**B6.129S7-Rag1^{tm1Mom}/J**

**Stock No:** 002216 | Rag1 KO

- Congenic, Targeted Mutation

**PLACE ORDER**

Sized to accommodate orders of up to 100 or more. Call Customer Service for details.

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**Also Known As:** Rag1 KO

Mice homozygous for the Rag1^{tm1Mom} mutation produce no mature T cells or B cells. Their phenotype can be described as a "non-leaky” immune deficiency.

**Donating Investigator**

IMR Colony, The Jackson Laboratory

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**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>000664 C57BL/6J</td>
<td>Contact Technical Support (2018-07-27 00:00:00)</td>
</tr>
</tbody>
</table>

**Rag1^{tm1Mom}**
RESEARCH APPLICATIONS
Research Tools
Immunology, Inflammation and Autoimmunity Research
Internal/Organ Research
Cancer Research
Hematological Research

BASE PRICE
Starting at:
$129.97 Domestic price for female 4-week

Details

Detailed Description
Mice homozygous for the Rag-1<sup>tm1Mom</sup> mutation produce no mature T cells or B cells. Whereas Prkdc<sup>scid</sup> homozygotes produce some B cells and IgM (i.e., are 'leaky'), Rag-1<sup>tm1Mom</sup> homozygotes lack all mature lymphocytes (i.e., are 'non-leaky'). Rag1 null mice have no CD3<sup>+</sup> or T cell receptor (TCR) alpha-beta positive cells. The thymus of the mutant mice contains 15 to 130 times fewer cells than heterozygous or wild-type siblings. The thymocytes are CD8 CD4<sup>-</sup> and most are IL2 receptor-positive. Neither the spleen nor the bone marrow contain any IgM or IgD staining cells, indicating an absence of mature B cells. These and other data suggest that B cell and T cell development has been arrested at an early stage. Macroscopically, the mutants are indistinguishable from heterozygotes or normal wild-type siblings.

View Flow Cytometry Characterization Data for Immunodeficient JAX Strains

Development

Control Suggestions

Selected References
Genotypic Protocols
MELT: Rag1^{tm1Mom} Alternate1
Genotyping resources and troubleshooting

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

Breeding Considerations
This strain is a good breeder.
This Rag1^{tm1Mom} strain is maintained by mating homozygous siblings. This strain should be housed under pathogen free conditions similar to Prkdc^sca1/Prkdc^sca1 mice or any other immunodeficient strain. Only homozygous mice may be ordered.
Additional Breeding and Husbandry Support

Mating System
Homozygote x Homozygote

Appearance
black
Related Genotype: a/a

Citation
When using the Rag1/KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #002216 in your Materials and Methods section.
### Pricing & Availability

Pricing effective for USA, Canada and Mexico shipping destinations.

**Live Mouse**

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
</table>
| 4 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 5 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 6 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 7 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 8 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 9 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 10 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 11 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1
| 12 weeks | Female | Homozygous for Rag1
|       | Male   | Homozygous for Rag1

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ordering and performing tests on a small number of mice to determine suitability for your particular project.

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