B6;129S-Ppp3r1tm2Grc/J

Stock No: 017692 | Cnb1flox

Targeted Mutation

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: Cnb1flox

This strain carries a floxed allele of the Ppp3r1 gene. Cre excision disrupts calcineurin enzymatic activity in non-germline cell types. These mice have been useful in studies of T cell development/selection.

Donating Investigator

Gerald R Crabtree, Stanford University Medical Center
GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ppp3r1&lt;sup&gt;tm2Grc&lt;/sup&gt;</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Conditional ready (e.g. floxed), No functional change)</td>
<td>Ppp3r1</td>
<td>protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type I)</td>
</tr>
</tbody>
</table>

RESEARCH APPLICATIONS
Research Tools
Cell Biology Research

BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description

LoxP sites flank exons 3-5 of the Calcineurin 1 (Ppp3r1, protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type II) gene in these floxed mutant mice. When bred to Cre-recombinase mice, excision of the floxed exons can be directed in a tissue/cell-specific manner in the resulting offspring. Disruption of the calcineurin 1 subunit results in a lack of calcineurin enzymatic activity in non-germline cell types. Ppp3r1 is a Ca<sup>2+</sup>-binding regulatory subunit of heterodimeric calcineurin, a Ca<sup>2+</sup>- and calmodulin-dependent serine/threonine protein phosphatase involved in a number of cellular processes and calcium-dependent signaling pathways.

When crossed with Lck-cre mice to specifically block calcineurin expression in thymocytes, it was shown that calcineurin 1 is essential for positive but not negative selection during thymocyte development.
When bred to a strain expressing Cre recombinase in endothelial cells (see Stock No. 008863 for example), this mutant mouse strain may be useful in studies of angiogenesis.

**Genetics**

**Ppp3r1<sup>tm2Grc</sup>**

**Disease/Phenotype**

**Disease Terms**

**Research Areas By Genotype**

**Mammalian Phenotype Terms by Genotype**

**References**

**Technical Support**

CONTACT TECHNICAL SUPPORT

**Genotyping Protocols**

Standard PCR: **Ppp3r1<sup>tm2Grc</sup>**

Genotyping resources and troubleshooting

**Breeding Considerations**

Homozygotes or heterozygotes may be bred.

Additional Breeding and Husbandry Support

**Citation**

When using the C57BL/6J mouse strain in a publication, please cite the originating article(s) and include JAX stock #017692 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.

<table>
<thead>
<tr>
<th>Service</th>
<th>Genotype</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous for Ppp3r1&lt;tm2Grc&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 a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

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Email: TechTran@jax.org
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