B6;129S4-C3tm1Crr/J
Stock No: 003641
Targeted Mutation

Also Known As: B6.129S4-C3tm1Crr/J
A C57BL/6J-congenic version of this strain is available as Stock No. 029661.
These knock-out mice, susceptible to infection, are useful when studying the role of C3 during immune responses.

Donating Investigator
Michael C. Carroll, The Center for Blood Research

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N2+pN7F20</td>
<td>(2018-04-02 00:00:00)</td>
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</table>

C3tm1Crr

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>C3</td>
<td>complement component 3</td>
</tr>
</tbody>
</table>

RESEARCH APPLICATIONS
Immunology, Inflammation and Autoimmunity Research
Developmental Biology Research
Research Tools

BASE PRICE
Detailed Description

Mice homozygous for the C3 (complement component C3) targeted mutation are viable and fertile. Homozygous mutants exhibit an increased susceptibility to lethal infection by Group B streptococci. Reductions in peritoneal mast cell degranulation, production of tumor necrosis factor alpha, neutrophil infiltration and bacterial clearance have also been reported in these mice. Homozygotes also demonstrate a profound defect in antibody response to T cell dependent antigens. They show a diminished level of peanut agglutinin+ germinal centers and a failure in isotype switching despite normal B cell signaling in vitro.

Genetics

C3<sup>tm1Cr</sup>

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
High Resolution Melting: C3<sup>tm1Cr</sup>
Genotyping resources and troubleshooting

Dietary Information
LabDiet<sup>®</sup> 5K52 formulation (6% fat)
Breeding Considerations
When maintaining a live colony, homozygous mice may be bred together. The expected coat color from breeding is black.

Additional Breeding and Husbandry Support

Mating System
Homozygote x Homozygote

Citation
When using the B6.129S4-c3m1Crr/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #003641 in your Materials and Methods section.

Facility Barrier Level Descriptions
A AX11 (Maximum)

Pricing & Availability
Ask Customer Service for expected lead time.

Repository Live

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

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>4 weeks</td>
<td>Female</td>
<td>Homozygous for C3^{m1Crr}</td>
<td>$231.00</td>
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<tr>
<td></td>
<td>Male</td>
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<tr>
<td>5 weeks</td>
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<td></td>
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<td>6 weeks</td>
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<td>7 weeks</td>
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<tr>
<td>9 weeks</td>
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<td>Homozygous for C3^{m1Crr}</td>
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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
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Phone: 207-288-6470

Email: TechTran@jax.org

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By Allele

By Gene

By Collection

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