

## FVB-Tg(Ckm-Chrnd\*S268F)1Cgz/J

Stock No: 021199

 Coisogenic, Transgenic

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

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### Donating Investigator

Christopher M. Gomez, The University of Chicago

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## GENETIC OVERVIEW

Genetic Background

Generation

### Tg(Ckm-Chrnd\*S268F)1Cgz

#### Allele Type

Transgenic (Inserted expressed sequence)

VIEW GENETICS

## RESEARCH APPLICATIONS

Neurobiology Research

Cell Biology 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

These transgenic mice express the S268F mutant form of the murine cholinergic receptor, nicotinic, delta polypeptide (*Chrd*) under control of the murine creatine kinase, muscle (*Ckm*) promoter. *Chrd* encodes the acetylcholine receptor (AChR) delta subunit AChR $\delta$ , a subunit of the adult skeletal muscle AChR. Expressed in the neuromuscular junction, AChRs are ligand-gated ion channels that open in response to acetylcholine to elicit endplate potentials that evoke the muscle fiber action potentials and muscular contraction. A point mutation was introduced in *CHRND* resulting in the  $\delta$ S268F mutation present in a patient with the slow-channel congenital myasthenic syndrome (SCCMS). SCCMS is a dominantly inherited disorder of neuromuscular transmission, characterized by fatigability and progressive weakness and atrophy of skeletal muscles. Hemizygous  $\delta$ S268F mice are viable and fertile with a fine tremor and slow progressive weakness and fatigability. They exhibit impaired neuromuscular transmission with prolonged duration of neuromuscular endplate currents, reduced quantal content, and reduced endplate current amplitudes. They also display degeneration of the postsynaptic membrane, damage to subsynaptic nuclei and mitochondria, calcium overload of the postsynaptic region, and activation of calpain and caspase proteases in the postsynaptic region.

### Development

### Expression Data

### Selected References

## Genetics

### Tg(*Ckm-Chrd*\*S268F)1Cgz

## 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: [Tg\(Ckm-Chrnd\\*S268F\)1Cgz](#)  
[Genotyping resources and troubleshooting](#)

#### Breeding Considerations

When maintaining a live colony, homozygous mice may be bred together.

[Additional Breeding and Husbandry Support](#)

#### Citation

When using the FVB-Tg(Ckm-Chrnd\*S268F)1Cgz/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #021199 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>	Hemizygous or Non carrier for Tg(Ckm-Chrnd*S268F)1Cgz	\$2,854.50

## RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo

FVB-Tg(Ckm-Chrnd\*S268F)1Cgz/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](#)

QUESTIONS ABOUT TERMS OF USE

## 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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