B6.Cg-Prkdc<sup>tm1Dcr</sup>tg Fcgr<sup>32Dcr/DcrJ</sup>

Stock No: 018441 | scid FcRn<sup>-/-</sup> hFcRn (32) Tg

- Congenic
- Spontaneous Mutation
- Targeted Mutation
- Transgenic

AVAILABLE NOW

PLACE ORDER

Sized to accommodate orders of up to 50 or more. Ask Customer Service for details.
Overview

Also Known As: scid FcRn/- hFcRn (32) Tg

These scid FcRn/- hFcRn (32) Tg mice express a human alpha chain FCGRT molecule in lieu of the endogenous mouse Fcgrt. The scid allele makes the mice immunodeficient, therefore allowing the ability to test potential immunogenic hIgGs and to perform xenograft studies in addition to evaluating the pharmacokinetics of human immunoglobulin and Fc-domain based therapeutics.

Need assistance evaluating antibodies in FcRn mice? Human preclinical pharmacokinetic (PK) analysis is available. See our FcRn full service platform.

Donating Investigator

Dr. Derry Roopenian, The Jackson Laboratory

---

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N11F14+F18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prkdc&lt;sup&gt;scid&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allele Type</td>
</tr>
<tr>
<td>Gene Symbol</td>
</tr>
<tr>
<td>Gene Name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allele Type</td>
</tr>
<tr>
<td>Gene Symbol</td>
</tr>
<tr>
<td>Gene Name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tg(FCGRT)32Dcr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allele Type</td>
</tr>
</tbody>
</table>
These mFcRn-/- hFcRn (32) Tg mice are homozygous for the knockout mutation of the FcRn α-chain (Fcgrt<sup>tm1Dcr</sup>) and express a human FcRn α-chain (FCGRT) transgene. By itself, the homozygous Fcgrt KO allele mice have low serum levels of IgG and albumin (Roopenian et al. J Immunol. 2003 Apr 1;170(7):3528-33; Chadhury et al. J Exp Med. 2003 Feb 3;197(3):315-22; Stein et al. 2012). They fail to recycle IgG and albumin, and to transport IgG across the neonatal gut. By introducing the FCGRT transgene the albumin levels are restored to wild type, but the IgG levels remain low due to species-specific binding of IgG by human FCGRT. The transgenic founder line 32 provides a model to study serum half-life of human IgG (hIgG), with a good correlation to cynomolgus monkey and human. In addition, the model may be used to compare the serum half-life of antibodies as when screening FcRn binding variants (Petkova et al. 2006). When comparing the Tg32 model to Tg276 (see Stock No. 004919) overall longer half-lives have been observed, making it a better model for short-lived hIGs and Fc-fusion proteins. The humanized FcRn-/- hFcRn (32) Tg mice that are also homozygous for the <i>Prkdc<sup>scid</sup></i> allele produce no mature T cells or B cells, therefore allowing the ability to test potential immunogenic hIgGs and to perform xenograft studies in addition to evaluating the pharmacokinetics of human immunoglobulin and Fc-domain based therapeutics.
Tg(FCGRT)32Dcr

**Disease/Phenotype**

**Disease Terms**

**Research Areas By Phenotype**

**Mammalian Phenotype Terms by Genotype**

**References**

**Technical Support**

---

**Genotyping Protocols**

**End Point Analysis:** Prkdc End Point  
**Standard PCR:** Fcgrt  
**Standard PCR:** Fcgrt Alternate1  
**QPCR:** Tg(FCGRT)-qPCR  
**Probe:** Tg(FCGRT)-Chr2-Probe-alterate1

**Genotyping resources and troubleshooting**

**Dietary Information**  
LabDiet® 5LA6 11%

**Breeding Considerations**

When maintaining a live colony, mice homozygous for the FcRn ?-chain targeted allele (Fcgrt<sup>tm1Dcr</sup>), homozygous for the scid allele, and hemizygous or homozygous for the hFcRn (32) transgene (Tg(FCGRT)32Dcr) may be bred together.

**Additional Breeding and Husbandry Support**

**Citation**

When using the scid FcRn<sup>-/-</sup> hFcRn (32) Tg mouse strain in a publication, please cite the originating article(s) and include JAX stock #018441 in your Materials and Methods section.

**Animal Health Reports**

**Facility Barrier Level Descriptions**

- AX11 (Maximum)

---

**Pricing & Availability**

- **Available Now**

  Sized to accommodate orders of up to 50 or more. Ask Customer Service for details.

