Overview

These mice carry the ALR complex and insulin dependent diabetes susceptibility locus 16, Idd16a from ALR/LtJ and exhibit suppression of diabetes incidence.

Donating Investigator

Dr. Edward Leiter, The Jackson Laboratory

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

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>001289 NOD/ShiLt</td>
<td></td>
</tr>
</tbody>
</table>

**Idd16.1**<sup>ALR/LtJ</sup>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTL</td>
<td><em>Idd16.1</em></td>
<td>insulin dependent diabetes susceptibility 16.1</td>
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<table>
<thead>
<tr>
<th>Marker(s)</th>
<th>Marker Symbol</th>
<th>Marker Name</th>
<th>Marker Name</th>
<th>Marker Name</th>
<th>Marker Name</th>
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<tr>
<td></td>
<td><em>Idd1</em></td>
<td>insulin dependent diabetes susceptibility 1</td>
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<td></td>
<td><em>D17Mit16</em></td>
<td>DNA segment, Chr 17, Massachusetts Institute of Technology 16</td>
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<tr>
<td></td>
<td><em>D17Mit10</em></td>
<td>DNA segment, Chr 17, Massachusetts Institute of Technology 10</td>
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</tbody>
</table>

RESEARCH APPLICATIONS

NOD.ALR-(D17Mit16-D17Mit10)/LtJ

Stock No: 004309 | NOD-Idd16a
congenic

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.
This allelic congenic strain commonly called D.R1, carries a defined segment of Chr. 17 that includes the ALR $H_2^{\text{Dk}}$ complex and insulin dependent diabetes susceptibility locus 16, $\text{Idd}16a^{\text{ALR}}$.

At 35 weeks of age diabetes incidence in this NOD.ALR strain is significantly suppressed with about 60% of the females and less than 20% of the males diabetic as compared to NOD/ShiLt in which 100% of the females and nearly 70% of the males were diabetic. Histological exam of the pancreas of 40-week old pre-diabetic animals showed widespread intra-islet insulitis.

This strain is useful for identifying candidate genes and dissecting the role of $\text{Idd}16a$ in autoimmune diabetes.

**Development**

**Control Suggestions**

**Selected References**

**Genetics**

- $\text{Idd}16.1^{\text{ALR/LtJ}}$
- $\text{Idd}1$
- $\text{D17Mit16}$
- $\text{D17Mit10}$
Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
Genotyping resources and troubleshooting

Appearance
albino, pink eyed
Related Genotype: A/A Tyr<sup>C</sup> / Tyr<sup>C</sup>

Citation
When using the NOD-Idd16<sub>ALR</sub> mouse strain in a publication, please cite the originating article(s) and include JAX stock #004309 in your Materials and Methods section.

Animal Health Reports
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.
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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