



F V B . 1 2 9 S $R(aB\beta 61)^{MOM}$ / L c s n J

Stock No: 032562 | Rag1 KO

Congenic, Targeted Mutation



CRYORECOVERY

P L A C E O R D E R

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

Also Known As: Rag1 KO

Mice homozygous for the *Rag1*^{tm1Mom} mutation produce no mature T cells or B cells. Their phenotype can be described as a "non-leaky" immune deficiency.

Donating Investigator

Lisa M. Coussens, Oregon Health and Science University

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GENETIC OVERVIEW

Genetic Background

Generation

Rag1^{tm1Mom}

Allele Type

Gene Symbol

Gene Name

Targeted (Null/Knockout)

Rag1

recombination activating gene 1

VIEW GENETICS

RESEARCH APPLICATIONS

Immunology, Inflammation and Autoimmunity Research

Research Tools

Internal/Organ Research

Cancer Research

Hematological Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

Mice homozygous for the *Rag1*^{tm1Mom} mutation produce no mature T cells or B cells. Whereas *Prkdc*^{scid} homozygotes produce some B cells and IgM (i.e., are "leaky"), *Rag1*^{tm1Mom} homozygotes lack all mature lymphocytes (i.e., are "non-leaky"). *Rag1* null mice have no CD3⁺ or T cell receptor (TCR) alpha-beta positive cells. The thymus of the mutant mice contains 15 to 130 times fewer cells

than heterozygous or wild-type siblings. The thymocytes are CD8⁻CD4⁻ and most are IL2 receptor-positive. Neither the spleen nor the bone marrow contain any IgM or IgD staining cells, indicating an absence of mature B cells. These and other data suggest that B cell and T cell development has been arrested at an early stage. Macroscopically, the mutants are indistinguishable from heterozygotes or normal wild-type siblings.

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. It should be noted that the phenotype of these FVB/NJ-congenic mice could vary from that originally described on a B6.129S7 congenic background. We may modify the strain description if necessary as published results become available.

+ Development

+ Control Suggestions

+ Selected References

- Genetics

+ *Rag1^{tm1Mom}*

- Disease/Phenotype

+ Disease Terms

+ Research Areas By Genotype

+ Mammalian Phenotype Terms by Genotype

+ References

- Technical Support

T E C H N I C A L S P O K E E C H A T

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

Probe:[Rag1^{tm1Mom} Probe](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

This *Rag1^{tm1Mom}* strain is maintained by mating homozygous siblings. This strain should be housed under pathogen free conditions similar to *Prkdc^{scid}/Prkdc^{scid}* mice or any other immunodeficient strain. Only homozygous mice may be ordered.

[Additional Breeding and Husbandry Support](#)

Mating System

Heterozygote x Heterozygote

Citation

When using the Rag1 KO mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #032562 in your Materials and Methods section.

[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	GENOTYPE	PRICE
Cryo Recovery	Heterozygous or wildtype for Rag1<tm1Mom>	\$2,854.50

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a [Dedicated Supply](#) for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

Related Products and Services

Frozen Mouse Embryo	FVB.129S7(B6)-Rag1<tm1Mom>/LcsnJ	\$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.

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By Collection

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