Isolation and mapping of a polymorphic DNA sequence (CJ52.105) on chromosome 16 [D16S154]

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SOURCE/DESCRIPTION: Cosmid CJ52.105 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 pWe vector.

POLYMORPHISM: TaqI identifies an insertion/deletion type polymorphism, with alleles at 3.9 kb (T1), 3.8 kb (T2), 2.9 kb (T3), 2.6 kb (T4), 2.55 kb (T5) and 2.5 kb (T6). MspI and PstI, and probably other enzymes also detect this polymorphism.

FREQUENCY: Estimated from 102 unrelated Caucasians.

T1 : 0.02
T2 : 0.15
T3 : 0.03
T4 : 0.12
T5 : 0.48
T6 : 0.20

NOT POLYMORPHIC FOR: unknown

CHROMOSOMAL LOCALIZATION: CJ52.105 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 51 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.

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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