Isolation and mapping of a polymorphic DNA sequence (CJ52.15) on chromosome 11 [D11S383]

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SOURCE/DESCRIPTION: Cosmid CJ52.15 was isolated from a library constructed from a mouse/human somatic cell hybrid that contains a chromosome 11q-16q derivative as the only human chromosome (1). The Sau3A partial digest was inserted into pWe vector.

POLYMORPHISM: TaqI identifies a 2-allele polymorphism:

T1 : 8.5 kb

T2 : 6.5 kb

FREQUENCY: Estimated from 79 unrelated Caucasians.

T1 : 0.57

T2 : 0.43

NOT POLYMORPHIC FOR: MspI and PstI.

CHROMOSOMAL LOCALIZATION: CJ52.15 has been assigned to chromosome 11 by multipoint linkage analysis (2) with loci known to map on this chromosome (1).

MENDELIAN INHERITANCE: Codominant segregation of the TaqI RFLPs was observed in 36 three generation families.

PROBE AVAILABILITY: Contact C.J.

OTHER COMMENTS: This probe contains repetitive DNA sequences, and needs to be used in the presence of an excess of total human DNA in the prehybridization and hybridization mixtures.

Another polymorphic system, with allele sizes at 2.5 and 2.4 kb is also detected with TaqI, that seems to be in complete linkage disequilibrium with the system described here.

REFERENCES:

1. C. Julier et al., in preparation
2. G.M. Lathrop et al., Am. J. Hum. Genet. 37:482-498 (1985)

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