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Isolation and mapping of a polymorphic DNA sequence (pCMM12) on chromosome 1p [D1S76]

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**SOURCE/DESCRIPTION:** A 5.3 kb TaqI fragment from the cosmid cCMM12 isolated with myoglobin-2 oligonucleotide (1) was subcloned into the AccI site of pUC18.

**POLYMORPHISM:** TaqI identifies a 5 allele VNTR polymorphism with bands between 3.0 kb and 4.0 kb. BglII, PstI, BamHI and HindIII also detect the same polymorphism.

**HETEROZYGOSITY:** 65% heterozygosity was observed with TaqI in 40 unrelated Caucasians.

**NOT POLYMORPHIC FOR:** MspI

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

**MENDELIAN INHERITANCE:** Co-dominant segregation was observed in 20 three generation families.

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

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

**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. P. O'Connell et al., Cytogenet. Cell Genet. **46**:672 (1988)