

FVB.129S4(B6)-Scn4a<sup>tm1.1Ljh</sup>/J

Stock No: 011033

 Congenic, Targeted Mutation

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

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hyperkalemic periodic paralysis (HyperKPP).

### Donating Investigator

Lawrence J Hayward, University of Massachusetts Medical School

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## GENETIC OVERVIEW

Genetic Background

Generation

*Scn4a*<sup>tm1.1Ljh</sup>

**Alele Type**

**Gene Symbol**

**Gene Name**

Targeted

*Scn4a*

sodium channel, voltage-gated, type IV, alpha

VIEW GENETICS

## RESEARCH APPLICATIONS

Cell Biology Research

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

## BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

V I E W   P R I C E   L I S T

### Details

#### Detailed Description

Most homozygous mice die before 30 days, although a few live longer. Homozygotes appear smaller, have difficulty feeding, and exhibit an accelerated myopathy characterized by increased fiber size variation and vacuolar structures within muscle fibers. Mice heterozygous for the mutation exhibit continuous myotonia of skeletal muscles, progressive age-related myopathy, reduced contractile force, delayed relaxation and potassium sensitive skeletal muscle weakness. A switch from a mixture of glycolytic and oxidative muscle fibers to an increased number of oxidative fibers is observed in multiple muscle types. The donating investigator reports that the *Scn4a*<sup>tm1.1Ljh</sup> allele (neo out) has the same phenotype as the *Scn4a*<sup>tm1Ljh</sup> allele (neo in) reported in Hayward et al, 2009. This mutant strain may be useful in studies of myotonia, vacuolar myopathy and hyperkalemic periodic paralysis (HyperKPP).

*In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.*

#### Development

#### Control Suggestions

### Genetics

#### *Scn4a*<sup>tm1.1Ljh</sup>

### Disease/Phenotype

#### Disease Terms

#### Research Areas By Phenotype

[+ Mammalian Phenotype Terms by Genotype](#)

[+ 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

Standard PCR:[Scn4a](#)

[Genotyping resources and troubleshooting](#)

#### Breeding Considerations

While maintaining a live colony, these mice are bred as heterozygotes. Mice homozygous for the mutation die by two months of age.

[Additional Breeding and Husbandry Support](#)

#### Citation

When using the FVB.129S4(B6)-*Scn4a*<sup>tm1.1Ljh</sup>/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #011033 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*

## [- Pricing & Availability](#)



Cryo  
Recovery

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

## Domestic **International**

Pricing effective for USA, Canada and Mexico shipping destinations

### CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
<a href="#">Cryo Recovery</a>	Heterozygous or wildtype for <i>Scn4a</i> <tm1.1Ljh>	\$2,854.50

## RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo

FVB.129S4(B6)-Scn4a<tm1.1Ljh>/J

\$2595.00

## PAYMENT TERMS AND CONDITIONS

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

## THE JACKSON LABORATORY'S GENOTYPE PROMISE

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. **Therefore, we cannot guarantee a strain's phenotype will meet all expectations.** To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee [breeding performance](#) and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

### Terms Of Use

#### TERMS OF USE

[General Terms and Conditions](#)

Q U E S T I O N S   A B O U T   T E R M S   O F   U S E

#### LICENSING INFORMATION

Phone: 207-288-6470

Email: [TechTran@jax.org](mailto:TechTran@jax.org)

### Related Strains

All

By Allele

By Gene

By Collection



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