Eco RV RFLP at the insulin-like growth factor I (IGF I) locus on chromosome 12

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- SOURCE AND DESCRIPTION OF CLONE : The human liver IGF I cDNA insert from the λ TG03 (1) was subcloned in PGEM4 (pTG 3906). We used the 660 bp Eco RI-Bam HI fragment containing the 5'untranslated, the coding and the 3' untranslated region of the IGF IA gene (exons 1, 2, 3 and 5).

- POLYMORPHISM : Eco RV digestion of genomic DNA and hybridisation with the IGF I probe reveals invariant fragments of 20; 8,7 and 5 kb and polymorphic fragments of 13 kb (allele 1) and 11,5 kb (allele 2).

- FREQUENCY : Studied in 51 unrelated European Caucasians
allele 1 : 0.14 allele 2 : 0.86

- NOT POLYMORPHIC FOR : Bam HI, Bgl II, Eco RI, Kpn I, Msp I, Pst I, Taq I (n=14); Ava II; Bgl I, Hph I, Mbo I, Rsa I, Sac I (n=10).

- CHROMOSOMAL LOCALISATION : 12 q22-24.1 (Ref 2-4).

- MENDELIAN INHERITANCE : Codominant segregation observed in 2 european families (9 individuals).

- PROBE AVAILABILITY : Contact Y. Le Bouc.

- OTHER COMMENTS : Hind III and Pvu II digestions show previous described RFLP (Ref 3-5). Allelic frequencies however were : Hind III (5,2 kb allele = 0,14 and 4,9 kb allele = 0,86) and Pvu II (5 kb allele = 0,14 and 4,7 kb allele = 0,86). Hind III and Pvu II RFLPs are linked. Among the DNA of the 14 individuals, where Eco RV RFLP was found, only one exhibit Hind III and Pvu II RFLPs.

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