion (1,2).

MENDELIAN INHERITANCE: Codominant segregation observed in a three generation pedigree of 14 individuals.

PROBE AVAILABILITY: ATCC

OTHER COMMENTS: High resolution is necessary to separate the largest two alleles; indeed the RFLP was originally described with 2 alleles as part of a set of RFLPs for proximal chromosome 15q (3). The detection of a third allele raises the informativeness significantly (0.28 to 0.37). Gels are run for 5 days, 0.6% agarose, 0.8 V/cm, 4°C.

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