Volume 16 Number 16 1988 Nucleic Acids Research

HindIII polymorphism in the human c-*sis* proto-oncogene

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SOURCE AND DESCRIPTION OF CLONE: The 2.0 kb BamHl restriction fragment corresponding to a cDNA insert encoding the human c-*sis* PDGF A chain and nucleotide sequences homologous to the v-*sis* gene was isolated from plasmid pSM-1 (1). An identical polymorphism was noted using the 1.2 kb PstI fragment or the 1.0 kb PstI/XbaI fragment isolated from the v-*sis* sequence subcloned in the plasmid pV-sis (2).

POLYMORPHISM: HindIII identifies a single bi-allelic polymorphism with bands at 22.6 kb and 19.4 kb.

FREQUENCY: Studied in 59 caucasian individuals.

HindIII	22.6 kb	0.57
	19.4 kb	0.43

NOT POLYMORPHIC FOR: Pstl, BamHI, HindII, EcoRI

CHROMOSOME LOCATION: HGM 8 Map 22q12.3-13.1

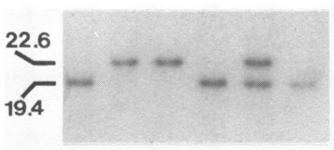
MENDELIAN INHERITANCE: Co-dominant segregation demonstrated in 1 family (see fig. below).

PROBE AVAILABILITY: Probes are commercially available through the American Type Culture Collection, 12301 Parklawn Drive, Rockville MD, 20852. Request bacterial host strain numbers 41033 (pV-sis) and 57051 (pSM-1).

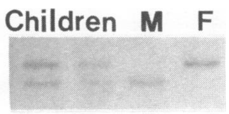
OTHER COMMENTS: This polymorphism is not easily detected unless the restricted DNA is separated on 0.6-0.8% agarose gels. Resolution was optimal if gels were run until the bromophenol blue tracking dye had migrated 14 cm from the origin and Southern blotting was performed under alkaline conditions.

REFERENCES: 1. Ratner, S.F., et al. (1985) Nucleic Acids Res. 13: 5007-5018. 2. Robbins, K.C., et al. (1981) Proc. Natl. Acad. Sci. USA 78:2918-2922.

ACKNOWLEDGEMENTS: This work was supported by grants from NCIC and AHFMR. RMF and RAA are NCIC and MRC Post-doctoral Fellows, respectively.



6 individuals



family study