An allelic polymorphism of the angiotensinogen gene in mice

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SOURCE AND DESCRIPTION OF CLONE: pANG.71 is a 0.71 kb EcoRI to BamHI fragment of the mouse angiotensinogen gene (1), containing part of intron A and adjacent exon 2 cloned into pUC19. A 397 bp StuI - BamHI fragment of pANG.71 was used for the probe.

<u>POLYMORPHISM</u>: While screening random bred Swiss mice for the presence of a transgene, we noted 2 alleles of the angiotensinogen gene in BamHI digested genomic DNA (Figure 1). The 1.7 kb band is also present in BALB/cJ, C57BL/6J, SWR/J and CBA/J and has been named the Ang^D allele. The 2.1 kb band found in AKR/J, C3H/HeJ, and C57L/J has been named the Ang^S allele.

NOT POLYMORPHIC FOR: In BALB/cJ, C57BL/6J and AKR/J, there is no polymorphism for PstI, BgIII or NcoI.

<u>FREQUENCY</u>: Estimated from 52 random bred Swiss mice: - Ang^S/Ang^S 0.15; Ang^S/Ang^b 0.62; Ang^b/Ang^b 0.23.

CHROMOSOMAL LOCALIZATION: Human not known; currently being mapped in mice.

PROBE AVAILABILITY: For collaborative studies.

<u>OTHER COMMENTS</u>: The occurence of this allelic polymorphism for angiotensinogen in inbred mice is independent of the renin gene duplication (2).

REFERENCES:

- (1) Clouston W.M. et al. (1988) Genomics 2: 240-248.
- (2) Piccini, N. et al. (1982) Cell 30: 205-213.

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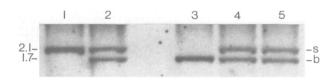


FIGURE 1 RFLP for angiotensinogen in BamHI-digested genomic DNA from 5 random bred Swiss mice (lanes 1 to 5).