RsaI and TaqI RFLPs for pACHF3.5 (D16S10)

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SOURCE AND DESCRIPTION OF CLONE: ACHF3 (D16S10) was isolated from an EcoRI λ Charon 4A library constructed from a mouse-human hybrid cell line (WAIVA) containing human chromosomes 16 and 22 (Deisseroth *et al.*, 1977). A unique 3.5 kb XbaI fragment was subcloned from ACHF3 into pSP64, and named pACHF3.5.

POLYMORPHISMS: RsaI identifies one invariant band at 0.8 kb and a two-allele polymorphism with bands at either 2.6 kb (B1) or 1.84 and 0.76 kb (B2). TaqI identifies one invariant band at 4.5 kb and a two-allele polymorphism with bands at either 1.3 kb (A1) or 5.4 kb (A2).

FREQUENCY: RsaI RFLP, studied in 21 unrelated Caucasians.
2.6 kb allele (B1) 0.71
1.84, 0.76 kb allele (B2) 0.29; PIC value = 0.33
TaqI RFLP, studied in 20 unrelated Caucasians.
1.3 kb allele (A1) 0.62
5.4 kb allele (A2) 0.38; PIC value = 0.36

NOT POLYMORPHIC FOR: BamHI, BanII, BclI, BglI, BglIII, BstNI, BstXI, DraI, EcoRI, EcoRV, HaeIII, HincII, HindIII, HinfI, KpnI, MspI, NsiI, PstI, PvuII, SacI and XbaI, with a panel of 6 unrelated individuals.

CHROMOSOMAL LOCALISATION: Localised to 16q13-16q22.1 using a panel of somatic cell hybrids (Callen, 1986) and by *in situ* hybridisation as proximal to FRA16B.

MENDELIAN INHERITANCE: Codominant inheritance for RsaI and TaqI RFLPs was shown in UTAH Family 985.

PROBE AVAILABILITY: Available on a collaborative basis from G.R. Sutherland.

OTHER COMMENTS: The A1, B1 and A2, B2 alleles were co-inherited in 28 unrelated individuals, A1B2 and A2B1 haplotypes were not found, indicating linkage disequilibrium.

REFERENCES: Callen (1986), *Ann. Genet.* **29** : 235-239.
Deisseroth *et al.* (1977), *Cell* **12** : 205-218.

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