B6.129S2^{Ab1-Ea}/J

Stock No: 003584 | MHC II

- Congenic, Targeted Mutation

AVAILABLE NOW

PLACE ORDER

Live mice available in varying quantities. Ask Customer Service for details.

Overview
Also Known As: MHC II

This strain lacks MHC class II genes H2-Ab1, H2-Aa, H2-Eb1, H2-Eb2, H2-Ea, serving as an appropriate background for developing xenogenic Class II MHC transgenic strains.

Donating Investigator

IMR Colony, The Jackson Laboratory

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>000664 C57BL/6J</td>
<td>N14F4</td>
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<td></td>
<td>(2019-06-13 00:00:00)</td>
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**H2**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>H2</td>
<td>histocompatibility-2, MHC</td>
</tr>
</tbody>
</table>

RESEARCH APPLICATIONS

- Immunology, Inflammation and Autoimmunity Research
- Internal/Organ Research
- Research Tools
Details

Detailed Description

Mice that are homozygous null for MHC class II genes H2-Ab1, H2-Aa, H2-Eb1, H2-Eb2, H2-Ea are viable, fertile, normal in size and do not display any gross physical or behavioral abnormalities. MHC class II gene products (mRNA or protein) are not detected. A dramatic decrease is observed in the number of CD4 positive T cells in thymus, spleen and lymph nodes. This strain should serve as a suitable recipient of xenogenic Class II MHC transgenes allowing the engineering of mouse models of human MHC Class II-associated diseases.

In an attempt to offer alleles on well-characterized or multiple genetic backgrounds, alleles are frequently moved to a genetic background different from that on which an allele was first characterized. This is the case for the strain above. It should be noted that the phenotype could vary from that originally described. We will modify the strain description if necessary as published results become available.

Development

Control Suggestions

Selected References

Genetics

H2d1Ab1-Ea

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support
Genotyping Protocols

Standard PCR: H2<sup>dAb1-Ea</sup>

Genotyping resources and troubleshooting

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

Breeding Considerations
This strain originated on a mixed B6,129S background and is maintained on a congenic B6.129 background. Reproduction is fair. The strain is immunodeficient and sensitive to poor microbiological conditions. Pneumocystis can be a problem. Expected coat color expected from breeding: Black.

Additional Breeding and Husbandry Support
Mating System
Homozygote x Homozygote

Citation
When using the MHC II mouse strain in a publication, please cite the originating article(s) and include JAX stock #003584 in your Materials and Methods section.

Animal Health Reports

Facility Barrier Level Descriptions
AX11 (Maximum)

Pricing & Availability

Live mice available in varying quantities. Ask Customer Service for details.

Available Now

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tr>
<td>4 weeks</td>
<td>Female</td>
<td>Homozygous for H2&lt;sup&gt;dAb1-Ea&lt;/sup&gt;</td>
<td>$236.78</td>
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<tr>
<td></td>
<td>Male</td>
<td>Homozygous for H2&lt;sup&gt;dAb1-Ea&lt;/sup&gt;</td>
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<tr>
<td>5 weeks</td>
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### Related Products and Services

| Frozen Mouse Embryo | B6.129-H2<dlAb1-Ea>/J Frozen Embryos | $2595.00 |

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#### Terms of Use

**General Terms and Conditions**

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**Licensing Information**

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

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