B6.Cg-Ptprc<sup>a</sup> Cx3cr1<sup>1m1Litt/LittJ</sup>

Stock No: 008451 | CX<sub>3</sub>CR<sub>1</sub> <sup>GFP</sup>

*Congenic, Spontaneous Mutation, Targeted Mutation*

**REPOSITORY LIVE**

**PLACE ORDER**

2–4 week lead time for most orders depending on quantity and age range requested.

**Also Known As: CX<sub>3</sub>CR<sub>1</sub><sup>GFP</sup>**

These CX3CR1<sup>GFP</sup> mice express EGFP under control of the endogenous Cx3cr1 locus and also harbor the CD45.1 (Ly5.1 or Ptprc<sup>a</sup>) allele, which is atypical for the C57BL/6 congenic background and may be useful in studies of leukocyte migration and trafficking, as well as for transplantation studies with C57BL/6 (CD45.2: Ptprc<sup>b</sup>) mice.

**Donating Investigator**

Dr. Dan R. Littman, New York University Medical Center

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N11F32</td>
</tr>
<tr>
<td></td>
<td>(2018-05-01 00:00:00)</td>
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**Ptprc<sup>a</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>Ptprc</td>
<td>protein tyrosine phosphatase, receptor type, C</td>
</tr>
</tbody>
</table>

**Cx3cr1<sup>1m1Litt</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Reporter, Null/Knockout)</td>
<td>Cx3cr1</td>
<td>chemokine (C-X3-C motif) receptor 1</td>
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</tbody>
</table>

**VIEW GENETICS**

**RESEARCH APPLICATIONS**

Research Tools
Cancer Research
Immunology, Inflammation and Autoimmunity Research
**BASE PRICE**
Starting at:

$231.00 Domestic price for female

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**Details**

**Detailed Description**

Mice that are homozygous for the CX3CR1-GFP targeted mutation are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. RT-PCR analysis of lymphoid tissue from homozygotes detects mutant gene product (mRNA) and no wild type gene product (mRNA). Flow cytometric analysis of peripheral blood cells identified a subset of green fluorescent cells not observed in wild type mice. Enhanced Green Fluorescent Protein (EGFP), but not the endogenous gene, is expressed in monocytes, dendritic cells, NK cells, and brain microglia, mimicking endogenous gene expression. The same subset of peripheral blood cells isolated from heterozygote mice express detectable levels of EGFP. These mice also express the CD45.1 (Ly5.1 or Ptprc\(^a\)) allele, which is atypical for the C57BL/6 congeneric background, and this marker may be used to track donor cell populations in transplantation studies with C57BL/6 (CD45.2, Ly5.2 or Ptprc\(^b\)) mice. These CX3CR1-GFP mice may be useful in studies of leukocyte migration and trafficking, as well as for transplantation studies.

Of note, CX3CR1-GFP mice are also available with the Ptprc\(^b\) allele normally found in the C57BL/6 genetic background (see Stock No. 005582).

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**Development**

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**Expression Data**

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**Control Suggestions**

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**Selected References**

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**Genetics**

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**Ptprc\(^a\)**

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**Cx3cr1\(^{tm/1}Llt\)**

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**Disease/Phenotype**

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**Disease Terms**
Genotyping Protocols
End Point Analysis: Crb1<sup>r</sup><sub>dd</sub> End Point
Probe: Ptpre<sup>kn</sup> End Point-Alternate 1
High Resolution Melting: Cx3cr1<sup>m1</sup>Litt alternate1
Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K52 formulation (6% fat)

Breeding Considerations
When maintaining a live colony, these mice are bred as homozygous for the Cx3cr1 mutant allele and homozygous for the Ptpre<sup>kn</sup> allele.

Additional Breeding and Husbandry Support

Mating System
Homozygote x Homozygote

Citation
When using the CX-014<sup>GFP</sup> mouse strain in a publication, please cite the originating article(s) and include JAX stock #008451 in your Materials and Methods section.

Facility Barrier Level Descriptions
2 - AX11 (Maximum)

Pricing & Availability
2–4 week lead time for most orders depending on quantity and age range requested

Repository Live

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

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>Approx 4-8 weeks</td>
<td>Female</td>
<td>Homozygous for Ptpre, Homozygous for Cx3cr1&lt;sup&gt;m1&lt;/sup&gt;Litt</td>
<td>$231.00</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Homozygous for Ptpre, Homozygous for Cx3cr1&lt;sup&gt;m1&lt;/sup&gt;Litt</td>
<td>$231.00</td>
</tr>
</tbody>
</table>
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Related Strains

All

By Allele

By Gene

By Collection

All Related Strains