

# IFN $\alpha$ / $\beta$ R-/- (A129) Mice



BIORESOURCES



**Gene Name:** Interferon alpha/beta receptor null (Type I Interferon)

**Type of Mutation:** Knockout by embryonic stem cell electroporation

**Background strain:** 129S7/SvEvBrd

**Colour:** Agouti

**Controls:** 129S7/SvEvBrdBkl-Hprt<sup>b-m2</sup> (S129)  
Control animals are also available. The 129/SvEv mouse line we have available originates from the laboratory of Alan Bradley. They represent the congenic line from which the AB-1 ES cell line was derived. According to Simpson et al. (1997) this line is one of the Steel substrains and is a direct descendant of the 129/SvEv mouse from the Evans laboratory.

**Genotype:** Homozygous

**Strain Description:** Homozygotes show increased susceptibility to viral infections despite otherwise normal immune responses (Müller et al., 1994).

**Phenotype/Health:** Homozygotes are viable, fertile and phenotypically normal

**Genetic Typing:** Genetic analysis is by PCR

**Feed:** Irradiated rat & mouse standard or expanded breeder diet

**Accommodation:** Maintained in flexible film isolators

**Breeding programme:** Inbred strain maintained via monogamous pairs or trios

**General Breeding Performance – over a 12 month period**

- Average litter size 5.8
- Average litter size weaned 5.4
- Production Index 0.7
- Percentage of pre-wean loss 8%

**Health Status:** All of our mice are isolator-raised, and we perform routine health monitoring in accordance with FELASA recommendations. Mice have a specific pathogen free (SPF) health status, and we can also offer mice with a specific opportunistic pathogen free (SOPF) health status as well. A list of the pathogens included in our routine microbiologic screening and our current health monitoring reports are available upon request.



All our mice are provided with nesting paper, aspen chew blocks and play tubes.

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### References:

Simpson et al. (1997). Genetic variation among 129 sub strains and its importance for targeted mutagenesis in mice. *Nature Genetics*, Vol. 16, p.19-27

Müller et al. (1994). Functional Role of Type I and Type II Interferons in Antiviral Defense. *Science*, Vol. 264, p. 1918-1921