B6.129P2(Cg)-Cx3cr1tm2.1(cre/ERT2)Lit/WganJ

Stock No: 021160 | Cx3cr1 CreER

AVAILBLE NOW

PLACE ORDER

Live mice available in varying quantities. Ask Customer Service for details.
Overview

Also Known As: Cx3cr1<sup>CreER<sup>

Cx3cr1<sup>CreER<sup> knock-in/knock-out mice express a Cre-ERT2 fusion protein and EYFP in microglia in the brain. These mice may have applications in studies requiring conditional gene manipulation in central nervous system microglia, as well as other Cx3cr1-expressing myeloid cell populations.

Donating Investigator

Dr. Dan R. Littman, New York University Medical Center
Wen-biao Gan, New York University School of Medicine - Skirball Institute - Langone Medical Center

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N12+N2F3</td>
<td>(2019-06-27 00:00:00)</td>
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</table>

**Cx3cr1<sup>tm2.1(cre/ERT2)Litt**

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

RESEARCH APPLICATIONS

Research Tools
Neurobiology Research

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

$270.00 Domestic price for female 4-week

VIEW PRICE LIST
**Details**

**Detailed Description**

Cx3cr1^{CreER} knock-in/knock-out mice express a Cre-ERT2 fusion protein and an enhanced yellow fluorescent protein (EYFP) from endogenous Cx3cr1 promoter/enhancer elements. Insertion of the Cre-ERT2 and EYFP knocks out endogenous CX3CR1 expression. EYFP immunofluorescence is observed in Cx3cr1-expressing microglia in the brain, mimicking endogenous gene expression patterns. Homozygous mice are viable and fertile. When Cx3cr1^{CreER} mice are bred with mice containing loxP-flanked sequence, tamoxifen-inducible, Cre-mediated recombination will result in deletion of the floxed sequences.

When bred to mice containing loxP-flanked STOP cassette upstream of a red fluorescent protein (DsRed) sequence, few DsRed+ microglia (0.3% ± 0.01%) were found in the brain in the absence of tamoxifen. After 5 days of tamoxifen treatment, 93.9% of CX3CR1-EYFP+ microglia in Cx3cr1^{CreER/+}:R26^{DsRed/+} mice were found to coexpress YFP and DsRed.

Of note, The Jackson Laboratory also has available Cx3cr1^{CreER} mice without EYFP expression (Stock No. 020940).

**Development**

**Expression Data**

**Control Suggestions**

**Selected References**

**Genetics**

Cx3cr1^{tm2.1(creERT2)Jlt}

**Disease/Phenotype**

**Disease Terms**

**Research Areas By Genotype**

**Mammalian Phenotype Terms by Genotype**

**References**

**Technical Support**

TECHNICAL SUPPORT CHAT 📬

CONTACT TECHNICAL SUPPORT
Genotyping Protocols
Probe: Generic Cre
Standard PCR: Cx3cr1 tm2.1(cre/ERT2)Litt
Standard PCR: Generic Cre
Genotyping resources and troubleshooting

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

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

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Citation
When using the Cx3cr1 CreER mouse strain in a publication, please cite the originating article(s) and include JAX stock #021160 in your

Animal Health Reports
Materials and Methods section

Pricing & Availability
Live mice available in varying quantities. Ask Customer Service for details.

Available Now

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<td>4 weeks</td>
<td>Female</td>
<td>Homozygous for Cx3cr1 tm2.1(cre/ERT2)Litt</td>
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<td>8 weeks</td>
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Related Products and Services
Frozen Mouse Embryo B6.129P2(Cg)-Cx3cr1<tm2.1(cre/ERT2)Litt>/WganJ $2595.00
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- By Allele
- By Gene
- By Collection

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TOMORROW'S CURES