An *EcoRI* restriction fragment length polymorphism at the *KRAS2* locus on mouse chromosome 6

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SOURCE/DESCRIPTION:

Plasmid *HiHi3* was obtained from Dr. E. Scolnick (1) and contains a 1 kP *EcoRI* insert derived from the murine Kirsten sarcoma virus, cloned into *pBR322*.

POLYMORPHISM:

Constant *EcoRI* bands were found at 9.5 kP, 8.5 kP and 1.5 kP. In addition, a variant band containing the first exon of *KRAS2* (2) was present with allele 1 at 0.55 kP and allele 2 at 0.7 kP.

FREQUENCY:

Feral populations were not studied. Among inbred *Mus musculus*, allele 1 is found in strains: A/J, A/HeJ, SWR/J, Balb/cJ, CBA/J, RF/J and 129/RxJ. Allele 2 is found in strains AKR/J, C58/J, C57L/J, C3H/HeJ, SJL/J and DBA/2J.

NOT POLYMORPHIC FOR:

Not tested.

CHROMOSOMAL LOCALISATION:

Reported as mouse chromosome 6F3-G3 (3).

MENDELIAN INHERITANCE:

Codominant transmission in A/J x C57BL/6J testcrosses and backcrosses.

PROBE AVAILABILITY:

Contact Dr. E. Scolnick.

OTHER COMMENTS:

High concentration (1.8%) gels with transfer to BA83 nitrocellulose or nylon filters is recommended.

REFERENCE:

1. Ellis et al. *Nature* (1981), 292:506-511.
2. Guerre et al. *Science* (1984), 225:1159-1162.
3. Cahilly, L.A. and George, D.L. *Cytogenet. Cell Genet.* (1985), 39:140-144.

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Figure 1. Autoradiogram of Southern blot probed with *HiHi3*. *EcoRI*-cleaved DNAs from 1) A/J mouse, 2) C57BL/6J mouse and 3) 1:1 mixture of A/J and C57BL/6J. Sizes to right in kilobases.

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