A complex Hind III polymorphism in the human apolipoprotein-B gene (APOB)

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SOURCE/DESCRIPTION: B1-8, a 1.5 Kb EcoRI Fragment of the 3' end of the apolipoprotein-B cDNA subcloned in pBR322 and derived from a human liver cDNA library cloned in λ gt11 (1).

POLYMORPHISM: Hind III identifies a complex polymorphism with bands ranging from 1.6 Kb to 2.0 Kb and 6 other invariant bands at 7.5 Kb, 6.2 Kb, 5.0 Kb, 4.2 Kb, 3.2 Kb, and .52 Kb.

FREQUENCY: Studied in 53 unrelated American Caucasians, all male

2.0 Kb	0.20	1.8 Kb	0.22	1.6 Kb	0.13
1.9 Kb	0.02	1.7 Kb	0.43		

NOT POLYMORPHIC FOR:

XbaI, EcoRI, Hind II, Bam HI.

CHROMOSOMAL LOCALISATION: Mapping of the apoB-100 gene to the short arm of chromosome 2 was performed by Southern Blot analysis of human-rodent somatic cell hybrids (2).

MENDELIAN INHERITANCE:

Demonstrated in two families.

PROBE AVAILABILITY:

Available for collaborative studies.

OTHER COMMENTS:

Low background at usual stringency (0.1 x SSC).

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REFERENCE:

1. C.F. Wei et al, Proc. Natl. Acad. Sci. USA 82:7265-7269 (1985).
2. L. Chan et al, Bioch. Bioph. Res. Comm. 133:248-255 (1985).