These mice carry a spontaneous mutation at the *Lepr* locus characterized by obesity and elevation of plasma insulin and blood sugar.

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Leprdb-3J</em></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td><em>Lepr</em></td>
<td>leptin receptor</td>
</tr>
</tbody>
</table>

**RESEARCH APPLICATIONS**

- Metabolism Research
- Diabetes and Obesity Research
- Internal/Organ Research
- Reproductive Biology Research
- Mouse/Human Gene Homologs
- Endocrine Deficiency Research
- Immunology, Inflammation and Autoimmunity Research
Mice homozygous for the diabetes 3J spontaneous mutation (Lepr<sup>db-3J</sup>) become identifiably obese around three to four weeks of age. Elevations of plasma insulin begin at 10 to 14 days and of blood sugar at four to eight weeks. Homozygous mutant mice are polyphagic, polydipsic, and polyuric. The course of the disease is markedly influenced by genetic background. Homozygous mutant mice on the 129P3/J background exhibit severe obesity but the diabetes phenotype is much reduced.
Genotyping Protocols
Genotyping resources and troubleshooting

Citation
When using the diabetes 3 Jackson mouse strain in a publication, please cite the originating article(s) and include JAX stock #000709 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.

<table>
<thead>
<tr>
<th>PRICE</th>
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<tbody>
<tr>
<td>$2,854.50</td>
</tr>
</tbody>
</table>

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.

THE JACKSON LABORATORY’S GENOTYPE PROMISE

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. Therefore, we cannot guarantee a strain's phenotype will meet all expectations. To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain
that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

Terms Of Use

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General Terms and Conditions

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

Related Strains

All

By Allele

By Gene

By Collection