

B6;FVB-Tg(ACTA1-TRPC6*)1Jmol/J

Stock No: **024053**

 **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

Jeffery D. Molkentin, Cincinnati Children's Hospital

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GENETIC OVERVIEW

Genetic Background

Generation

Tg(ACTA1-TRPC6*)1Jmol

Alele Type

Transgenic (Dominant negative, Inserted expressed sequence, Humanized sequence)

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

TRPC (transient receptor potential canonical) channels have been implicated as mediators of unregulated calcium influx in dystrophic myofibers or myotubes.

This transgenic strain overexpresses a dominant-negative form of human *TRPC6* (dnTRPC6) cDNA under the control of a modified human *ACTA1* promoter. Western blot analysis has demonstrated protein overexpression in all skeletal muscles examined. The development or health of skeletal muscle is not negatively impacted, as assessed by histological methods.

When combined with a mutation that over-expresses *TRPC3* in a model of muscular dystrophy (see Stock No. [024052](#)), the dnTRPC6 transgene is found to significantly attenuate all aspects of disease associated with TRPC3 overexpression, including histopathology, the increase in small fiber numbers, and the number of myofibers with central nucleation.

Expression Data

Control Suggestions

Selected References

Genetics

Tg(ACTA1-TRPC6*)1Jmol

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

Separated PCR:[Tg\(ACTA1-TRPC6*\)](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

Hemizygotes are viable and fertile. Homozygotes are viable, but the donating lab didn't use them in their breeding program.

[Additional Breeding and Husbandry Support](#)

Mating System

Noncarrier x Hemizygote

Hemizygote x Noncarrier

Citation

When using the B6;FVB-Tg(ACTA1-TRPC6*)1Jmol/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #024053 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
Cryo Recovery	Hemizygous or Non carrier for Tg(ACTA1-TRPC6*)1Jmol	\$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	B6;FVB-Tg(ACTA1-TRPC6*)1Jmol/J Frozen Embryo	\$2595.00
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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

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

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

Related Strains

All

By Allele

By Gene

By Collection



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TOMORROW'S CURES



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