

**A frequent polymorphism of the complement component C4 gene**Rose Goldstein<sup>1</sup>, Janet Gruhn<sup>2</sup>, Frank C. Arnett<sup>1</sup> and Madeleine Duvic<sup>2</sup>

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**SOURCE/DESCRIPTION:** 0.5 Kb Bam HI/Kpn I fragment isolated from the 5' end of a full length C4 cDNA 5.5 Kb insert from clone pAT-A.(1)

**POLYMORPHISM:** Hind III (AAGCTT/TTCGAA) (BRL Ltd) identifies a two allele polymorphism with a band at either 32 Kb or 24 Kb.

**FREQUENCY:** Studied 24 North American Caucasians

32 Kb Allele (A1)	0.6
24 Kb Allele (A2)	0.4

**NOT POLYMORPHIC FOR:** Bgl II,(2) Kpn I,(2) Taq I, Pst I, Dde I, Msp I, Hpa II, and Xba I from at least 6 unrelated individuals. Bam HI is polymorphic.(2)

**CHROMOSOMAL LOCALISATION:** On the short arm of chromosome 6 between the genes for factor Bf and HLA-B.(2)

**MENDELIAN INHERITANCE:** Co-dominant segregation in one family. (See figure)

**PROBE AVAILABILITY:** Available from Dr. Michael C. Carroll.

**OTHER COMMENTS:** No problems with routine overnight digestion. Run on 0.6% agarose gel and hybridized under high stringency conditions.

**REFERENCE:** (1) Belt, Carroll, Porter: Cell 36:907-914, 1984.  
(2) Carroll, Palsdottir, Belt, Porter: EMBO J 4:2547-2552, 1985.

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