Isolation and mapping of a polymorphic DNA sequence (pTHH33) on chromosome 1g [D1S81]

Y.Nakamura, T.Holm and R.White

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

SOURCE/DESCRIPTION: A 5.6 kb EcoRI fragment from the cosmid cTHH33 isolated with HBV-2 oligonucleotide (1) was subcloned into the EcoRI site of pUC18.

POLYMORPHISM: RsaI identifies a >10 allele VNTR polymorphism with bands between 4.0 kb and 6.5 kb. TaqI, BglII, PstI, PvuII, BamHI, EcoRI MspI and HindIII also detect the same polymorphism.

HETEROZYGOSITY: 85% heterozygosity was observed with RsaI in 82 unrelated Caucasians.

NOT POLYMORPHIC FOR: none detected

CHROMOSOMAL LOCALIZATION: This probe has been assigned to distal chromosome 1q by multipoint linkage analysis (2) with loci known to span this region (3).

MENDELIAN INHERITANCE: Co-dominant segregation was observed in 41 three generation families.

PROBE AVAILABILITY: Freely available (contact Y.N.) or will be available from ATCC.

OTHER COMMENTS: RFLPs were observed under normal conditions of hybridization and washing.

## REFERENCES:

- Y. Nakamura et al., Science <u>235</u>: 1616-1622 (1987)
  G.M. Lathrop et al., Am. J. Hum. Genet. <u>37</u>:482-498 (1985)
- 3. P. O'Connell et al., Cytogenet. Cell Genet. 46:672 (1988)