**NOD.Cg-Prkdcscid B2m^tm1Unc/J**

**Stock No:** 002570 | NOD scid 2m^null

- Congenic. Targeted Mutation

**REQUEST CRYORECOVERY**

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

**Also Known As:** NOD scid 2m^null

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

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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</thead>
<tbody>
<tr>
<td><strong>B2m^tm1Unc</strong></td>
<td></td>
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<tr>
<td>Allele Type</td>
<td>Gene Symbol</td>
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<tr>
<td>Targeted (Null/Knockout)</td>
<td>B2m</td>
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| **Prkdcscid**      |            |
| Allele Type        | Gene Symbol | Gene Name                |
| Spontaneous        | Prkdcs     | protein kinase, DNA activated, catalytic polypeptide |

**RESEARCH APPLICATIONS**

- Virology Research
- Research Tools
- Metabolism Research
- Internal/Organ Research
- Immunology, Inflammation and Autoimmunity Research
- Diabetes and Obesity Research
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<sub>c</sub><sup>+</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
Genotyping Protocols
Standard PCR: B2m\textsuperscript{ln1Unc}
MELT: B2m\textsuperscript{ln1Unc}
Genotyping resources and troubleshooting

Breeding Considerations

This strain is a challenging breeder.
This B2m\textsuperscript{ln1Unc} 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\textsuperscript{c}/Tyr\textsuperscript{c}

Citation
When using the NOD-scid \textsuperscript{2null} mouse strain in a publication, please cite the originating article(s) and include JAX stock #002570 in your Materials and Methods section.

Facility Barrier Level Descriptions
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>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous for Prkdc&lt;scid&gt; and B2m&lt;ln1Unc&gt;</td>
<td>$2,595.00</td>
</tr>
</tbody>
</table>

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 | $2,955.00 per straw or vial |

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.

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

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**Related Strains**

- All
- By Allele
- By Gene
- By Collection

All Related Strains