Two RFLPs at the human renin (ren) gene locus

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SOURCE/DESCRIPTION: 1.5 kb full length human renin cDNA isolated from a kidney cDNA library and subcloned into pUC 9 (1).

POLYMORPHISM: Bgl I detects two allelic fragments of 5.0 kb and 9.0 kb. Hind III detects a two-allele polymorphism with bands at 6.2 kb and 9.0 kb.

FREQUENCY: Studied in 80 unrelated North American Caucasians:

Bgl I	9.0 kb allele : 0.61,	5.0 kb allele : 0.39
Hind III	9.0 kb allele : 0.66,	6.2 kb allele : 0.34

NOT POLYMORPHIC FOR: Apa I, Ava I, Ava II, Bam HI, Dra I, Eco RI, Eco RV, Hinc II, Mbo I, Msp I, Nci I, Pst I, Pvu II, Sst I, Xba I and Xmn I.

CHROMOSOMAL LOCALISATION: Human renin gene assigned to chromosome 1 by filter hybridisation of human-rodent somatic cell hybrids (2).

MENDELIAN INHERITANCE: Co-dominant segregation observed in 3 families (18 individuals) for Bgl I and 2 families (12 individuals) for Hind III.

PROBE AVAILABILITY: Requests for probe to L.C.F. at the above address.

OTHER COMMENTS: Low background under usual stringency conditions.

REFERENCE: 1. Fritz, L.C. et al., PNAS (in press) (1986); 2. Naylor, S.L. et al., Cytogen. Cell Genet. 37 (1984) 549.

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