A myeloperoxidase cDNA clone identifies an EcoRV RFLP

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Source/Description: A myeloperoxidase cDNA clone (pMPO: 1200 bp BamHI insert in pUC8) was isolated from a HL-60 cDNA library (1).

Polymorphism: EcoRV (GAT/ATC) (Boehringer, Mannheim, FRG) identifies a two allele-RFLP: 27 kb (A1) and/or 24 kb (A2).

Frequency: 26 unrelated European Caucasians were studied:

A1: 0.87

A2: 0.13

Not Polymorphic For: BamHI, BglI, BglII, EcoRI, HindIII, PvuII, StuI.

Chromosomal Localization: Localizations reported in the literature include: 17q21-q23 (2); 17q12-q21 (3).

Mendelian Inheritance: Autosomal codominant segregation in 2 unrelated families (one with 3 and one with 2 generations).

Probe Availability: Contact H.P.Koeffler, M.D., Division of Hematology/Oncology, UCLA School of Medicine, Factor Building 11-240, Los Angeles, CA 90024, USA

Other Comments: A PstI RFLP has been reported (4).

Acknowledgements: Work was funded by grants from the Swiss National Science Foundation (31.9141.87 to AT; 31.9392.88 to MFF) and the Bernische Krebsliga.

References:

- 1) Johnson, K.R., Nauseef, M., Care, A., Wheelock, M.J., Shane, S., Hudson, S., Koeffler, H.P., Selsted, M., Miller, C. and Rovera, G. (1987) *Nucl. Acids Res.* **15**, 2013-2028.
- 2) Van Tuinen, P., Johnson, K.R., Ledbetter, S.A., Nussbaum, R.L., Rovera, G. and Ledbetter, D.H. (1988) *Oncogene* **1**, 319-322.
- 3) Weil, S.C., Rosner, G.L., Reid, M.S., Chisholm, R.L., Lemons, R.S., Swanson, M.S., Carrino, J.J., Diaz, M.O. and Le Beau, M.M. (1988) *Science* **240**, 790-792.
- 4) Miki, T., Weil, S.C., Rosner, G.L., Reid, M.S. and Kidd, K.K. (1988) *Nucl. Acids Res.* **16**, 1649.

A TaqI RFLP at the EDN1 gene locus

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Source/Description: ET1c contains a 1.2 kb EcoRI fragment and at least two identical 0.9 kb EcoRI fragments, from human endothelin 1 (EDN1) cDNA derived from human umbilical vein endothelial cells and subcloned into pUC 13 (1). The 1.2 kb EcoRI fragment derived from the 5' end of the cDNA was used as probe.

Polymorphism: TaqI detects a single two-allele polymorphism with fragments at either 6.7 kb or 5.2 kb/1.5 kb (see figure).

Frequency: Alleles counted in 90 unrelated Norwegians.

6.7 kb allele: 0.26

5.2 kb/1.5 kb allele: 0.74

Not Polymorphic For: AvaII, BamHI, BanII, BclI, BglII, EcoRI, HindIII, MspI, NruI, PstI, SstI, StyII, XbaI, and XhoI, in a screen of 16 unrelated persons.

Chromosomal Localization: The EDN1 gene has been assigned to human chromosome 6 (1).

Mendelian Inheritance: Co-dominant inheritance observed in 4 informative nuclear families.

Probe Availability: Contact Dr Kenneth D.Bloch, Cardiac Unit, Massachusetts General Hospital, Boston, MA, USA (1).

Acknowledgement: We are indebted to Dr Kenneth D.Bloch for providing the endothelin probe.

Reference: 1) Bloch, K.D. et al. (1989) *J. Biol. Chem.* **264**, 10851-10857.

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