**Overview**

These mice carry the ALR-H2 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.

**Relevant Genetic Information**

<table>
<thead>
<tr>
<th><strong>Allele Type</strong></th>
<th><strong>Gene Symbol</strong></th>
<th><strong>Gene Name</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>QTL</td>
<td><em>Idd16.1</em></td>
<td>insulin dependent diabetes susceptibility 16.1</td>
</tr>
</tbody>
</table>

**Marker(s)**

<table>
<thead>
<tr>
<th><strong>Marker Symbol</strong></th>
<th><strong>Marker Name</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Idd1</em></td>
<td>insulin dependent diabetes susceptibility 1</td>
</tr>
<tr>
<td><em>D17Mit16</em></td>
<td>DNA segment, Chr 17, Massachusetts Institute of Technology 16</td>
</tr>
<tr>
<td><em>D17Mit10</em></td>
<td>DNA segment, Chr 17, Massachusetts Institute of Technology 10</td>
</tr>
</tbody>
</table>

**Research Applications**

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

This allelic congenic strain commonly called D.R1, carries a defined segment of Chr. 17 that includes the ALR $H_{2}^{DK}$ complex and insulin dependent diabetes susceptibility locus 16, $ldd16a_{ALR}$. 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 $ldd16a$ in autoimmune diabetes.

**Development**

**Control Suggestions**

**Selected References**

**Genetics**

- $ldd16.1^{ALR/LtJ}$
- $ldd1$
- $D17Mit16$
- $D17Mit10$
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-Idd16a<sup>ALR</sup> 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.
Related Products and Services

<table>
<thead>
<tr>
<th>SERVICE/PRODUCT</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>NOD.ALR-(D17Mit16-D17Mit10)/LtJ Frozen Embryos</td>
<td>$2595.00</td>
</tr>
</tbody>
</table>

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Related Strains

All

By Allele

By Gene

By Collection