

A BamHI RFLP in the human arylsulfatase A gene

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Source and Description of Clone: CP8 is a 1.4 kb partial cDNA of the human arylsulfatase A gene isolated from a human placenta cDNA library, subcloned into the EcoRI site of Bluescript SKM13⁻ and sequenced (Stein *et al.*, 1989).

Polymorphism: BamHI identifies a two allele polymorphism with bands at 23 kb (A1) and 15.5 and 6.5 kb (A2).

Frequency: Studied in 19 European Caucasians:

A1: 0.71

A2: 0.29

Not Polymorphic for: BglII, EcoRI, HindIII, MspI, PstI, PvuII (from 7 individuals).

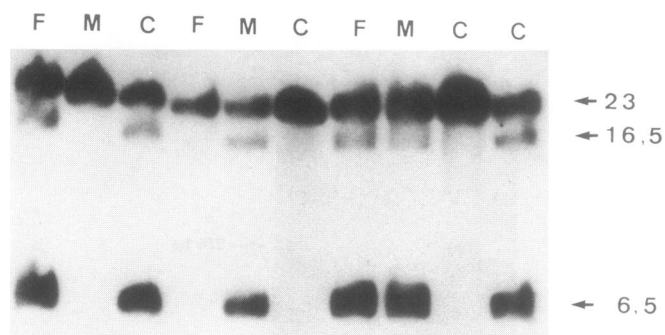
Chromosomal Localization: 22q13.1-qter (Geurts van Kessel *et al.*, 1980).

Mendelian Inheritance: Co-dominant segregation shown in 3 families (10 meioses).

Probe Availability: Available from V.Gieselmann.

References: 1. Stein *et al.* (1989) *J. Biol. Chem.* **264**, 1252–1259. 2. Geurts van Kessel *et al.* (1980) *Cytogenet. Cell Genet.* **28**, 169–172.

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A TaqI RFLP for the human arylsulfatase A gene

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Source and Description of Clone: CP8 is a 1.4 kb partial cDNA of the ARSA gene isolated from a human placenta cDNA library, subcloned into the EcoRI site of Bluescript SKM13⁻ and sequenced (Stein *et al.*, 1989).

Polymorphism: TaqI identifies a two allele polymorphism with bands at 3.9 kb (B1) and 3.2 kb (B2) and a constant band at 1.1 kb.

Frequency: Studied in 19 European Caucasians:

B1: 0.50 B2: 0.50.

Not Polymorphic for: BglII, EcoRI, HindIII, MspI, PstI, PvuII (from 7 individuals).

Chromosomal Localization: The previous localization performed by somatic human/rodent cell hybrids and enzymatic determination (Geurts van Kessel *et al.* 1980) was confirmed using Southern blots of DNA from an equivalent set of hybrid cells (kindly provided by Geurts van Kessel, Nijmegen).

Mendelian Inheritance: Co-dominant segregation shown in 3 families (10 meioses).

Probe Availability: Available from V.Gieselmann, Department of Biochemistry II, University, 3400 Göttingen, Germany

References: 1. Stein *et al.* (1989) *J. Biol. Chem.* **264**, 1252–1259. 2. Geurts van Kessel *et al.* (1980) *Cytogenet. Cell Genet.* **28**, 169–172.

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