A *Ban*II dimorphic site located in the third intron of the human apolipoprotein AI (APOA1) gene

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SOURCE/DESCRIPTION A 0.7kb fragment generated by *Ava*II digestion of pBL13AI, a 0.965kb full-length human apolipoprotein AI cDNA cloned into the *Eco*RI site of pBR322. The apoAI cDNA was isolated from a λ gt10 human fetal liver cDNA library (1).

POLYMORPHISM *Ban*II (GpuGCPyC) (International Biotechnologies, Inc.) identifies two invariant bands at 1122bp and 417bp, and a single two-allele polymorphism with bands at either 274bp or 452bp.

FREQUENCY Studied in 90 unrelated North American Caucasians
 452bp allele: 0.12 ± 0.02
 274bp allele: 0.88 ± 0.02

CHROMOSOMAL LOCALIZATION: The human apolipoprotein AI-CIII-AIV gene complex has been localized on the long arm of chromosome 11 by Southern blot analysis of human-chinese hamster cell hybrids (2,3).

MENDELIAN INHERITANCE: Co-dominant segregation observed in two families (13 individuals).

PROBE AVAILABILITY: Requests for probe to P.M.F. at the above address.

OTHER COMMENTS: The *Ban*II restriction map (see below) was constructed from DNA sequence data of the human apoAI gene (1). The 452bp fragment is generated by the loss of a *Ban*II dimorphic site in the third intron of the apoAI gene, between the 178bp and the 274bp fragments.

REFERENCES: 1. Seilhamer J, *et al.* (1984) DNA 3, 309-317
 2. Cheung P, *et al.* (1984) PNAS 81, 508-511
 3. Karathanasis SK (1985) PNAS 82, 6374-6378