

B6.Cg-Sgca^{tm1Kcam} Tg(Ckm-SGCE)1Kcam/J
 Stock No: **009651**

📍 Congenic, Targeted Mutation, Transgenic

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

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the compound mutants show an exaggerated fatigue response. This strain may be useful in studies of muscular dystrophy and exercise-induced fatigue.

Donating Investigator

Kevin Campbell, University of Iowa

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GENETIC OVERVIEW

Genetic Background

Generation

Sgca^{tm1Kcam}

Alele Type

Targeted (Null/Knockout)

Gene Symbol

Sgca

Gene Name

sarcoglycan, alpha (dystrophin-associated glycoprotein)

Tg(Ckm-SGCE)1Kcam

Alele Type

Transgenic (Inserted expressed sequence, Humanized sequence)

VIEW GENETICS

RESEARCH APPLICATIONS

Mouse/Human Gene Homologs
 Neurobiology Research

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

Homozygous alpha-sarcoglycan targeted mutant mice develop a progressive pathology characteristic of limb-girdle muscular dystrophy type 2D starting at one week of age. Necrosis, regeneration, central nucleation, atrophy, hypertrophy, fiber splitting and endomysial fibrosis are observed in their muscle.

When combined with a human epsilon-sarcoglycan transgene driven by a mouse muscle creatine kinase promoter specific to skeletal and heart muscle (as in this compound mutant strain) mice display no overt phenotype with normal behavior and normal muscle force generation. After mild exercise, the compound mutants show an exaggerated fatigue response. Biochemically, the mice show normal levels of nNOS (NOS1) in muscle homogenates, but variable levels in membrane fractions. By immunofluorescence, nNOS (NOS1) is not localized to all muscle membrane fibers.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Sgca^{tm1Kcam}

Tg(Ckm-SGCE)1Kcam

– 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:[Sgca](#)

Standard PCR:[Tg\(Ckm-SGCE\)1Kcam](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

The donating investigator crosses homozygous *Sgca* targeted mutant/hemizygous *SGCE* transgenic males with homozygous *Sgca* targeted mutant females to maintain a colony.

[Additional Breeding and Husbandry Support](#)

Citation

When using the B6.Cg-*Sgca*^{tm1Kcam} Tg(Ckm-SGCE)1Kcam/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #009651 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



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DomesticInternational

Pricing effective for USA, Canada and Mexico shipping destinations

CRYORECOVERY - DOMESTIC PRICING

SERVICE/PRODUCT	DESCRIPTION	PRICE
Cryo Recovery	Heterozygous for Sgca<tm1Kcam> , Hemizygous or Non Carrier for Tg(Ckm-SGCE)1Kcam	\$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	B6.Cg-Sgca<tm1Kcam> Tg(Ckm-SGCE)1Kcam/J Frozen Embryo	\$2595.00
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TERMS OF USE

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QUESTIONS ABOUT TERMS OF USE

ADDITIONAL USE RESTRICTIONS APPLY

Use of MICE by companies or for-profit entities requires a license prior to shipping.

LICENSING INFORMATION

Phone: 207-288-6470

Email: TechTran@jax.org

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All

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By Collection



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