RFLP for the human apolipoprotein B gene: I;BamHI

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SOURCE AND DESCRIPTION OF CLONE: 5.07 kb cDNA isolated from an adult human liver cDNA library made from size fractionated (>28S) mRNA (Belt <u>et al</u>,1984). The clone spans the entire T2 thrombin peptide coding sequence of apo B and 270 bp of 3' untranslated region (Knott <u>et al</u>, 1985)

POLYMORPHISM: BamHI (G/GATCC) detects one invariant band of 6.6 kb and a simple 2 allele polymorphism with bands at either 5.7 kb or 5.5 kb.

FREQUENCY: Among 20 white Europeans studied, 5.7 kb allele 0.15 5.5 kb allele 0.85

NOT POLYMORPHIC FOR: AvaII, BglII, Hind III, HinfI, KpnI and SstI with DNA from 10 unrelated individuals.

CHROMOSOMAL LOCALISATION: The probe has been localised to 2p24 by <u>in situ</u> hybridisation (Knott et al, 1985).

MENDELIAN INHERITANCE: Co-dominant segregation demonstrated in one family of 13 individuals.

PROBE AVAILABILITY: Requests for probe to J.S. at the above address.

OTHER COMMENTS: The polymorphism is more easily detected by a BamHI/PvuII double digest giving 1.9 kb and 2.2 kb bands.

REFERENCES: Belt KT, Carroll MC, Porter RR (1984) Cell <u>36</u> 907. Knott TJ et al (1985) Science (in press).

