## Isolation and mapping of a polymorphic DNA sequence pMCK2 on chromosome 10 [D10S15]

Y.Nakamura, M.Carlson, K.Krapcho, J.Gill, P.O'Connell, M.Leppert, G.M.Lathrop, J.-M.Lalouel and R.White

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

SOURCE/DESCRIPTION: A 2.0 kb MspI fragment from cosmid MCK2 isolated by an oligonucleotide (GTGTGTGTGTGTGTGTGTGTGT) (1) was subcloned into the AccI site of pUC18.

**POLYMORPHISM:** RsaI identifies a 6 allele VNTR polymorphism with bands between 0.8 - 1.2 kb without a constant band. MspI, PstI and PvuII also identify the same polymorphism.

**FREQUENCY:** With RsaI, 45% heterozygosity was observed in 20 unrelated Caucasians.

NOT POLYMORPHIC FOR: TagI and BglII

CHROMOSOMAL LOCALIZATION: pMCK2 has been assigned to chromosome 10 by multipoint linkage analysis(2) with loci (D10S1, D10S4, IRBP) known to span this region(3,4,5,6).

MENDELIAN INHERITANCE: Co-dominant segregation of the PvuII RFLP was observed in 48 three generation families.

PROBE AVAILABILITY: Contact Y.N.

<u>OTHER COMMENTS</u>: RFLPs were observed under normal hybridization and wash stringencies.

## **REFERENCES**:

- 1. Y. Nakamura et al., Science 235: 1616-1622 (1987)
- 2. G.M. Lathrop et al., Am. J. Hum. Genet. 37:482-498 (1985)
- 3. K.-H. Grzeschik and H.H. Kazazian, Cytogenet. Cell Genet. 40:179-205 (1985)
- 4. M. Litt et al., Nucleic Acids Research 15:2783 (1987)
- 5. G.I. Liou et al., Nucleic Acids Research 15:3196 (1987)
- 6. Y. Nakamura et al., abstract submitted to Human Gene Mapping Workshop 9. Cytogenet. Cell Genet., in press