B6.D2-Car2 n/J

Stock No: 001623 | CA II-deficient

[Image]

CRYO RECOVERY

REQUEST CRYROCOVERY

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

Overview

Also Known As: CA II-deficient

These mice carry an ENU-induced mutation characterized by renal tubular acidosis, doubled urine output, increased urine pH and Cl⁻, decreased blood pH and HCO₃⁻, phosphatemia, lower plasma bicarbonate, and a smaller body size.

READ MORE +

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
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<tbody>
<tr>
<td>000664 C57BL/6J</td>
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Car²

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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RESEARCH APPLICATIONS
Metabolism Research
Neurobiology Research
Cardiovascular Research
Developmental Biology Research
Cell Biology Research

BASE PRICE
Starting at:
$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description
In human, CAR2 deficiencies can result in osteopetrosis, renal tubular acidosis, impaired growth, cerebral calcification, and mental retardation. Mice homozygous for Car2<sup>-/-</sup> do not display cerebral calcification or osteopetrosis, although medial calcification of small arteries has been found in several organs, most notably the male genital tract. The phenotype of these mice includes renal tubular acidosis, doubled urine output, increased urine pH and Cl<sup>-</sup>, decreased blood pH and HCO<sub>3</sub><sup>-</sup>, phosphatemia, lower plasma bicarbonate, and a smaller body size. Despite smaller body weight, the kidneys are of normal size and plasma potassium and creatinine levels are normal. Type A and B intercalated cells of the kidney are severely depleted. Car2<sup>-/-</sup> homozygotes have reduced susceptibility to audiogenic and chemogenic seizures and hippocampal slices from homozygotes are more resistant to hypoxia than are those of wild type controls. Increased CAR4 levels, suggesting a compensation mechanism, have been found in oligodendrocytes and myelinated tracts. Successful liposome-delivered gene therapy has been performed on this mutant. (Lewis et al., 1988; Spicer et al., 1989; Brechue et al., 1991; Tashian, 1992; Velisek et al., 1993A and B, and 1995; Brion et al., 1994 and 1997; Breton et al.1995; Lai et al, 1998.)

Development

Genetics

Car2<sup>-/-</sup>

Disease/Phenotype
Genotyping Protocols
Pyrosequencing: Car2<sup>n</sup>-Pyro
Genotyping resources and troubleshooting

Breeding Considerations
Car2<sup>n</sup> homozygotes are intolerant of NH4Cl in their drinking water. Homozygous females are poor breeders, often producing stillborn pups. Male homozygotes can be used for breeding.
Additional Breeding and Husbandry Support

Citation
When using the Car2<sup>n</sup> deficient mouse strain in a publication, please cite the originating article(s) and include JAX stock #001623 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.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>International</th>
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</thead>
<tbody>
<tr>
<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
<td></td>
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</tbody>
</table>

**Cryorecovery - Domestic Pricing**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous for Car2&lt;sup&gt;n&lt;/sup&gt;</td>
<td>$2,595.00</td>
</tr>
</tbody>
</table>

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**

| Frozen Mouse Embryo | $2,595.00 per straw or vial |

**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**

**Licensing Information**

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

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All

By Allele

By Gene

By Collection

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Leading the search for
TOMORROW’S CURES