Ava I RFLP at the gas-1 locus on mouse chromosome 12Mario P.Colombo, P.Baracetti, C.Schneider¹ and G.Cairo²

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SOURCE/DESCRIPTION

A family of G₀-specific genes whose expression is negatively regulated by serum and growth factor has been called gas(growth-arrest-specific genes)¹. A fragment of 1.3 Kb of gas-1 cDNA cloned in a EcoRI site of Blue script vector was used as probe.

POLYMORPHISM

After DNA digestion with Ava I a constant band of 4.9 Kb and a variant band of 5.4 Kb were observed.

FREQUENCY

The 5.4 Kb Ava I fragment was observed in DNA from C57BL/6, DBA/2 and C3Hf but not in BALB/c mouse strains.

NOT POLYMORPHIC FOR

Bam HI, Bgl I, Bgl II, Eco RI, Hind III, Pvu II, Sma I, Taq I, Xba I.

CHROMOSOMAL LOCALIZATION

CxB recombinant inbred strains have been used to follow the inheritance of the C57BL/6 5.4 Kb band. The presence of this band only in CxBD and CxBJ strains delineated the strain distribution pattern BCCCCBC identical for those of the three minor histocompatibility loci H-17, H-34 and H-38 and for the MuLV loci pol-1^c, pol-7^b and pol-17^c which has been localized on chromosome 12².

MENDELIAN INHERITANCE

Segregation of the 5.4 Kb C57BL/6 band was followed among the CxB RI strains.

PROBE AVAILABILITY

Probe is available upon request to Dr. Claudio Schneider (Trieste, Italy).

REFERENCES

- 1) Schneider C. et al. Cell (1988) 54: 787-793.
- 2) Rossomando A. and Meruelo D. Immunogenetics (1986) 23: 233-245.