I/LnJ

Stock No: 000674 | I Lyon

Inbred Strain

CRYO RECOVERY

PLACE ORDER

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

Overview

Also Known As: I Lyon, I/Lyn, I/FnLn

I inbred mice are a piebald strain that lacks a corpus callosum and exhibits behaviors consistent with attention deficit hyperactivity disorder (ADHD). They are resistant to mouse mammary tumor virus (MMTV) and generate neutralizing antibodies to MMTV and Murine Leukemia Virus (MuLV).
**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
</table>

**RESEARCH APPLICATIONS**
- Reproductive Biology Research
- Sensorineural Research
- Neurobiology Research
- Cancer Research
- Immunology, Inflammation and Autoimmunity Research
- Research Tools
- Dermatology Research
- Mouse/Human Gene Homologs

**BASE PRICE**

Starting at:

$28,854.50 Domestic price
Cryo Recovery

**Details**

**Detailed Description**

I/LnJ mice were originally derived by Dr. LC Strong in 1926 from an unpedigreed stock of mice. A high proportion of mice from this strain lack a corpus callosum. This absence is associated with slow growth of the medial septum subadjacent to the cavum septi. I/LnJ mice are resistant to MMTV induced mammary tumor development and generate neutralizing antibodies to MMTV and MuLV virions that effectively block viral transmission. This phenotype was traced to the I/LnJ loss-of-function allele, vic1, in H2-Ob (Denzin et al., 2017). Due to a frameshift mutation in alpha 1 phosphorylase kinase these mice have increased glycogen content in resting skeletal muscle. The reproductive performance of I/LnJ mice is very poor. Further analysis indicates that oocytes from I/LnJ mice display retarded kinetics of meiotic maturation and a high frequency of metaphase I arrest. Some oocytes fail to resume meiosis. Oocytes have many very small centrosomes with an absence of microtubules. I/LnJ mice, in addition to carrying several other coat color alleles, are homozygous for the piebald mutation (Ednrb14). Thus, these mice show irregular white spotting, the amount of which is greatly influenced by minor modifying genes. They also have dark eyes. The white areas of the coat are completely lacking in neural crest-derived melanocytes, and there is a reduction in the number of melanocytes in the choroid layer of the eye. Although kinked tail is not a phenotype noted at birth, approximately 10% of pups at wean age and 20% of breeders have a single kink in the tail. This
phenotype was recorded in 2006, and whether this strain characteristic was part of the original phenotype of this inbred strain or arose subsequent to inbreeding is not known.

Selected References

Genetics

Il3ra<sup>att</sup>

Gpr84<sup>drl</sup>

H2-Ob<sup>vic</sup>

Hc<sup>3</sup>

Mx1<sup>s2</sup>

Ahr<sup>d</sup>

Ednrb<sup>5</sup>

Cox7a2I<sup>l</sup>

Myo5a<sup>4</sup>

Phka<sup>1fil</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

Phenotype Information

References

Technical Support

CONTACT TECHNICAL SUPPORT
Genotyping Protocols
Genotyping resources and troubleshooting

Appearance
pink-eyed dilute brown, piebald (spotted)
Related Genotype: a/a_Tyrp1^+/-Tyrp1^+ Oca2^o/Oca2^o_Myo5a^d/Myo5a^d_Ednrb^s/Ednrbs^s

Citation
When using the Lyon mouse strain in a publication, please include JAX stock #000674 in your Materials and Methods section.

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.

Domestic and International
Pricing effective for USA, Canada and Mexico shipping destinations

<table>
<thead>
<tr>
<th>Cryorecovery</th>
<th>Domestic Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVICE</td>
<td>GENOTYPE</td>
</tr>
<tr>
<td>Cryo Recovery</td>
<td>Inbred, 1 pair minimum will be supplied</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.

Related Products and Services

| Frozen Mouse Embryo | $2,595.00 per straw or vial |

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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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Email: TechTran@jax.org

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