

JE/LeJ

Stock No: **000259** | jerker ruby-eye flexed tail

 **Inbred Strain, Segregating Inbred, Spontaneous Mutation**

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

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ruby-eye (*Hps6^{ru}*).

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GENETIC OVERVIEW

Genetic Background

Generation

VIEW GENETICS

RESEARCH APPLICATIONS

Neurobiology Research
Sensorineural Research
Hematological Research
Developmental Biology Research
Mouse/Human Gene Homologs
Dermatology Research
Internal/Organ Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

Details

Detailed Description

Mice homozygous for the jerker spontaneous mutation (*Espr^{je}*) show behavior typical of the circling mutants - head-tossing, circling, and hyperactivity. Homozygous mutant mice are deaf from birth and have no detectable stimulus-related cochlear potential at any stage. The abnormal behavior and deafness are associated with postnatal degeneration of the sensory cells of the cochlea and the sacculus and utriculus in homozygotes. The primary influence of the jerker gene appears to be on the apical hair cells, not development of neural structures. Heterozygous jerker mice undergo a similar type of degeneration, but the onset is delayed. Auditory brainstem response is totally absent in homozygotes while heterozygous mice undergo a progressive impairment with age.

Flexed tail homozygotes can be identified hematologically as early as embryonic day 13 and are detectably paler than normal by embryonic day 16, with most paler than normal by embryonic day 15. Homozygotes are small at birth and have a transitory siderocytic hypochromic anemia due to defective heme synthesis in fetal but not adult reticulocytes. Fetal erythrocytes have more alpha hemoglobin synthesis than beta hemoglobin synthesis. Very high numbers of siderocytes are found at birth and this decreases during the first few weeks of life and stabilizes at approximately 3 weeks of age with 3% siderocytes, significantly higher than in wildtype adults. Most homozygotes have a belly spot and 1 to 5 flexures in the tail due to vertebral fusions. Vertebral fusions are also found elsewhere in the vertebral column. Fewer than expected homozygotes are generated indicating prenatal death and the postnatal death rate is approximately 4 times normal. A small minority of homozygotes have been found to have embryonic neural tube defects or a dorsal enlargement of the head. JE/Le mice are also homozygous for the nonagouti (*a*) and ruby-eye (*Hps6^{ru}*) mutations.

Development

Control Suggestions

Selected References

Genetics

Hps6^{ru}

Espr^{je}

f

Disease/Phenotype

[+ Disease Terms](#)

[+ Research Areas By Phenotype](#)

[+ Mammalian Phenotype Terms by Genotype](#)

[+ Phenotype Information](#)

[+ References](#)

[- Technical Support](#)

C O N T A C T T E C H N I C A L S U P P O R T

Genotyping Protocols

[Genotyping resources and troubleshooting](#)

Appearance

nonagouti, dark slate color, ruby eyed, tail bends, ataxic
Related Genotype: *ala Hps6^{ru} / Hps6^{ru} flf Espr^{ie} / Espr^{ie}*

dark slate color, ruby eyed, tail bends
Related Genotype: *ala Hps6^{ru} / Hps6^{ru} flf Espr^{ie} / +*

Citation

When using the jerker ruby-eye flexed tail mouse strain in a publication, please include JAX stock #000259 in your Materials and Methods section.

Animal Health Reports

[Facility Barrier Level Descriptions](#)

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, [G200](#)

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CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Homozygous for a, Homozygous for Hps6<ru>, Homozygous for f, Heterozygous or Homozygous for Espn<je>	\$2,854.50

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