A new polymorphic probe close to HLA-A

A.El Kahloun, A.M.Jouanolle, M.Chorney[1], V.Mauvieux, I.Gicquel, P.Pontarotti[2] and V.David*
Laboratoire de Biochimie Médicale B, Faculté de Médecine, 35043 Rennes Cédex, France, [1]Pennsylvannia State University, Hershey, PA 17033, USA and [2]Centre d'Immunologie INSERM/CNRS, Case 906, 13288 Marseille Cédex, France

Source/Description: I.82 is a 4.4 kb PstI fragment from the yeast artificial chromosome B 30. This YAC was a gift of D.Chaplin (Washington University School of Medicine, St Louis, MO); it contains a 300 kb insert including the HLA-A locus. I.82 was subcloned into the PstI site of the Bluescript plasmid.

Polymorphism: BglII: a two alleles polymorphism with bands at 15 kb (allele 1) and 7.4 kb (allele 2).

Frequency: Determined by Southern blotting in 61 unrelated caucasoid males and females:
allele G1 (15 kb): 0.467
allele G2 (7.4 kb): 0.533 (PIC = 0.37)

Not Polymorphic For: PstI, MspI, EcoRV, HindIII, EcoRI, PvuII, XhoI, HaeIII, ApaI, HpaI.

Chromosomal Localisation: 6p21.3 at about 100 kb from the HLA-A locus (as shown by Pulse Field Gel Electrophoresis).

Mendelian Inheritance: Codominant segregation demonstrated for both RFLPs in 23 European pedigrees (213 individuals).

Probe Availability: Please contact Véronique David (FAX: (33) 99.33.68.98).

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* To whom correspondence should be addressed

A *Msp*I-RFLP in the C-terminal part of the gene for desmoglein DGI (DSG)

J.Arnemann, N.K.Spurr[1] and R.S.Buxton
Laboratory of Eukaryotic Molecular Genetics, National Institute for Medical Research, Mill Hill, London NW7 1AA and [1]Human Genetic Resources, Imperial Cancer Research Fund, Clare Hall Laboratories, South Mimms, Potters Bar, Herts EN6 3LD, UK

Source/Description: pJA40T10 is a 1.7 kb *Bgl*II/*Eco*RI fragment from the human desmoglein DGI (DSG) cDNA out of a human keratinocyte library (1).

Polymorphism: MspI digestion of genomic DNA and hybridization with the probe detects a two-allele polymorphism: 9.9 kb (A1) and 3.9 kb (A2).

Frequency: Estimated from 31 unrelated Caucasians.
A1: 0.725
A2: 0.275
Frequency of heterozygosity: 0.40

Not Polymorphic For: *Eco*RI, *Bam*HI, *Bgl*II, *Pst*I.

Chromosomal Localization: Using a somatic cell hybrid panel the probe was assigned to chromosome 18 (2).

Mendelian Inheritance: Mendelian inheritance has been demonstrated in two three generation families of the Utah kindred.

Probe Availability: Available for collaboration.

References: 1) Wheeler,G.N., Parker,A.E., Thomas,C.L. *et al.* (1991) Desmosomal Glycoprotein I, a component of intercelluar desmosome junctions, is related to the cadherin familly of cell adhesion molecules. *Proc. Natl. Acad. Sci. USA* **88**, 4796–4800. 2) Arnemann,J., Spurr,N.K., Wheeler,G.N. *et al.* (1991) Chromosomal assignment of the human genes coding for the major proteins of the desmosome junction, desmoglein DGI (DSG), desmocollins DGII/III (DSC), desmoplakins DPI/II (DSP), and plakoglobin DPIII (JUP). (1991) *Genomics* **10**, 640–645.