Overview

Exon 1 of the X-linked androgen receptor (Ar) gene is floxed, making this conditional mutant strain useful when studying male sexual development and fertility.

Donating Investigator

Robert E Braun, The Jackson Laboratory
GENETIC OVERVIEW

Genetic Background

Generation

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Conditional ready</td>
<td>Ar</td>
<td>androgen receptor</td>
</tr>
<tr>
<td>(e.g. floxed), No functional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>change)</td>
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RESEARCH APPLICATIONS

Developmental Biology Research
Research Tools
Reproductive Biology Research

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

Details

Detailed Description

These mice possess  loxP  sites flanking exon 1 of the X-linked androgen receptor (Ar) gene. AR is a nuclear transcription factor expressed in Sertoli cells which becomes activated by binding to testosterone or dihydrotestosterone. AR is required for male embryonic sexual differentiation, the development of male sexual characteristics, and the regulation of spermatogenesis. Homozygous females and hemizygous males are viable and fertile. When these mutant mice are bred to mice that express Cre recombinase, resulting offspring will have exon 1 deleted in cre-expressing tissues, abolishing gene function.

For example, breeding these mice to 129S.FVB-Tg(Amh-cre)8815Reb/J mice (Stock No. 007915), results in the production of a new variety of Sertoli cell AR knock out (SCARKO) mice. These mice are azoospermic and show a block in meiosis in Sertoli cells, with normal expression of Ar in Leydig cells and myoid epithelial cells.
In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.

Genetics

$\text{A}^{\text{tm2.1Reb}}$

Disease/Phenotype

Genotyping Protocols

Standard PCR: $\text{A}^{\text{tm2.1Reb}}$

Genotyping resources and troubleshooting

Breeding Considerations

When maintaining a live colony, homozygous females may be bred to hemizygous males.

Additional Breeding and Husbandry Support

Citation

When using the B6.129S1-$\text{A}^{\text{tm2.1Reb}}$/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #018450 in your Materials and Methods section.

Animal Health Reports

Facility Barrier Level Descriptions

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200
Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

Cryo Recovery

Pricing & Availability

- 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>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen Mouse Embryo</td>
<td>B6.129S1-Ar&lt;tm2.1Reb&gt;/J</td>
<td>$2595.00</td>
</tr>
</tbody>
</table>

### Pricing & Availability

- **Pricing effective for USA, Canada and Mexico shipping destinations**

<table>
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<th>PRICE</th>
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<tr>
<td>Cryo Recovery</td>
<td>X-linked; Heterozygous females and wildtype males for Ar&lt;tm2.1Reb&gt;</td>
<td>$2,854.50</td>
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### 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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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.

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