Glutathione S-transferase 2 shows an RFLP with *Bst*EII/*Taq*I double digest

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Source/Description: A 700 bp *Pvu*II cDNA fragment (pGST2-*Pvu*II) cloned in vector pAT153/*Pvu*II/B (1).

Polymorphism: *Bst*EII/*Taq*I double digest detects polymorphic fragments at 3 kb and 2.8 kb.

Frequency: Allele frequencies from 43 unrelated individuals were: 0.5; 0.5.

Not Polymorphic For: *Apa*I, *Bgl*II, *Dra*I, *Sal*I/*Eco*RI.

Chromosomal Location: Mapped to chromosome 6p12.2 (1).

Mendelian Inheritance: Codominant segregation observed in 6 families.

Probe Availability: Available from Dr P.G.Board, The John Curtin School of Medical Research, Australian National University, Canberra ACT2601 Australia.

Acknowledgement: We thank Dr P.G.Board for his generous gift of probe pGST2-*Pvu*II.

Reference: 1) Board,P.G. and Webb,G.C. (1987) *Proc. Natl. Acad. Sci. USA* **84**, 2377-2381.

*Msp*I and *Mbo*I polymorphisms at the DXS704 locus

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Source and Description: K23a is a 1.95 kb fragment isolated from an Xp radiation hybrid cell line using interspersed repetitive sequence PCR, and cloned into the *Sma*I site of the pBluescriptII KS+ vector. A Sequence Tagged Site was established for this locus. The primers, 5'GACTTTCCTGTGCTTGTGA3' and 5'ATGCTAATTGTCCCAGACCC3', amplify a 178 bp fragment. This sequence has been deposited in the EMBL Data Library (accession number X59997).

Polymorphism: *Msp*I reveals a 4 allele RFLP, and *Mbo*I reveals a 2 allele RFLP. The allele sizes for each of these polymorphisms are shown below.

Frequency: 107 X chromosomes from 71 unrelated CEPH parents were scored for the *Msp*I polymorphism. The heterozygosity rate is 59%. 10 X chromosomes from 5 unrelated caucasians were scored for the *Mbo*I polymorphism.

A₁ (7.9 kb): 0.28 B₁ (0.96 kb): 0.4

A₂ (5.9 kb): 0.46 B₂ (0.80 kb): 0.6

A₃ (5.3 kb): 0.03

A₄ (3.5 kb): 0.23

Not Polymorphic For: *Apa*I, *Ava*II, *Bam*HI, *Ban*I, *Ban*II, *Bcl*I, *Bgl*II, *Bgl*III, *Bst*NI, *Dra*I, *Eco*RI, *Eco*RV, *Hae*III, *Hgi*AI, *Hind*III, *Kpn*I, *Pst*I, *Pvu*II, *Rsa*I, *Sac*I, *Sca*I, *Taq*I and *Xba*I.

Chromosomal Localization: K23a was localized to Xp21.3 using DNA from patients with deletions in this region and a set of X chromosome somatic cell hybrids.

Mendelian Inheritance: X linked segregation is demonstrated in 3 families.

Probe Availability: K23a is available upon request from Dr Huda Zoghbi at the above address.

Other Comments: Both the filter and the probe require preassociation with sheared human placental DNA. For low background, hybridize at normal stringency (67°C, 1 M Na+) and wash at high stringency (67°C, 0.45 M Na+).

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