Isolation and mapping of a polymorphic DNA sequence (pYNM18.1) on chromosome 15 [D15S35]


The Howard Hughes Medical Institute, University of Utah Medical School, Salt Lake City, UT 84132, USA

SOURCE/DESCRIPTION: A 6.6 kb PstI fragment from cosmid YNM18 was subcloned into the PstI site of pUC18.

POLYMORPHISM: TaqI identifies a three allele polymorphism (T1 : 4.8 kb, T2 : 4.4 kb, T3 : 4.2 kb) with constant bands at 2.0 and 1.4 kb.MspI also shows a two allele polymorphism (M1 : 3.3 kb, M2 : 2.6 kb) with constant bands at 0.8 and 0.7 kb but this has not verified by our three generation families.

FREQUENCY: Estimated from 103 unrelated Caucasians.
TaqI
T1 : 0.48
T2 : 0.51
T3 : 0.01

NOT POLYMORPHIC FOR: Rsal, BglII, PvuII and PstI

CHROMOSOMAL LOCALIZATION: pYNM18.1 has been assigned to chromosome 15q by multipoint linkage analysis(1) with loci (D15S1, D15S2, D15S3) known to span this region(2,3).

MENDELIAN INHERITANCE: Co-dominant segregation of the TaqI RFLP was observed in 55 three generation families.

PROBE AVAILABILITY: Contact Y.N.

OTHER COMMENTS: This probe was pre-associated with excess human DNA prior to hybridization. Otherwise, RFLPs were observed under normal hybridization and wash stringencies.

REFERENCES: