Overview

Mice are defective in clearing proteins that bear accessible mannose and N-acetylglucosamine residues and have elevated levels of eight different lysosomal hydrolases. Clearance of a subset of mannose-bearing serum glycoproteins that are normally elevated during inflammation is impaired. This strain may be useful in studies of serum glycoprotein homeostasis.

Donating Investigator

Michel C Nussenzweig, The Rockefeller University
GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mrc1^{tm1}Mnz</strong></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>Targeted (Reporter, Null/Knockout)</td>
<td>Mrc1</td>
<td>mannose receptor, C type 1</td>
</tr>
</tbody>
</table>

RESEARCH APPLICATIONS

Metabolism Research

BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description

Mice homozygous for this targeted mutation are viable and fertile and do not display any gross physical or behavioral abnormalities. Mice are defective in clearing proteins that bear accessible mannose and N-acetylglucosamine residues and have elevated levels of eight different lysosomal hydrolases. Clearance of a subset of mannose-bearing serum glycoproteins that are normally elevated during inflammation is impaired. Expression is abolished as shown by immunoblot of lymph node lysates. EGFP expression has not been assessed. This strain may be useful in studies of serum glycoprotein homeostasis.

Development

Expression Data

Selected References
Genetics
Mrc1<sup>tm1Mnz</sup>

Disease/Phenotype
Disease Terms

Research Areas By Genotype
Mammalian Phenotype Terms by Genotype

References

Technical Support
CONTACT TECHNICAL SUPPORT

Genotyping Protocols
MELT: Mrc1<sup>tm1Mnz</sup> alternate1
Genotyping resources and troubleshooting

Breeding Considerations
When maintained as a live colony, heterozygotes or homozygotes may be bred.
Additional Breeding and Husbandry Support

Citation
When using the B6.129P2-Mrc1<sup>tm1Mnz</sup>/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #007620 in your Materials and Methods section.

Facility Barrier Level Descriptions
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.

Domestic  International
Pricing effective for USA, Canada and Mexico shipping destinations

Cryorecovery - Domestic Pricing
We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11–14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.
Cryorecovery to establish a Dedicated Supply for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

### Related Products and Services

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>$2,595.00 per straw or vial</td>
</tr>
</tbody>
</table>

### 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.

### 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.

### Terms Of Use

**Terms of Use**

*General Terms and Conditions*

**Additional Use Restrictions Apply**

*Use of MICE by companies or for-profit entities requires a license prior to shipping.*

**Licensing Information**

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

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### Related Strains

| All |
| By Allele |
| By Gene |
| By Collection |

All Related Strains
Leading the search for
TOMORROW'S CURES