EcoRI and NsiI RFLPs at a human PLA₂ gene on chromosome 1

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SOURCE/DESCRIPTION: pCB-04, a 0.7kb genomic fragment encoding the second exon of a phospholipase homologue (1,2) of human pancreatic phospholipase A₂ (3) was subcloned into the EcoRI site of pUC9.

POLYMORPHISMS: EcoRI (GAATTC) detects a single two allele polymorphism with fragments at either 8.4kb or 8.0kb.

NsiI (ATGCAT) detects a single two allele polymorphism with fragments at either 5.5kb or 5.0kb.

FREQUENCY: Studied in 105 unrelated North American Caucasians

(i) EcoRI: 8.4 kb allele: 0.85 ± 0.03

8.0 kb allele: 0.15 ± 0.03

(ii) NsiI: 5.5 kb allele: 0.09 ± 0.02

5.0 kb allele: 0.91 ± 0.02

CHROMOSOMAL LOCALIZATION: The genomic fragment encoding the second exon of a gene homologous to human pancreatic phospholipase A₂ has been assigned to the chromosome 1 by Southern filter hybridization of DNA from human-rodent hybrids (1,2).

MENDELIAN INHERITANCE: Codominant segregation of both RFLPs observed in two families (20 individuals).

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

