Isolation and mapping of a polymorphic DNA sequence (pEFD70.3) on chromosome 18 [D18S23]

E.Fujimoto, Y.Nakamura, R.Payson, P.O'Connell, M.Leppert, G.M.Lathrop, J.-M.Lalouel and R.White

The Howard Hughes Medical Institute, University of Utah School of Medicine, Salt Lake City, UT 84132, USA

SOURCE/DESCRIPTION: A 1.3 kb PstI fragment from cosmid EFD70 was subcloned into the PstI site of pUC18.

POLYMORPHISM: PstI identifies a two allele polymorphism with a band at 1.5 kb (P1) or 1.3 kb (P2) without a constant band.

FREQUENCY: Estimated from 85 unrelated Caucasians.

PstI	P1 : 0.79
	P2 : 0.21

NOT POLYMORPHIC FOR: MspI, TaqI, RsaI, PvuII, EcoRI, HindIII
BamHI and BglII

CHROMOSOMAL LOCALIZATION: pEFD70.3 has been assigned to chromosome 18 by multipoint linkage analysis(1) with loci (D18S1, D18S3) known to span this region(2,3).

MENDELIAN INHERITANCE: Co-dominant segregation of the PstI RFLP was observed in 43 three generation families.

PROBE AVAILABILITY: Contact Y.N.

OTHER COMMENTS: RFLPs were observed under normal hybridization and wash stringencies.

REFERENCES:

1. G.M. Lathrop et al., Am. J. Hum. Genet. 37:482-498 (1985)
2. S. Naylor et al., Cytogenet. Cell Genet. 40:242-267 (1985)
3. P. O'Connell et al., abstract submitted to Human Gene Mapping Workshop 9. Cytogenet. Cell Genet., in press