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**Sph I restriction fragment length polymorphism on human chromosome 16 detected with an APRT gene probe**

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**SOURCE/DESCRIPTION:** The purified 2.3 kb Bam HI insert fragment from plasmid pAT2.3aprt was used as a probe. This fragment constitutes part, but not all, of the biologically active human aprt gene and contains few or no repetitive elements. (1)

**POLYMORPHISM:** Sph I identifies a two allele polymorphism with bands at either 8kb or 12kb.

**FREQUENCY:** As studied in 30 unrelated Caucasians:-  
8kb allele (A1) 0.78  
12kb allele (A2) 0.22

**NOT POLYMORPHIC FOR:** Msp I, Sst I, Bam HI, Xho I, Pst I each with a panel of at least 5 individuals.

**CHROMOSOMAL LOCATION:** The aprt gene has been localised to chromosome 16q24 (2).

**MENDELIAN INHERITANCE:** Codominant segregation shown in 1 informative 3 generation family of 11 individuals.

**PROBE AVAILABILITY:** Available from Janet Arrand.

**OTHER COMMENTS:** This probe also detects a known Taq I polymorphism (1). RFLP's were observed at a stringency of 0.1 x SSC; 1% SDS at 65° using 0.7% gels.

**REFERENCES:** 1. Murray, A.M., Drobetsky, E. and Arrand, J.E. (1984) *Gene* **31** 233-240. 2. Frantini, A., Simmers, R.N., Callen, D.F., Hyland, V.J., Tischfield, J.A., Stambrook, P.J. and Sutherland, G.R. (1986). *Cytogenet. Cell Genet.* **43** 10-13.

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