## Isolation and mapping of a polymorphic DNA sequence pYNZ23 to chromosome 1 (D1S58)

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SOURCE/DESCRIPTION: A 5.0 kb MspI fragment from cosmid cYNZ23 isolated with the zetaglobin oligonucleotide (1) was subcloned into ClaI site of pBR322.

<u>POLYMORPHISM</u>: MspI detects a 2 allele polymorphism (M1 : 5.0 kb, M2 : 4.5 kb). BamH1, BglII, EcoRI, HindIII, PstI, PvuII, RsaI and TaqI also detect the same polymorphism.

FREQUENCY: Estimated form 78 unrelated Caucasians.

Msp1 M1: 0.46

M2: 0.54

NOT POLYMORPHIC FOR: None detected

<u>CHROMOSOMAL LOCALIZATION</u>: pYNZ23 was assigned to chromosome 1q by multipoint linkage analysis (2) with loci (REN, FY) known to reside in this region(3,4).

MENDELIAN INHERITANCE: Co-dominant segregation was observed in 39 three generation families.

PROBE AVAILABILITY: Contact Y.N.

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

## REFERENCES:

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- 2. G.M. Lathrop et al., Am. J. Hum. Genet. <u>37</u>:482-498 (1985)
- 3. S. Povey et al., Cytogenet. Cell Genet. 40:67-106(1985)
- 4. P. O'Connell et al., abstract sumbitted to the Human Gene Mapping Workshop 9