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BamHI RFLP at the insulin-like growth factor II (IGF2) locus on chromosome 11

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SOURCE/DESCRIPTION: phins311 (vector-pBR322) contains an 8.6 kbp EcoRI fragment from the insulin (INS)/IGF2 genomic clone lambda hINS-3 (Bell et al 1985). This fragment contains an exon encoding part of the 5' untranslated region of IGF-II mRNA as well as adjacent intron sequences.

POLYMORPHISM: BamHI digestion reveals invariant fragments of 17.0, 2.1, 1.8 and 1.0 kbp and polymorphic fragments of 2.2 kbp (allele 1) and 1.2 kbp (allele 2).

FREQUENCY	Allele 1	Allele 2
Caucasians (N=66)	0.42	0.58
Chinese (N=68)	0.79	0.21

NOT POLYMORPHIC FOR: Apa I, Ban I, Bgl I, Bgl II, Dra I, Kpn I, Mbo II, Msp I, Pvu II, Rsa I, Sst I and Xba I.

CHROMOSOMAL LOCALISATION: 11p15 (McAlpine et al 1985). The IGF2 gene is immediately adjacent to the 3' end of the insulin gene.

MENDELIAN INHERITANCE: Co-dominant segregation observed in three families.

PROBE AVAILABILITY: Contact G. I. Bell

OTHER COMMENTS: This probe may be useful in those instances when it is not possible to distinguish each parental gene using an insulin hypervariable region probe.

REFERENCES:

Bell, G. I. et al (1985) Proc. Natl. Acad. Sci. USA 82:6450-6454

McAlpine, P. J. et al (1985) Cytogenet. Cell Genet. 40:8-66