

STOCK *Prkaa2*^{tm1.1Sjm} /J

Stock No: **014142** | *Prkaa2*¹

 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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(*Prkaa2*) gene. This strain may be useful for studying cell growth and energy expenditure, as well as bladder cancer.

Donating Investigator

Sean J Morrison, University of Texas Southwestern Medical Center

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GENETIC OVERVIEW

Genetic Background

Generation

Prkaa2^{tm1.1Sjm}

Alele Type

Targeted (Conditional ready (e.g. floxed), No functional change)

Gene Symbol

Prkaa2

Gene Name

protein kinase, AMP-activated, alpha 2 catalytic subunit

VIEW GENETICS

RESEARCH APPLICATIONS

Cell Biology Research

Research Tools

Cancer Research

Developmental 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 *Prkaa2* mutant mice possess *loxP* sites flanking exon 2 of the protein kinase, AMP-activated, alpha 2 catalytic subunit (*Prkaa2*) gene. Mice that are homozygous for this allele are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. *Prkaa2* belongs to the serine/threonine protein kinase family and is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (*AMPK*). *AMPK* is a sensor of the energy status of cells and ensures survival during stress. When bred to mice that express tissue-specific Cre recombinase, resulting offspring will have exon 2 deleted in the *cre*-expressing tissues. When bred to transgenic mice expressing Cre recombinase driven by myxovirus (influenza virus) resistance 1 (*Mx1*) promoter/enhanced elements, *PRKAA2* expression is abolished in hematopoietic cells. This strain may be useful for studying cell growth and energy expenditure, as well as bladder cancer.

Development

Control Suggestions

Selected References

Genetics

Prkaa2^{tm1.1Sjm}

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:[Prkaa2](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

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

[Additional Breeding and Husbandry Support](#)

Mating System

Homozygote x Homozygote

Citation

When using the Prkaa2^{fl} mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #014142 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	Heterozygous or wildtype for Prkaa2<tm1.1Sjm>	\$2,854.50

RELATED PRODUCTS AND SERVICES		
Frozen Mouse Embryo	STOCK Prkaa2<tm1.1Sjm>/J Frozen Embryo	\$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.

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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 no-fee JAX Leap License prior to shipping.](#)

LICENSING INFORMATION

Phone: 207-288-6470

Email: TechTran@jax.org

Related Strains

All

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By Gene

By Collection



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