NOD.Cg-Prkdc^scid^B2m^tm1Unc/J

Stock No: 002570 | NOD scid 2m null

Congeneric Targeted Mutation

CRYO RECOVERY

PLACE ORDER

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

Overview
Also Known As: NOD scid 2m

These mice are doubly homozygous for the severe combined immunodeficiency (scid) mutation and the beta2m null allele. They lack MHC class I, exhibit low NK cell activity, and support markedly elevated levels of human T cell engraftment.

Donating Investigator

Dr. Leonard D. Shultz, The Jackson Laboratory

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**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
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</table>

**B2m\(^{im1Unc}\)**

<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>B2m</td>
<td>beta-2 microglobulin</td>
</tr>
</tbody>
</table>

**Prkdc\(^{scid}\)**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>Prkdc</td>
<td>protein kinase, DNA activated, catalytic polypeptide</td>
</tr>
</tbody>
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**RESEARCH APPLICATIONS**

Virology Research  
Research Tools  
Metabolism Research  
Internal/Organ Research  
Immunology, Inflammation and Autoimmunity Research  
Diabetes and Obesity Research  
Hematological Research

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**BASE PRICE**

Starting at:

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**VIEW GENETICS**

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**VIEW ALL RESEARCH APPLICATIONS**

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**VIEW PRICE LIST**

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**Details**
**Detailed Description**

Mice homozygous for both the B2m<sup>tm1Unc</sup> and Prkdc<sup>scid</sup> (commonly referred to as scid) mutations on the NOD/ShiLtSz background are class I deficient, B and T cell deficient, C-5 deficient (H<sup>c<sub>0</sub></sup>), and have low NK cells. This strain is an ideal model for xenograft transplantation studies and is an excellent source for insulitis-free, MHC class I-negative islets for transplantation studies.

**Development**

**Control Suggestions**

**Selected References**

**Genetics**

**B2m<sup>tm1Unc</sup>**

**Prkdc<sup>scid</sup>**

**Disease/Phenotype**

**Disease Terms**

**Research Areas By Genotype**

**Mammalian Phenotype Terms by Genotype**

**References**

**Technical Support**

CONTACT TECHNICAL SUPPORT

**Genotyping Protocols**

Standard PCR: B2m<sup>tm1Unc</sup>

MELT: B2m<sup>tm1Unc</sup>

Genotyping resources and troubleshooting

**Breeding Considerations**

This strain is a challenging breeder.

This B2m<sup>tm1Unc</sup> strain is maintained by mating homozygous siblings. Only homozygous mice may be ordered. Reproduction is good.

Expected coat color from breeding: Albino

Additional Breeding and Husbandry Support
Appearance
albino
Related Genotype: Tyr<sup>c</sup>/Tyr<sup>c</sup>

Citation
When using the NOD-scid <i>Il2rg<sup>null</sup></i> mouse strain in a publication, please cite the originating article(s) and include JAX stock #002570 in your Materials and Methods section.

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Pricing & Availability

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

<table>
<thead>
<tr>
<th>Related Products and Services</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>$2,595.00 per straw or vial</td>
</tr>
</tbody>
</table>

Payment Terms and Conditions
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**Related Strains**

- **All**
- **By Allele**
- **By Gene**