B6.129Sdd241Mak/J

Stock No: 002663 | CD4 KO

Congenic, Targeted Mutation

AVAILABLE NOW

PLACE ORDER

Sized to accommodate orders of up to 10 or more with age range. Ask Customer Service for details.

Overview
Also Known As: CD4 KO

Mice homozygous for the Cd4<sup>tm1Mak</sup> targeted mutation have a significant block in CD4<sup>+</sup> T-cell development. Cell surface expression of CD4 protein is not detected on thymocytes and lymph node cells from homozygous mice. Homozygous mutant mice also show a Class II restricted deficit in helper T-cell activity and other T-cell responses. This mutant mouse strain may be useful in studies of T cell development, susceptibility to viral infection and inflammation.

Donating Investigator

Dr. Tak Mak, University Health Network/Un of Toronto

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**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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**Cd4<sup>tm1Mak</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tr>
<td>Targeted (Null/Knockout)</td>
<td>Cd4</td>
<td>CD4 antigen</td>
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**RESEARCH APPLICATIONS**

Immunology, Inflammation and Autoimmunity Research  
Research Tools  
Virology Research
Mice homozygous for the \( Cd4^{tm1Mak} \) targeted mutation have a significant block in CD4\(^+\) T-cell development; 90% of their circulating T-cells are CD8\(^+\). Cell surface expression of CD4 protein is not detected on thymocytes and lymph node cells from homozygous mice. Homozygous mutant mice also show a Class II restricted deficit in helper T-cell activity and other T-cell responses. This mutant mouse strain may be useful in studies of T cell development, susceptibility to viral infection and inflammation.
**Genotyping Protocols**

**Separated MCA:** C57BL/6J

**Genotyping resources and troubleshooting**

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

**Breeding Considerations**

This strain is a good breeder.

When maintaining a live colony, these mice can be bred as homozygotes. Expected coat color from breeding is black.

**Additional Breeding and Husbandry Support**

**Mating System**

Homozygote x Homozygote

**Appearance**

black

Related Genotype: *a/a*

**Citation**

When using the CD4 KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #002663 in your Materials and Methods section.

**Animal Health Reports**

**Facility Barrier Level Descriptions**

**Pricing & Availability**

Sized to accommodate orders of up to 10 or more with age range. Ask Customer Service for details.

**Domestic**

Pricing effective for USA, Canada and Mexico shipping destinations

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<tr>
<th>AGE</th>
<th>SEX</th>
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## Related Strains

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