B6;129-IRS4^{tm1Lhd/J}

Stock No: 003901 | IRS-4 KO

- 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: IRS-4 KO**

These Ir4 knock-out mice exhibit impaired glucose tolerance and slight retardation in growth rate.

**Donating Investigator**

Gustav E. Lienhard, Dartmouth Medical School

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td><strong>Irs4^{tm1Lhd}</strong></td>
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</table>

- **Allele Type**: Targeted (Null/Knockout)
- **Gene Symbol**: Irs4
- **Gene Name**: insulin receptor substrate 4

**RESEARCH APPLICATIONS**

Diabetes and Obesity Research

**BASE PRICE**

Starting at:

$2,595.00 Domestic price Cryo Recovery
Details

Detailed Description

Mice homozygous for the lrs4<sup>tm1Lhd</sup> targeted mutation are viable and fertile. However, homozygous mutant mice do appear to be at a greater risk of perinatal lethality and tend to produce fewer litters. At birth, surviving mice appear normal in size and do not display any gross physical or behavioral abnormalities. RT-PCR fails to detect lrs4 mRNA in any tissues analyzed. Growth rate appears to be slightly retarded beginning 6 weeks of age (males about 10% lighter). Homozygotes also exhibit impaired glucose tolerance, and have slightly lower blood glucose levels when compared to wildtype mice. These phenotypes are more pronounced in males than in females.

Development

Control Suggestions

Selected References

Genetics

lrs4<sup>tm1Lhd</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols

Standard PCR: lrs4<sup>tm1</sup>Lhd
Genotyping resources and troubleshooting

Breeding Considerations

This strain arose on a B6;129 background and is maintained on the same. Coat color expected from breeding: Black.

Additional Breeding and Husbandry Support
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>Cryorecovery - Domestic Pricing</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>X linked - Heterozygous Females and Wild-type Males for lrs4&lt;tm1Lhd&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 dedicated colonies for experimental purposes. Mice should be supplied to meet 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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ordering and performing tests on a small number of mice to determine suitability for your particular project.

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