When these Sim1-Cre mice are bred with mice containing aloxP-flanked sequence of interest, Cre-mediated recombination will result in deletion of the flanked sequences in Sim1-expressing tissues (including hypothalamus). As such, Sim1-Cre transgenic mice may be useful in studying body weight homeostasis, obesity, leptin metabolism, or as a reporter strain for Sim1-transcription factor activity.

Donating Investigator
Bradford B. Lowell, Beth Israel Deaconess Med Cntr (Harvard)
Details

Detailed Description

Hemizygous mice are viable, fertile, normal in size, and do not display any gross physical or behavioral abnormalities. Transgene expression is observed in all areas that endogenously express Sim1, including paraventricular hypothalamus and other parts of the brain. When these Sim1-Cre mice are bred with mice containing a loxP-flanked sequence of interest, Cre-mediated recombination will result in deletion of the flanked sequences in Sim1-expressing tissues (including hypothalamus). As such, Sim1-Cre transgenic mice may be useful in studying body weight homeostasis, obesity, leptin metabolism, or as a reporter strain for Sim1-transcription factor activity.

View cre expression characterization.

Of note, Sim1-Cre mice may also available on a C57BL/6J congenic background (see Stock No. 006451).

Development

Expression Data

Control Suggestions

Selected References

Genetics

Tg(Sim1-cre)1Lowl

Disease/Phenotype
Genotyping Protocols
Standard PCR: Tg(Sim1-cre)1Lowl Alternate3
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, hemizygous mice are bred to wildtype siblings.

Additional Breeding and Husbandry Support

Citation
When using the STOCK Tg(Sim1-cre)1Lowl/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #006395 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.
RELATED PRODUCTS AND SERVICES

<table>
<thead>
<tr>
<th>SERVICE/PRODUCT</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Hemizygous or Non carrier for Tg(Sim1-cre)1Lowl</td>
<td>$2,854.50</td>
</tr>
<tr>
<td>RELATED PRODUCTS AND SERVICES</td>
<td></td>
<td></td>
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<tr>
<td>Frozen Mouse Embryo</td>
<td>STOCK Tg(Sim1-cre)1Lowl/J Frozen Embryo</td>
<td>$2,595.00</td>
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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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The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. Therefore, we cannot guarantee a strain's phenotype will meet all expectations. To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

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TERMS OF USE

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Email: TechTran@jax.org
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By Allele

By Gene

By Collection