STOCK Mirc13^tm1Mt^/Mmjax

MMRRC Stock No: 34657-JAX

Targeted Mutation

CRYO RECOVERY

ORDER AT MMRRC JAX

Overview

These microRNA cluster 13 (miR-141/miR-200c) conditional mutant mice are designed to generate a null allele or a lacZ tagged null allele when combined with Flp or Cre recombinase expressing strains. LacZ expression is observed in lung and olfactory bulb at late embryonic stages. This mutant mouse strain may be useful in studies of microRNA biology.

Donating Investigator

Michael T McManus, University of California, San Francisco

READ MORE +

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mirc13^tm1Mt^</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Targeted (Conditional ready (e.g. floxed), Reporter, Null/Knockout)  Mirc13  microRNA cluster 13, including Mir141 through Mir200c

### Marker(s)

<table>
<thead>
<tr>
<th>Marker Symbol</th>
<th>Marker Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mir200c</td>
<td>microRNA 200c</td>
</tr>
<tr>
<td>Mir141</td>
<td>microRNA 141</td>
</tr>
</tbody>
</table>

### RESEARCH APPLICATIONS

- Research Tools
- Neurobiology Research
- Cell Biology Research

### Details

#### Detailed Description

Mice that are heterozygous for the targeted mutation are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. When combined with a Flp recombinase-expressing strain, the lacZ and neomycin genes are removed leaving an FRT site and the loxP-flanked miR-141/miR-200c (Mirc13) stem loop. A further cross to a Cre-recombinase-expressing strain generates the null allele. When combined with a Cre-recombinase-expressing strain, the neomycin cassette and miR-141/miR-200c stem loop are removed leaving a lacZ tagged null allele (FRT-lacZ-loxP). LacZ expression is observed in lung and olfactory bulb at late embryonic stages. Homozygous mice are viable, but have not been characterized. This mutant mouse strain may be useful in studies of microRNA biology.

### Development

### Expression Data

### Control Suggestions

### Genetics

- Mirc13<sup>ln1Mln</sup>
- Mir200c
- Mir141
Genotyping Protocols
Standard PCR: Mir141/200c<sup>tm1Mtm</sup>
Genotyping resources and troubleshooting

Breeding Considerations
While maintaining a live colony, the donating investigator crossed heterozygote to wild-type. Homozygotes are viable, but fertility has not been assessed.
Additional Breeding and Husbandry Support

Citation
When using the STOFF Mir13<sup>tm1Mtm</sup>/Mmjax mouse strain in a publication, please cite the originating article(s) and include MMRRC stock #36657 in your Materials and Methods section.

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

The Jackson Laboratory's Genotype Promise
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.
JAX® Mice, Products & Services Conditions of Use

Licensing Information
Phone: 207-288-6470
Email: TechTran@jax.org

No Warranty
MICE, PRODUCTS and SERVICES are provided “AS IS”. JACKSON EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO MICE, PRODUCTS OR SERVICES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF NON-INFRINGEMENT OF ANY PATENT, TRADEMARK, OR OTHER INTELLECTUAL PROPERTY RIGHTS.

Credit for PRODUCTS or SERVICES
In case of dissatisfaction for a valid reason and claimed in writing by a purchaser within ninety (90) days of receipt of, PRODUCTS or SERVICES, JACKSON will, at its option, provide credit or replacement for the PRODUCT received or the SERVICES provided. JACKSON makes no other representations and this shall be the exclusive remedy of the purchaser. Please note specific policy for live mice.

Animal Care and Use for SERVICES
Consistent with the requirement for a written understanding regarding animal care and use, the JACKSON Animal Care and Use Committee will review the animal care and use protocol(s) associated with any SERVICES to be performed at JACKSON, and JACKSON shall have ultimate responsibility and authority for the care of animals while on site or in JACKSON custody.

No Liability
In no event shall JACKSON, its trustees, directors, officers, employees, and affiliates be liable for any causes of action or damages, including any direct, indirect, special, or consequential damages, arising out of the provision of MICE, PRODUCTS, or SERVICES, including economic damage or injury to property and lost profits, and including any damage arising from acts or negligence on the part of JACKSON, its agents or employees. Unless prohibited by law, in purchasing or receiving MICE, PRODUCTS, or SERVICES from JACKSON, purchaser or recipient, or any party claiming by or through them, expressly releases and discharges JACKSON from all such causes of action or damages, and further agrees to defend and indemnify JACKSON from any costs or damages arising out of any third party claims.

MICE, PRODUCTS or SERVICES are to be used in a safe manner and in accordance with all applicable governmental rules and regulations.

The foregoing represents the General Terms and Conditions applicable to JACKSON’s MICE, PRODUCTS or SERVICES. In addition, special terms and conditions of sale of certain MICE, PRODUCTS, or SERVICES may be set forth separately in JACKSON web pages, catalogs, price lists, contracts, and/or other documents, and these special terms and conditions shall also govern the sale of these MICE, PRODUCTS and SERVICES by JACKSON, and by its licensees and distributors.

Acceptance of delivery of MICE, PRODUCTS or SERVICES shall be deemed agreement to these terms and conditions. No purchase order or other document transmitted by purchaser or recipient that may modify the terms and conditions hereof, shall be in any way binding on JACKSON, and instead the terms and conditions set forth herein, including any special terms and conditions set forth separately, shall govern the sale of MICE, PRODUCTS or SERVICES by JACKSON.

Related Strains

All

By Allele