B6.Cg-Oprm1^{tm1.1Jbwa/J}

Stock No: 026221

Congenic, Targeted Mutation

**CRYO RECOVERY**

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

MOR KI mice contain a mutation in the Oprm1 gene which makes them useful for studying the development of opioid tolerance, addiction, and physical dependence.

**Donating Investigator**

Jia Bei Wang, University of Maryland

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oprm1^{tm1.1Jbwa}</strong></td>
<td></td>
</tr>
<tr>
<td>Allele Type</td>
<td>Gene Symbol</td>
</tr>
<tr>
<td>Targeted (Not Specified)</td>
<td>Oprm1</td>
</tr>
</tbody>
</table>

**RESEARCH APPLICATIONS**

Neurobiology Research

**BASE PRICE**

Starting at: $2,595.00 Domestic price Cryo Recovery
Details

Detailed Description
MOR KI mice contain the amino acid mutation T394A in exon 4 of the opioid receptor, mu 1 (Oprm1) gene. These receptors are expressed throughout the neocortex, thalamus, nucleus accumbens, hippocampus, and amygdala, as well as in the peripheral nervous system, and have been associated with pain sensitivity. The MOR also has an important role in dependence to drugs of abuse, such as opioid, nicotine, cocaine, and alcohol via its modulation of the dopamine system. Binding of these drugs increases the release of beta-endorphins, which subsequently increase release of dopamine and stimulates cravings. T394 of the MOR is a crucial residue for initiation of agonist-induced opioid receptor phosphorylation. Homozygotes are viable and fertile. This mutation alters opioid tolerance and vulnerability to opioid abuse and dependence. Mice exhibit attenuated opioid tolerance, enhanced vulnerability to heroin self-administration, enhanced brain dopamine response to heroin, and enhanced opioid withdrawal.

Development

Control Suggestions

Genetics

Oprm1tm1.1bwa

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, homozygous mice may be bred together.
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.

Cryo Recovery

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous for Oprm1&lt;tm1.1Jbwa&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.

Cryo recovery 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.

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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Terms of Use

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