Overview

Also Known As: LysM-Cre ER

When these LysM-Cre ER knock-in/knock-out mice are bred with mice containing a loxP-flanked sequence of interest, tamoxifen-inducible, Cre-mediated recombination will result in deletion of the flanked sequences in myeloid cells. They are suitable for use in applications related to tamoxifen-inducible Cre-lox studies of the myeloid cell lineage (monocytes, mature macrophages and granulocytes) and the innate immune response.
Of note, the same LysM-Cre ER\textsuperscript{T2} knock-in/knock-out allele is also available on a C57BL/6J genetic background as Stock No. 032291.

Donating Investigator
Florian Greten, Georg-Speyer-Haus

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
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<tbody>
<tr>
<td>?+pN2</td>
<td>2019-12-13 00:00:00</td>
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</table>

\textbf{Lyz2}^{tm1(cre/ERT2)Grtn}

<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, Inducible)</td>
<td>Lyz2</td>
<td>lysozyme 2</td>
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</tbody>
</table>

**RESEARCH APPLICATIONS**

Immunology, Inflammation and Autoimmunity Research
Research Tools
Hematological Research

**BASE PRICE**

Starting at:

- $255.00 Domestic price for female
- 333.51 Domestic price for breeder pair

**Detailed Description**

The targeted \textit{Lyz2} gene encodes the antimicrobial enzyme found in myeloid cell lineage (myeloblasts, monocytes, macrophages). The LysM-Cre ER\textsuperscript{T2} knock-in allele has \textit{CreER}\textsuperscript{T2}, and a downstream \textit{loxP} site flanked NEO/kan cassette, replaced exon 1, including...
the ATG start site, of the endogenous Lyz2 gene. In this inducible LysM-Cre ER\textsuperscript{12} knock-in/knock-out strain, Cre-ERT2 protein expression is driven by the endogenous Lyz2 promoter. Cre activity is only detected upon treatment with tamoxifen, thereby offering both spatial and temporal control. Heterozygous mice are viable and fertile. Homozygous viability/fertility has not been tested (May 2018). When crossed to a reporter strain, Cre recombinase activity was detected only in CD11b positive cells in liver, lung, spleen, colon, and kidney tissues.
Citation

When using the LysM-Cre ERT2 mouse strain in a publication, please cite the originating article(s) and include JAX stock #031674 in your Materials and Methods section.

AX9 (Standard)

Pricing & Availability

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

Domestic

Available

International

Pricing effective for USA, Canada and Mexico shipping destinations

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<th>Live Mouse</th>
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<th>GENOTYPE</th>
<th>PRICE</th>
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<td>Approx 4-8 weeks Female</td>
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<tr>
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<td>Heterozygous for Lyz2&lt;sup&gt;tm1(creERT2)Grtn&lt;/sup&gt;</td>
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<td>Approx 4-8 weeks Female</td>
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<tr>
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<table>
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Related Products and Services

Frozen Mouse Embryo

| STOCK Lyz2<sup>tm1(creERT2)Grtn</sup>/J | $2595.00 |

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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Email: TechTran@jax.org

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