PvuII and RsaI RFLPs for the human homeo box-containing gene *EN2*

Cairine Logan and Alexandra L.Joyner*

Division of Molecular and Developmental Biology, Mount Sinai Hospital Research Institute, Department of Medical Genetics, 600 University Avenue, University of Toronto, Toronto, Ontario M5G 1X5, Canada

SOURCE/DESCRIPTION: mp4 is a 1.7 kb single-copy genomic *SstI* fragment which was isolated from the human *engrailed*-like gene, *EN2* and subcloned into puc118 (Logan *et al*, 1989).

POLYMORPHISM: PvuII identifies one invariant band at 1.4 kb and a simple two-allele polymorphism with a band at either 1.2 kb or 1.0 kb. RsaI identifies one invariant band at 2.3 kb and a simple two-allele polymorphism with a band at either 4.0 kb or 1.2 kb.

FREQUENCY: Estimated from 20 unrelated individuals:

PvuII	1.2 kb allele	0.35	RsaI	4.0 kb allele	0.22
	1.0 kb allele	0.65		1.2 kb allele	0.78

NOT POLYMORPHIC FOR: *AccI*, *ApaI*, *Asp718*, *BamHI*, *BcII*, *BglII*, *BstXI*, *EcoRI*, *HindII*, *HindIII*, *NcoI*, *NsiI*, *PstI*, *ScaI*, *SphI*, *SstI*, *StuI*, *TaqI*, *XbaI* and *XmnI* with DNA from 6 unrelated individuals.

CHROMOSOMAL LOCALISATION: Probe localised to 7q32-7qter using a panel of rodent-human somatic cell hybrids (Logan *et al*, 1989).

PROBE AVAILABILITY: Contact A.L. Joyner.

OTHER COMMENTS: The PvuII and RsaI alleles are not in linkage disequilibrium. They are also not in disequilibrium with the *SstI* alleles detected using a second more 3' probe (mp5) from the same gene.

REFERENCES: Logan, C., Willard, H.F., Rommens, J.M., and Joyner, A.L. (1989) Genomics, in press.

ACKNOWLEDGEMENTS: We thank Drs. R.G. Worton, P.N. Ray, and L.C. Tsui for providing the DNA samples used in this study. This work was supported by a grant from the Medical Research Council (MRC) of Canada (A.J.). C.L. was supported by an MRC Studentship. A.J. is an MRC Scholar.

*To whom correspondence should be addressed