## NcoI and HinfI RFLPs detected with a dihydropteridine reductase cDNA probe

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SOURCE/DESCRIPTION: The purified 1.2 kb human DHPR cDNA insert from  $\lambda$  DHPR 19 (1) was used as probe.

POLYMORPHISMS: NooI identifies a complicated multiallele polymorphism and HinfI identifies a simple two allele RFLP:

Restriction	No. of	Size of alleles	Frequency
endonuclease	alleles	(kb)	of alleles
NcoI	2	10 / 7.8 + 2.2	0.45 / 0.55
NcoI	3	6.6 / 5.9 + 3.5 / 5.9 + 0.7	0.27 / 0.33 / 0.40
HinfI	2	1.1 / 0.9	0.30 / 0.70

FREQUENCY: Estimated by analysis of 32 unrelated caucasians.

NOT POLYMORPHIC FOR: Acci, Alui, Apai, Ball, BamHi, Bcil, Bgli, Bglii, BstNi, Ddei, Drai, EcoRi, EcoRv, Fnu4Hi, Haeili, Hincil, Hindili, Nsil, Psti, Pvuii, Rsai, Saci, Sau3Ai, Sau96, Scai, Spei, Sphi, Stui, Taqi, Xbai, Xhoii, Xmni.

CHROMOSOME LOCATION: 4p15.3, by in situ hybridisation (2).

MENDELIAN INHERITANCE: Codominant segregation shown in two families (total of 14 individuals).

PROBE AVAILABILITY: Available for collaboration (contact H.-H.M.D.).

OTHER COMMENTS: The probe also detects AvaII and MspI polymorphisms (1). Linkage disequilibrium is apparent between the two NcoI polymorphisms, although both NcoI RFLPs appear to be in equilibrium with the HinfI RFLP.

**REFERENCES:** 

- 1. Dahl et al., Nucl. Acids Res. 15: 1921-1932 (1987).
- 2. Dahl and Brown. Genomics 1: 67-70 (1987).

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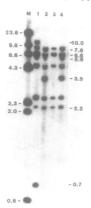


FIGURE: Lane M, marker; lanes 1-4, Ncol RFLPs.

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