Overview

B6.129/S7-Ifnm1r1/J

Stock No: 003245 | II1r1

Congenic, Targeted Mutation

PLEASE INQUIRE

PLACE ORDER

Ask Customer Service for an anticipated lead time
Also Known As: Il1r1<sup>-</sup>

IL-1 receptor KO mice exhibit altered innate immune and inflammatory responses and show multiple effects on physiological systems and behavior.

Donating Investigator

Dr. Jacques Peschon, Amgen
Interleukin 1 receptor, type I, is a receptor for interleukin 1 (IL1), which affects many cytokine induced immune and inflammatory responses. Mice homozygous for the Il1r<sup>tm1Imx</sup> targeted mutation therefore fail to respond to IL1 and exhibit an altered immune response to many different target proteins. Some effects seen from knocking out this receptor include defective responses to certain inflammatory agents such as turpentine and altered response to various pathogenic organisms such as <i>S. aureus</i> and <i>C. pneumoniae</i>.

Other observed effects include enhanced glucose homeostasis, enhanced insulin sensitivity of adipose tissue, reduction in diet-induced systemic atherosclerosis, improved restoration of normal skin architecture in wounds, increased incidence of acute convulsive seizures induced by pentylenetetrazole, and a decrease in anxiety-related behaviors.
### Genotyping Protocols

- **Standard PCR:** \( \text{Il1r1}^{tm1Imx} \)

### Genotyping resources and troubleshooting

### Dietary Information

- **LabDiet® 5K52 formulation (6% fat)**

### Breeding Considerations

This strain may be maintained by homozygous sibling matings. 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 \( \text{Il1r1} \) mouse strain in a publication, please cite the originating article(s) and include JAX stock #003245 in your Materials and Methods section.

### Animal Health Reports

- **Facility Barrier Level Descriptions**

  - AX11 (Maximum)

### Pricing & Availability

- **Ask Customer Service for an anticipated lead time**

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<thead>
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Related Strains

All Related Strains

- **B6.129(Cg)-Il1r1tm1.1Rbl/J**
  - Stock No: 028398
  - Related By: llfr

- **B6;129S-Tnfrsf1atm1lmx Il1r1tm1lmx/J**
  - Stock No: 003244
  - Related By: llfr, Il1r1tm1lmx

- **B6;129S1-Il1r1tm1Roml/J**
  - Stock No: 003018
  - Related By: llfr