B6.129P2-Lyz2tm1(cre)Ifs/J

Stock No: 004781 | LysMcre

Available now

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

Overview
Also Known As: LysMcre

The LysMcre knock-in/knockout allele has a nuclear-localized Cre recombinase inserted into the first coding ATG of the lysozyme 2 gene (Lyz2); both abolishing endogenous Lyz2 gene function and placing NLS-Cre expression under the control of the endogenous Lyz2 promoter/enhancer elements. These LysMcre mice may be useful for Cre-lox studies of the myeloid cell lineage (monocytes, mature macrophages and granulocytes) and the innate immune response.

Donating Investigator

Irmgard Foerster, University of Duesseldorf

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tr>
<td>N6F7xN1F14</td>
<td>(2019-07-11 00:00:00)</td>
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**Lyz2^m1(cre)fo**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tr>
<td>Targeted (Recombinase-expressing)</td>
<td>Lyz2</td>
<td>lysozyme 2</td>
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RESEARCH APPLICATIONS

Immunology, Inflammation and Autoimmunity Research

Research Tools
Details

Detailed Description
The LysMcre knock-in allele has a nuclear-localized Cre recombinase inserted into the first coding ATG of the lysozyme 2 gene (Lyz2); both abolishing endogenous Lyz2 gene function and placing NLS-Cre expression under the control of the endogenous Lyz2 promoter/enhancer elements. When crossed with a strain containing loxP site flanked sequence of interest, Cre-mediated recombination results in deletion of the targeted gene in the myeloid cell lineage, including monocytes, mature macrophages, and granulocytes. Mice that are homozygous for the targeted mutation are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. This strain represents an effective tool for generating myeloid cell-specific targeted mutants.

View cre expression characterization.

Development

Expression Data

Control Suggestions

Selected References

Genetics

\textit{Lyz2}^{\text{tm1creIle}}

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype
**Genotyping Protocols**
- Separated MCA: Lyz2<sup>tm1creflo</sup>
- Separated PCR: Lyz2<sup>tm1creflo</sup>

**Genotyping resources and troubleshooting**

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

**Breeding Considerations**
When maintaining the live colony, homozygous mice may be bred together. The expected coat color is black (non-agouti).

**Additional Breeding and Husbandry Support**

**Mating System**
Homozygote x Homozygote

**Citation**
When using the JAX mouse strain in a publication, please cite the originating articles and include JAX stock #004781 in your Materials and Methods section.

**Animal Health Reports**
- Facility Barrier Level Descriptions
- AX11 (Maximum)

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**Pricing & Availability**

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**Domestic | International**

Pricing effective for USA, Canada and Mexico shipping destinations

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<thead>
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<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
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