Isolation and mapping of a polymorphic DNA sequence (CJ52.96) on chromosome 16 [D16S157]

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SOURCE/DESCRIPTION: Cosmid CJ52.96 was isolated from a library constructed from a mouse/human somatic cell hybrid that contains a chromosomellq-16q derivative as the only human chromosome (1). The Sau3A partial digest was inserted into pWc vector.

POLYMORPHISM: TaqI identifies a polymorphism, with bands at 7.9 kb (T1) and 6.6 and 1.3 kb (T2).

FREQUENCY: Estimated from 97 unrelated Caucasians.

T1 : 0.15

T2 : 0.85

NOT POLYMORPHIC FOR: PstI.

CHROMOSOMAL LOCALIZATION: CJ52.96 has been assigned to chromosome 16 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 49 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 polymorphism was detected with MspI using the whole cosmid, but was not studied further.

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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