**Domestic**  
**International**

Pricing effective for USA, Canada and Mexico shipping destinations
## Live Mouse

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 weeks</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>6 weeks</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>7 weeks</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>8 weeks</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>9 weeks</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>13 weeks</td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(FCGRT)32Dcr</td>
<td>$425.00</td>
</tr>
</tbody>
</table>

### Related Products and Services

| Frozen Mouse Embryo | B6.Cg-Fcgrt<sup>tm1Dcr</sup> Prkdc<sup>scid</sup> Tg(FCGRT)32Dcr Frozen Embryos | $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.
Terms Of Use

General Terms and Conditions

Additional Use Restrictions Apply
Use of MICE by companies or for-profit entities requires a no-fee license prior to shipping.

Licensing Information
Phone: 207-288-6470
Email: TechTran@jax.org

JAX® Mice, Products & Services Conditions of Use

“MICE” means mouse strains, their progeny derived by inbreeding or crossbreeding, unmodified derivatives from mouse strains or their progeny supplied by The Jackson Laboratory (“JACKSON”); “PRODUCT(S)” means biological materials supplied by JACKSON, and their derivatives; “SERVICES” means projects conducted by JACKSON for other parties that may include but are not limited to the use of MICE or PRODUCTS. “RECIPIENT” means each recipient of MICE, PRODUCTS, or SERVICES provided by JACKSON including each institution, its employees and other researchers under its control. MICE or PRODUCTS shall not be: (i) used for any purpose other than internal research, (ii) sold or otherwise provided to any third party for any use, or (iii) provided to any agent or other third party to provide breeding or other services. Acceptance of MICE, PRODUCTS or SERVICES from JACKSON shall be deemed as agreement by RECIPIENT to these conditions, and departure from these conditions requires JACKSON’s prior written authorization.

No Warranty
MICE, PRODUCTS AND SERVICES ARE PROVIDED "AS IS". JACKSON EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO MICE, PRODUCTS OR SERVICES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF NON-INFRINGEMENT OF ANY PATENT, TRADEMARK, OR OTHER INTELLECTUAL PROPERTY RIGHTS.

Credit for PRODUCTS or SERVICES
In case of dissatisfaction for a valid reason and claimed in writing by a purchaser within ninety (90) days of receipt of, PRODUCTS or SERVICES, JACKSON will, at its option, provide credit or replacement for the PRODUCT received or the SERVICES provided; JACKSON makes no other representations and this shall be the exclusive remedy of the purchaser. Please note specific policy for live mice.

Animal Care and Use for SERVICES
Consistent with the requirement for a written understanding regarding animal care and use, the JACKSON Animal Care and Use Committee will review the animal care and use protocol(s) associated with any SERVICES to be performed at JACKSON, and JACKSON shall have ultimate responsibility and authority for the care of animals while on site or in JACKSON custody.

No Liability
In no event shall JACKSON, its trustees, directors, officers, employees, and affiliates be liable for any causes of action or damages, including any direct, indirect, special, or consequential damages, arising out of the provision of MICE, PRODUCTS, or SERVICES, including economic damage or injury to property and lost profits, and including any damage arising from acts or negligence on the part of JACKSON, its agents or employees. Unless prohibited by law, in purchasing or receiving MICE, PRODUCTS, or SERVICES from JACKSON, purchaser or recipient, or any party claiming by or through them, expressly releases and discharges JACKSON from all such causes of action or damages, and further agrees to defend and indemnify JACKSON from any costs or damages arising out of any third party claims.

MICE, PRODUCTS or SERVICES are to be used in a safe manner and in accordance with all applicable governmental rules and regulations.

The foregoing represents the General Terms and Conditions applicable to JACKSON’s MICE, PRODUCTS or SERVICES. In addition, special terms and conditions of sale of certain MICE, PRODUCTS, or SERVICES may be set forth separately in JACKSON web pages, catalogs, price lists, contracts, and/or other documents, and these special terms and conditions shall also govern the sale of these MICE, PRODUCTS and SERVICES by JACKSON, and by its licensees and distributors. Acceptance of delivery of MICE, PRODUCTS or SERVICES shall be deemed agreement to these terms and conditions. No purchase order or other document transmitted by purchaser or recipient that may modify the terms and conditions hereof, shall be in
any way binding on JACKSON, and instead the terms and conditions set forth herein, including any special terms and conditions set forth separately, shall govern the sale of MICE, PRODUCTS or SERVICES by JACKSON.

### Related Strains

<table>
<thead>
<tr>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Allele</td>
</tr>
<tr>
<td>By Gene</td>
</tr>
<tr>
<td>By Collection</td>
</tr>
</tbody>
</table>

All Related Strains

---

**DO YOU NEED BALB/c MICE?**

Rely on JAX to provide the models you need, when you need them.

---

**CONTACT**

**DONATE**

**SUBSCRIBE**

**JAX HOME**  **CAREERS**  **PRIVACY POLICY**  **TERMS OF USE**

**RESEARCH CENTERS**  **MOUSE GENOME INFORMATICS**

**MOUSE PHENOME DATABASE**

*Leading the search for*

**TOMORROW'S CURES**