A new HincII RFLP for epidermal growth factor (EGF) on chromosome 4

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SOURCE/DESCRIPTION: phEGF121 contains a 555 bp EcoRI fragment that encodes the 5' untranslated region and amino acids 1-38 of the human EGF precursor (Bell et al, 1986). The vector is pUC9.

POLYMORPHISM: HincII identifies a third allele of a polymorphism previously reported (Murray et al, 1986) to have allelic bands of 8.0 or 4.5 kb. The third allele is found at 2.5 kb and has been identified only in Asians.

FREQUENCY:	300 Caucasoids	3 Blacks	13 Asians
HincII			
8.0 kb	0.40	0.50	0.35
4.5 kb	0.60	0.50	0.42
2.5 kb	-	-	0.23

NOT POLYMORPHIC FOR: AvaII, BamHI, BclI, BglII, EcoRI, HaeIII, HindIII, HinfI, KpnI, MspI, PstI, PvuII, RsaI, TaqI, XbaI

CHROMOSOMAL LOCALIZATION: Probe localized to 4q25-4q27 using in situ hybridization (Morton et al, 1985).

MENDELIAN INHERITANCE: Co-dominant segregation was shown in two families including CEPH pedigree 104 (from Venezuela) and a second family of Asian descent.

PROBE AVAILABILITY: Contact G.I. Bell

OTHER COMMENTS: This polymorphism was not observed in any other CEPH individuals. A fourth HincII allele of size 7.8kb is potentially observed in CEPH family 1362 and may represent an insertion/deletion RFLP.

REFERENCE: Bell, GI et al. NAR 14:8427-8446, 1986.
Murray JC et al. NAR 14:5117, 1986
Morton CC et al. Cytogenet & Cell Genet 41:245-249, 1986.

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