NOD.Cg-Ighm<sup>tm1Ggn</sup> Tg(IghelMD4)4Ccg/DvsJ

Stock No: 006608 | NOD.IgHEL.Igh-/-

- Congenic, Targeted Mutation, Transgenic

**CRYO RECOVERY**

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

**Also Known As:** NOD.IgHEL.Igu, NOD.Cg-Igh-6<sup>tm1Ggn</sup> Tg(IghelMD4)4Ccg/DvsJ, NOD.IgHEL.Ig<sup>null</sup>, NOD.IgHEL.Igh-/-

Mice of this strain do not express endogenous IgM, and all B lymphocytes express Ig molecules specific for hen egg lysozyme (HEL). This strain may be used to study defects in B-cell selection as it relates to Type 1 Diabetes.

**Donating Investigator**

Dr. David Serreze, The Jackson Laboratory

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tr>
<td>001289 NOD/ShiLt</td>
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**Tg(IghelMD4)4Ccg**

- Allele Type: Transgenic (Inserted expressed sequence)

**Ighm<sup>tm1Ggn</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>Ighm</td>
<td>immunoglobulin heavy constant mu</td>
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</table>

**RESEARCH APPLICATIONS**

- Immunology, Inflammation and Autoimmunity Research
- Diabetes and Obesity Research
- Research Tools
BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description
NOD:Cg-Ighm<sup>tm1Ghn</sup> Tg(IghelMD4)4Ccg/Dvs.J (NOD.IgHEL.Ighm-deficient) mice are viable, fertile, normal in size, and do not display any gross physical or behavioral abnormalities. Because these mice are Ighm-deficient, they do not express endogenous IgM. All B lymphocytes in NOD.IgHEL.Ighm-deficient mice express Ig molecules specific for hen egg lysozyme (HEL). There is no significant difference in the total number of B and T lymphocytes between NOD.IgHEL.Ighm-deficient and NOD.IgHEL (Stock No. 006345) mice. The incidence of diabetes in transgenic vs. non-transgenic NOD.Ighm-deficient mice is similar by 21 weeks of age, (16.7% vs. 13.6%, respectively). Histological evaluation of 12 week old NOD.IgHEL.Ighm-deficient mice shows that most mice have low levels of insulitis compared to NOD/ShiLt control mice, although an occasional animal had extensive insulitis. In addition, NOD.IgHEL.Ighm-deficient mice develop lymphomas after 20 weeks of age. This pathology is not observed in either NOD.Ighm-deficient or NOD.IgHEL transgenic mice.

This strain may be used to study defects in B-cell selection as it relates to Type 1 Diabetes.

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(IghelMD4)4Ccg

Ighm<sup>tm1Ghn</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype
Genotyping Protocols
Standard PCR: lghm\textsuperscript{tm}1Cgn
MELT: Tg(lghelMD4/4Ccg Alternate1
Standard PCR: Tg(lghelMD4/4Ccg
Genotyping resources and troubleshooting

Breeding Considerations
Female mice homozygous for the lghm\textsuperscript{tm}1Cgn mutation and homozygous for the transgene are poor breeders, however males homozygous for the lghm\textsuperscript{tm}1Cgn mutation and homozygous for the transgene breed well.
Additional Breeding and Husbandry Support

Appearance
pink-eyed, albino
Related Genotype: A/A Tyr\textsuperscript{c}/Tyr\textsuperscript{c}

Citation
When using the NOD/IL-2R\textsuperscript{-/-} mouse strain in a publication, please cite the originating article(s) and include JAX stock #006608 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.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>International</th>
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<tbody>
<tr>
<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
<td></td>
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</tbody>
</table>

<table>
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<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Homozygous for lgh-6&lt;tm1Cgn&gt;, Hemizygous or Homozygous for Tg(lghelMD4)4Ccg</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.

**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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Terms Of Use
General Terms and Conditions

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

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