



B 6 . 1 *R9a-g^{tm1}Mom* F c *g^{tm1}Do* / D c r J

Stock No: 017700 | Rag1- mFcRn-

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.

Overview

Also Known As: Rag1- mFcRn-

Rag1^{-/-} FcRn^{-/-} mice are immunodeficient and therefore suitable for xenograft assays. They may be useful in testing therapeutic compounds and their involvement in the FcRn pathway or as a control for immunocompromised humanized FcRn transgenics.

Donating Investigator

Dr. Derry Roopenian, The Jackson Laboratory

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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

Fcgrt^{tm1Dcr}

Allele Type

Gene Symbol

Gene Name

Targeted (Null/Knockout)

Fcgrt

Fc receptor, IgG, alpha chain transporter

VIEW GENETICS

RESEARCH APPLICATIONS

Hematological Research

Immunology, Inflammation and Autoimmunity Research

Research Tools

Internal/Organ Research

Cancer Research

Cell Biology Research

Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$2,854.50 Domestic price Cryo Recovery

VIEW PRICE LIST

Details

Detailed Description

The neonatal Fc receptor, encoded by the *Fcgrt* gene, is a MHC class I like molecule. One of its functions is to protect IgG and albumin from degradation, and to mediate the transport of IgG across epithelial cells. Further, it plays a role in antigen presentation by professional antigen presenting cells. It has been demonstrated that FcRn is critical for the materno-fetal transport and intestinal uptake of IgG.

Mice that are homozygous for the FcRn α -chain and *Rag1* knockout mutations are viable and fertile. Homozygotes exhibit a low plasma albumin concentration due to the lack of murine FcRn (see strain description Stock No. [003982](#)) and lack mature B- and T-cells caused by the *Rag1* knockout (see strain description Stock No. [002216](#)). It is possible to perform xenograft studies in these mice and to study the involvement of the FcRn pathway in response to administered compounds, especially when compared with the humanized *Rag1*^{-/-} *FcRn*^{-/-} hFcRn transgenic mice (see Stock No. [016919](#)), for which these mice serve as a control.

Development

Control Suggestions

Selected References

Genetics

Rag1^{tm1Mom}

Fcgrt^{tm1Dcr}

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CHAT OFFLINE

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Standard PCR: [Fcgrt^{tm1Dcr}](#)

Standard PCR: [Rag1^{tm1Mom}](#)

Standard PCR: [Fcgrt^{tm1Dcr}](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, these mice can be bred as homozygous for both alleles.

[Additional Breeding and Husbandry Support](#)

Citation

When using the Rag1^{tm1Mom}Fcgrt^{tm1Dcr} mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #017700 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	GENOTYPE	PRICE
Cryo Recovery	Homozygous for Rag1<tm1Mom>, Homozygous for Fcgrt<tm1Dcr>	\$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	B6.129-Rag1<tm1Mom> Fcgrt<tm1Dcr>/DcrJ Frozen Embryos	\$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

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