Isolation and mapping of a polymorphic DNA sequence (pTBQ16) on chromosome 10 [D10S30]

T.Bragg, Y.Nakamura, C.Jones¹ and R.White

The Howard Hughes Medical Institute, University of Utah Medical School, Salt Lake City, UT 84132 and
¹Eleanor Roosevelt Institute for Cancer Research, Denver, CO 80262, USA

SOURCE/DESCRIPTION: A 2.5 kb Msp I fragment from the cosmid TBQ16 isolated from a somatic hybrid cell line 762-8A, which included chromosome 10 and Y as human chromosomes (1), was subcloned into the Acc I site of pUC18.

POLYMORPHISM: Msp I identifies a 2 allele polymorphism with a band at 2.5 kb (M1) or 2.0 kb (M2) with a constant band at 2.6kb.

FREQUENCY : Estimated from 75 unrelated Caucasians.

M1 : 0.68

M2 : 0.32

NOT POLYMORPHIC FOR: TaqI and PstI

CHROMOSOMAL LOCALIZATION: pTBQ16 has been assigned to chromosome 10 by multipoint linkage analysis (2) with loci mapped on chromosome 10 (3).

MENDELIAN INHERITANCE: Co-dominant segregation of RFLP was observed in 36 three generation families.

PROBE AVAILABILITY: Freely available (contact Y.N.).

OTHER COMMENTS: RFLPs were observed after competitive hybridization with total human DNA.

REFERENCES:

1. Fisher et al., Am. J. Hum. Genet. 40 :503-511 (1987)
2. G.M. Lathrop et al., Am. J. Hum. Genet. 37:482-498 (1985)
3. G.M. Lathrop et al., Genomics 2:157-164 (1988)