Also Known As: C, BALBc, BALB, BALB/c
BALB/cJ is a commonly used inbred. Key traits include a susceptibility to developing the demyelinating disease upon infection with Theiler's murine encephalomyelitis virus. The BALB/cJ substrain is susceptible to *Listeria*, all species of *Leishmania*, and several species of *Trypanosoma*, but is resistant to experimental allergic orchitis (EAO).

### GENETIC OVERVIEW

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

Contact Technical Support
(2018-07-27 00:00:00)

### RESEARCH APPLICATIONS

Readily available in any quantity needed.
BALB/c mice are particularly well known for the production of plasmacytomas following injection with mineral oil forming the basis for the production of monoclonal antibodies. Although not all BALB/c substrains have been examined for plasmacytoma induction, substrains derived from the Andervont (An) lineage (which includes BALB/cByJ) typically are susceptible, while those descended from BALB/cJ are resistant (see: Potter M, 1985). Mammary tumor incidence is normally low but infection with mammary tumor virus by fostering to MMTV C3H mice dramatically increases tumor number and age of onset. BALB/c mice develop other cancers later in life including reticular neoplasms, primary lung tumors, and renal tumors. Rare spontaneous myoepitheliomas arising from myoepithelial cells of various exocrine glands have been observed in both BALB/cJ and BALB/cByJ substrains. This strain was found to be susceptible to infection by *Listeria monocytogenes*, with a 3 day median time to death in females (Cheers and McKenzie, 1978).

White et al. reported a variation in thioglycolate medium-induced peritoneal leukocyte recruitment in 4 analyzed strains. The response of total leukocyte recruitment, from greatest to least, was C57BL/6J>BALB/c>CD1>129X1/SvJ. Variations were also found in the timeline of response and cell types most impacted.

BALB/c mice immunized with PLP develop an atypical form of experimental autoimmune encephalomyelitis (EAE) in which susceptibility is determined by location. In the spinal cord 60-70% mice develop pathological lesions and in the brain and cerebellum 100% of mice develop sever lesions.

Dorso-ventral vaginal septa is observed in some BALB/cJ females, and may contribute to non-productive females in this strain. (Cunliffe-Beamer T, *Lab Anim Sci*, 1976)
Genetics

- *Hld*
- *Cdhl2*<sup>shi</sup>
- *Micr<sup>0</sup>*
- *Mx<sup>1</sup>*
- *Cox7a2*<sup>ls</sup>

Disease/Phenotype

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

Technical Support
Genotyping Protocols
Separated PCR: GAL Panel
Genotyping resources and troubleshooting
Inbred mouse strains are maintained through sibling (sister x brother) matings; no genotyping required.

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

Breeding Considerations
This strain is a good breeder.

Additional Breeding and Husbandry Support
Mating System
Sibling x Sibling

Appearance
albino

Related Genotype: \( A/A \, Tyrp^b/Tyrp^b \, Tyr^c/Tyr^c \)

Citation
When using the BALBc mouse strain in a publication, please include JAX stock #000651 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

- MP16 (Standard)
- RB09 (Maximum)
- RB10 (Maximum)
- RB17 (High)
- EM03 (Maximum)
- MP13 (Maximum)
- RB11 (Maximum)
- AX5 (Standard)
- RB07 (Maximum)
- EM04 (Maximum)

Pricing & Availability
Readily available in any quantity needed.

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

<table>
<thead>
<tr>
<th>LIVE MOUSE</th>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
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<td>QUANTITY</td>
<td>Volume Pricing</td>
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<tr>
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<tr>
<td>Male</td>
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</table>

**Volume Pricing Program**

Quantities: Volume pricing is automatically applied when a minimum quantity per strain for a shipment is reached.

Sexes: Sexes of the same strain may be combined to reach minimum quantity levels to receive the volume pricing.

Shipment: All shipping destinations qualify.

This strain is available from some international Charles River (CR) breeding facilities in Japan and/or Europe. For more information, see the [Worldwide Distributor List for JAX® Mice.](#)

**RELATED PRODUCTS AND SERVICES**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Description</th>
<th>Price</th>
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<td>Mouse ES Cells</td>
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<td>Frozen Mouse Embryo</td>
<td>BALB/cJ Frozen Embryos</td>
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</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. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.

Terms Of Use

TERMS OF USE

General Terms and Conditions

QUESTIONS ABOUT TERMS OF USE

LICENSING INFORMATION

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

Related Strains

All
Did you find what you were looking for?

☐ Yes  ☐ No