B6.CFgoc- gtm1Dcr Tg(CAG-FCGRT)276Dcr/Dcr

Stock No: 004919 | FcRn KO hFcRn Tg

Available Now

Place Order

Live mice available in varying quantities. Ask Customer Service for details.
Also Known As: FcRn<-> hFcRn (276) Tg, FcRn KO hFcRn Tg

FcRn<-> hFcRn (line 276) Tg mice are useful in evaluating the pharmacokinetics and pharmacodynamics of human immunoglobulin G (hIgG), such as therapeutic IgG. These mice carry a null mutation for the mouse gene and a transgene expressing the human FcRn α-chain under the control of the ubiquitous CAG promoter.

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>N11F13p+F26</td>
</tr>
<tr>
<td></td>
<td>(2019-06-12 00:00:00)</td>
</tr>
</tbody>
</table>

**Tg(CAG-FCGRT)276Dcr**

**Allele Type**: Transgenic (Inserted expressed sequence, Humanized sequence)

**Fcgrtm1Dcr**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>Fcgrt</td>
<td>Fc receptor, IgG, alpha chain transporter</td>
</tr>
</tbody>
</table>
FcRn−/− hFcRn (276) Tg mice harbor a knockout allele of the FcRn α-chain (Fcgrt<sup>tm1Dcr</sup>) and express the human FcRn α-chain cDNA (FCGRT) under the control the human cytomegalovirus immediate early promoter/enhancer with chicken beta-actin/rabbit beta-globin hybrid promoter (CAG). FcRn−/− mice (see Stock No. 003982) lack murine FcRn α-chain expression and fail to transport IgG across the neonatal gut; they do not recycle IgG and albumin and therefore show low plasma levels of both. In FcRn−/− hFcRn (276) Tg mice, plasma albumin levels are similar to wild-type mice, however the serum IgG levels remain low due to the species-specific behavior of human FcRn. A number of studies have shown this model's usefulness for pharmacokinetic and pharmacodynamic studies of human IgG and to screen hIgGs, with regard to their serum half-life. For example, human antibodies engineered to have enhanced binding to human FcRn (Hu4D5-IgG1, directed against human EGFR2) exhibit a significant increase in their serum half-life (2-2.5 fold) in these mice. Specifically, longer half-lives are observed in this strain with mice homozygous for the hFcRn transgene (hFcRn Tg/Tg) when compared to mice hemizygous for the hFcRn transgene (hFcRn Tg/0), indicating that higher copy number correlates with higher expression of FCGRT and provides greater protection of IgG from clearance. This mouse model is useful for studying human FcRn biology and the behavior of IgG antibodies and Fc-domain proteins, including Fc-engineered molecules.
Tg(CAG-FCGRT)276Dcr

Fcgrtm1Dcr

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
Separated PCR: Tg(FCGRT)
Standard PCR: Fcgrtm1Dcr
Standard PCR: Fcgrtm1Dcr
QPCR: Tg(FCGRT)
Standard PCR: Fcgrtm1Dcr

Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K52 formulation (6% fat)

Mating System
See "Breeding Considerations"

Citation
When using the FcRn KO hFcRn Tg mouse strain in a publication, please cite the originating article(s) and include JAX stock #004919 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions
AX11 (Maximum)

Pricing & Availability

Live mice available in varying quantities. Ask Customer Service for details.

Available Now
# Live Mouse

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>8</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td>8</td>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$425.00</td>
</tr>
</tbody>
</table>

## Breeder Pair

<table>
<thead>
<tr>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$850.00</td>
</tr>
<tr>
<td>Male</td>
<td>Homozygous for Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt;, Homozygous for Tg(CAG-FCGRT)276Dcr</td>
<td>$850.00</td>
</tr>
</tbody>
</table>

## Related Products and Services

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>B6.Cg-Fcgrt&lt;sup&gt;tm1Dcr&lt;/sup&gt; Tg(CAG-FCGRT)276Dcr/DcrJ Frozen Embryo</td>
<td>$2595.00</td>
</tr>
</tbody>
</table>
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

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

All

By Allele

By Gene

By Collection

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

©2020 THE JACKSON LABORATORY

Choose other country or region