
A polymorphic locus, D10S5, at 10q21.1

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SOURCE/DESCRIPTION: A library was constructed with partially EcoRI digested DNA, isolated from a flow-sorted chromosome 9-12 peak, in the phage vector L47.1. A single copy 2.5 kb HindIII fragment was isolated from a recombinant phage (λ 9-12A/2) and subcloned into pUC8 (p19-12A/2dIII2.5).

POLYMORPHISMS: The probe detects a TaqI RFLP (A1 - 4.55 kb, A2 - 3.80 kb), a HincII RFLP (B1 - 10.00 kb, B2 - 8.00 kb with 4.50 and 1.25 constant bands), and a DraI RFLP (C1 - 0.90 kb, C2 - 0.70 kb with 1.15 and 1.25 constant bands).

FREQUENCIES: A1 - 0.57 (170 chromosomes)
B1 - 0.60 (108 chromosomes)
C1 - 0.66 (62 chromosomes)

NOT POLYMORPHIC FOR: MspI and HindIII.

CHROMOSOMAL LOCALISATION: The sequence was mapped to 10q21.1 by in situ hybridisation. Of 75 grains analysed in 109 metaphase spreads 34 were located over the 10q11-q22 region with the majority over 10q21.1.

MENDELIAN INHERITANCE: A co-dominant segregation pattern was observed in 5 families in which Multiple Endocrine Neoplasia Type 2A is present.

PROBE AVAILABILITY: Available to collaborators.

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