B6(Cg)-Tyr<sup>c-2J</sup>/J

Also Known As:B6 albino, albino B6

B6(Cg)-Tyr<sup>c-2J</sup>/J, or B6-albino mice, are C57BL/6J mice that carry a mutation in the tyrosinase gene. Pigment is completely absent from skin, hair and eyes in mice homozygous for Tyr<sup>c-2J</sup>. This unique characteristic makes these mice ideal for creation of novel strains with targeted mutations (gene knockouts). B6-albino mice are used to generate blastocysts that can be used for microinjection of genetically modified C57BL/6J embryonic stem cells. Following implantation and gestation, resulting offspring that are chimeric for the donor embryonic stem cells and the recipient blastocyst are easily identified by coat color. This allows an easy method to create knockout mice on the C57BL/6J genetic background.

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous Mutation</td>
<td>Contact Technical Support (2018-07-27 00:00:00)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>Tyr</td>
<td>tyrosinase</td>
</tr>
</tbody>
</table>
**Gene Symbol**: Cox7a2l  
**Gene Name**: cytochrome c oxidase subunit 7A2 like

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**RESEARCH APPLICATIONS**

**Research Tools**
- Dermatology Research
- Sensorineural Research
- Mouse/Human Gene Homologs

**BASE PRICE**

Starting at: $33.75 Domestic price for female 3-week

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**Details**

**Detailed Description**

Mice homozygous for *Tyr<sup>c-2J</sup>* are phenotypically identical to homozygotes for the classic albino allele. Pigment is completely absent from skin, hair and eyes. While *Tyr* mRNA levels of *Tyr<sup>c-2J</sup>* homozygotes are similar to those of wild-type mice, there is virtually no tyrosinase protein present (Le Fur et al. 1996). Both homozygote and heterozygote mice are highly resistant to light damage and exhibit retinal degeneration (increased photoreceptor death) into young adulthood. Degeneration does not continue in adult mice (Bravo-Nuevo et al. 2004).

**Development**

**Control Suggestions**
Genetics

- *Tyr*-2J
- *Cox7a2*-f

Disease/Phenotype

- Disease Terms
- Research Areas By Phenotype
- Mammalian Phenotype Terms by Genotype
- Phenotype Information
- References

Technical Support

Genotyping Protocols
Pyrosequencing: *Tyr*
End Point Analysis: *Tyr alternative 1*

Genotyping resources and troubleshooting

Dietary Information
LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

This strain is a good breeder.

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote
Appearance
albino
Related Genotype: a/a Tyr<sup>−2J</sup>/Tyr<sup>−2J</sup>

Citation
When using the B6(Cg)-Tyr<sup>−2J</sup>/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #000058 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

- RB10 (Maximum)
- EM03 (Maximum)
- AX30 (Maximum)

Pricing & Availability

Readily available in any quantity needed.
# Related Products and Services

## Mouse ES Cells

<table>
<thead>
<tr>
<th>SEX</th>
<th>genotype</th>
<th>Price</th>
</tr>
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<tbody>
<tr>
<td>Female</td>
<td>Tyr&lt;sup&gt;c-2J&lt;/sup&gt;</td>
<td>$51.57</td>
</tr>
<tr>
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#### Terms of Use

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Email: TechTran@jax.org

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