PstI RFLP at the MYH2 locus on chromosome 17

C.Schwartz

Molecular Genetics Laboratory, Greenwood
Genetic Center, Greenwood, SC 29646, USA

Source/Description: The probe, p10-5, is a 1.7 kb genomic fragment of the MYH2 gene subcloned into the EcoRI site of pBR322 (1).

Polymorphism: PstI digestion of genomic DNA reveals a 2 allele polymorphism.

A1: 8.0 kb

A2: 5.5 kb

Frequency: The frequencies of the alleles, based on 102 chromosomes from the CEPH panel of families:

A1: 0.72

A2: 0.28

Heterozygosity: Expected: 0.4; Observed: 0.375.

Not Polymorphic For: BglII, BamHI, EcoRI, PvuII, TaqI.

Chromosomal Location: MYH2 has previously been mapped to the short arm of chromosome 17 (17p13) by linkage analysis (2).

Mendelian Inheritance: Codominant segregation of the PstI RFLP was observed in the CEPH family panel.

Other Comments: This RFLP was found to increase information at the MYH2 locus in 4 of 20 chromosomes previously typed for the HindIII RFLP (2).

Probe Availability: Probe is available from the ATCC.

Acknowledgements: Supported by grants from the Self Foundation and The South Carolina Department of Mental Retardation.

References: 1) Leinwand *et al.* (1983) *Science* **221**, 766–768.
2) Schwartz *et al.* (1986) *Cytogenet. Cell Genet.* **43**, 117–120.

The human gene for plasminogen activator inhibitor 2 (PAI2) exhibits an EcoRI RFLP

E.A.van den Berg, E.le Clercq, T.Kooistra*,
R.R.Frants¹ and E.Bakker¹

Gaubius Institute TNO, PO Box 612, 2300 AP
Leiden and ¹Department of Human Genetics,
State University, PO Box 9503, 2300 RA Leiden,
The Netherlands

Source and Description of Clone: A 1.2 kb EcoRI insert representing a partial cDNA fragment of the human PAI2 gene, was isolated from an U-937 lambda gt10 library, and subcloned in pUC 8 (plasmid pPAI8.3, W.D.Schleuning *et al.*, 1987).

Polymorphism: EcoRI identifies two constant bands of 11 and 6 kb, and a two-allele polymorphism with allelic fragments of 1.2 and 2.3 kb (figure 1).

Frequency: Studied in 30 unrelated Dutch individuals.

2.3 kb allele (A1) 0.33

1.2 kb allele (A2) 0.67

Chromosomal Localization: The PAI2 gene was localized to 18q21-q23 by *in situ* hybridization (Ye *et al.*, 1989).

Mendelian Inheritance: The variants were codominantly inherited in three families (31 individuals). In a fourth family a more complex inheritance pattern was observed, possibly due to the presence of an additional 'rare' allele.

Probe Availability: Probe freely available from Dr E.K.O.Kruithof, Hematology Laboratory CHUV, 1011 Lausanne, Switzerland.

Acknowledgements: We thank W.D.Schleuning and E.K.O.Kruithof for their gift of the PAI2 probe.

References: 1) Schleuning *et al.* (1987) *Mol. Cell. Biol.* **7**, 4564–4567. 2) Ye *et al.* (1989) *J. Biol. Chem.* **264**, 5495–5502.

Figure 1. 1. A1A1, 2. A2A2, 3. A2A2, 4. A1A2.

* To whom correspondence should be addressed