RFLP for the human retinoic acid receptor gene RAR- β

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SOURCE/DESCRIPTION: 1.4 kb Mae I fragment containing the entire RAR- β ORF cloned into the Sma I site of pTZ18U, yielding the plasmid pCOD20 (Brand et al., 1988).

POLYMORPHISM: Msp I digestion of genomic DNA and hybridisation with the pCOD20 probe detects a two allele polymorphism with allelic fragments of 8.1 and 7.7 kb.

FREQUENCY: MspI 8.1 kb allele 0.88
7.7 kb allele 0.12
Studied in 78 unrelated individuals

NOT POLYMORPHIC FOR: Rsa I, Xmn I, Bgl II, Hind II, Hinf I, Bam HI, Ban I, Stu I, Ava II, Bcl I, Taq I, Eco RI, Hind III, Apa I, Sst I, Apa LI, Hha I, Kpn I, Bst XI, Stu I, and Asp I with panels of at least 10 unrelated individuals.

CHROMOSOMAL LOCALISATION: The human RAR- β gene has been localised to the p24 band of chromosome 3 (Mattei et al., 1988).

MENDELIAN INHERITANCE: Co-dominant segregation of the alleles was observed in 4 Caucasian families.

PROBE AVAILABILITY: Contact A. Dejean.

OTHER COMMENTS: Constant bands of 7.1, 1.6, 1.4 and 0.74 kb.

REFERENCE: N. Brand, M. Petkovich, A. Krust, P. Chambon, H. de Thé, A. Marchio et al. (1988). Nature 332: 850-853.
M-G. Mattei, H. de Thé, J-F. Mattei, A. Marchio, P. Tiollais, and A. Dejean. (1988). Hum Genet 80: 189-190.

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