

C57BL/6-Tg(Ckm-DGAT2)10Far/J

Stock No: 006781

 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

Robert V Farese, Jr., Harvard University School of Public Health

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GENETIC OVERVIEW

Genetic Background

Generation

Tg(Ckm-DGAT2)10Far

Allele Type

Transgenic (Inserted expressed sequence, Humanized sequence)

VIEW GENETICS

RESEARCH APPLICATIONS

Cardiovascular Research

Diabetes and Obesity Research

Metabolism Research

Research Tools

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

Mice hemizygous for this MCK-DGAT2 transgene are viable and fertile. Under direction of the mouse muscle creatine kinase (MCK) promoter, these mice overexpress human acyl CoA:diacylglycerol acyltransferase 2 (DGAT2) in striated skeletal muscles, specifically glycolytic (rather than oxidative) muscle. DGAT2 overexpression leads to increased lipid deposition (triacylglycerol, ceramide, and fatty acyl CoA) in glycolytic muscle. This lipid accumulation leads to impaired insulin signaling (insulin resistance), glucose uptake, and glucose tolerance in this tissue, as well as whole-body glucose intolerance. These MCK-DGAT2 transgenic mice may be useful in studying lipid accumulation in skeletal muscle, insulin and glucose metabolism, obesity, and type 2 diabetes.

Of note, these mice may also be useful in conjunction with Liv-DGAT2-low transgenic mice (Stock No. [007744](#)) which exhibit DGAT2 overexpression directed to hepatic tissue.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(Ckm-DGAT2)10Far

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

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, transgenic mice can be bred to wildtype siblings. Alternatively, transgenic mice may be bred together, although a homozygous phenotype is not yet characterized.

[Additional Breeding and Husbandry Support](#)

Citation

When using the C57BL/6-Tg(Ckm-DGAT2)10Far/J mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #006781 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(Ckm-DGAT2)10Far	\$2,854.50

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	C57BL/6-Tg(Ckm-DGAT2)10Far/J	\$2595.00
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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.

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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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