Overview

**N O D . C B 1 r 7 k - d i d J**

Stock No: 001303 | NOD scid

- Spontaneous Mutation

**READILY AVAILABLE**

**PLACE ORDER**

Readily available in any quantity needed.
Also Known As: NOD SCID, NOD scid

Mice homozygous for the severe combined immune deficiency spontaneous mutation \( Prkdc^{scid} \), commonly referred to as scid, are characterized by an absence of functional T cells and B cells, lymphopenia, hypogammaglobulinemia, and a normal hematopoietic microenvironment. \( Prkdc^{scid} \) mice accept allogeneic and xenogeneic grafts making them an ideal model for cell transfer experiments. In general, \( Prkdc^{scid} \) leakiness is low on the NOD/ShiLtSz genetic background.

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Technical Support</td>
<td>(2019-05-01 00:00:00)</td>
</tr>
</tbody>
</table>

\( Hc^0 \)

- **Allele Type**: Spontaneous
- **Gene Symbol**: \( Hc \)
- **Gene Name**: hemolytic complement

\( Prkdc^{scid} \)

- **Allele Type**: Spontaneous
- **Gene Symbol**: \( Prkdc \)
- **Gene Name**: protein kinase, DNA activated, catalytic polypeptide

RESEARCH APPLICATIONS

- Cancer Research
- Research Tools
- Diabetes and Obesity Research
- Immunology, Inflammation and Autoimmunity Research
Mice homozygous for the severe combined immune deficiency spontaneous mutation (Prkdc<sup>scid</sup>, commonly referred to as scid) are characterized by an absence of functional T cells and B cells, lymphopenia, hypogammaglobulinemia, and a normal hematopoietic microenvironment. Normal antigen-presenting cell, myeloid, and NK cell functions are strain dependent. scid mice carry a DNA repair defect and a defect in the rearrangement of genes that code for antigen-specific receptors on lymphocytes. Most homozygotes have no detectable IgM, IgG1, IgG2a, IgG2b, IgG3, or IgA. Thymus, lymph nodes, and splenic follicles are virtually devoid of lymphocytes. scid mice accept allogeneic and xenogeneic grafts making them an ideal model for cell transfer experiments. Some scid mice will spontaneously develop partial immune reactivity. Scid mice that have serum Ig levels greater than 1 ug/ml are considered "leaky." Scid leakiness is highly strain dependent, increases with age, and is higher in mice housed under non-SPF conditions. In general, scid leakiness is high on the C57BL/6J and BALB/cBy genetic backgrounds, low on the C3H/HeJ background, and even lower on the NOD/ShiLtSz background. NOD/ShiLtSz-Prkdc<sup>scid</sup> mice are both insulitis- and diabetes-free throughout life and serve as a diabetes-free control for comparison to NOD/ShiLtJ mice (Stock No. 001976). Thymic lymphomas occur with high frequency, however, and life span typically is limited to only 8.5 months under specific pathogen-free conditions. In addition to being an excellent host for xenografts, NOD.CB17-Prkdc<sup>scid</sup>/J mice may be useful for delineation of the role of T cell subsets in autoimmune diabetes and also as a source for insulitis-free islets.
Genotyping Protocols
End Point Analysis: Prkdc<sup>scid</sup>
Genotyping resources and troubleshooting

Breeding Considerations
This strain is a good breeder.

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Appearance
albino

Related Genotype: A/ATyr<sup>c</sup>/Tyr<sup>c</sup>

Citation

When using the NOD<sup>scid</sup> mouse strain in a publication, please cite the originating article(s) and include JAX stock #001303 in your Materials and Methods section.

Facility Barrier Level Descriptions
- EM02 (Maximum)
- RB04 (Maximum)

Pricing & Availability
Readily available in any quantity needed.

Domestic
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>3 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$106.83</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$105.77</td>
</tr>
<tr>
<td>4 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$106.83</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$105.77</td>
</tr>
<tr>
<td>5 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$110.02</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$109.25</td>
</tr>
<tr>
<td>6 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$112.10</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$111.03</td>
</tr>
<tr>
<td>7 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$112.10</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$111.03</td>
</tr>
<tr>
<td>8 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$112.10</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$111.03</td>
</tr>
<tr>
<td>9 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$122.72</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$121.51</td>
</tr>
<tr>
<td>10 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$129.35</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$128.07</td>
</tr>
<tr>
<td>11 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$133.61</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$132.32</td>
</tr>
<tr>
<td>12 weeks</td>
<td>Female</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$137.52</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Prkdc&lt;sup&gt;sdd&lt;/sup&gt;</td>
<td>$136.24</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

QUESTIONS ABOUT TERMS OF USE
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