Overview

**Also Known As:** Rab11a<sup>fl</sup>

The Rablla<sup>fl</sup> allele has *loxP* sites flanking exons 3-4 of the *Rab11a* gene. These mice allow generation of tissue-specific Rablla knockout, and may be useful for studying the function of this recycling endosome resident small GTPase in intracellular trafficking, Toll-like receptors (TLRs), inflammatory responses and intestinal host-microbial homeostasis.

Donating Investigator
GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted (Conditional ready (e.g. floxed))</td>
<td>Rab11a</td>
<td>RAB11A, member RAS oncogene family</td>
</tr>
</tbody>
</table>

The Rablla<sup>tm1.1Ngao</sup> allele has loxP sites flanking exons 3-4 of the Rab11a gene. The Rab11a gene encodes a RAS oncogene family protein that functions as a small GTPase in intracellular membrane trafficking, and is also a component of the recycling endosome. Mice homozygous for the Rablla<sup>tm1.1Ngao</sup> allele are viable and fertile with no reported abnormalities. When bred to mice that express Cre recombinase, the resulting offspring may be useful in generating tissue-specific Rablla knockout.

For example, when bred to germline Cre-expressing mice, the resulting Rab11a global knockout homozygotes die in utero around the implantation stage. When Rablla<sup>ΔIEC</sup> mice are bred to Villin-Cre transgenic mice (Stock Nos. 004586 / 018963), the resulting Rablla<sup>ΔIEC</sup> homozygotes lack Rablla expression in intestinal intraepithelial cells, and exhibit epithelial cell-intrinsic cytokine production, inflammatory bowel phenotype and early mortality.

RESEARCH APPLICATIONS

Research Tools
- Cancer Research
- Immunology, Inflammation and Autoimmunity Research
- Cell Biology Research

BASE PRICE
Starting at:
- $2,854.50 Domestic price Cryo Recovery

Details

Detailed Description

The Rablla<sup>tm1.1Ngao</sup> allele has loxP sites flanking exons 3-4 of the Rab11a gene.

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Development
Control Suggestions

Selected References

Genetics

*Rab11a*<sup>tm1.1Ngao</sup>

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
Standard PCR: *Rab11a*
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, heterozygous mice may be bred together, to wildtype mice from the colony or to C57BL/6J inbred mice (Stock No. 000664). Alternatively, homozygous mice may be bred together.

Additional Breeding and Husbandry Support

Citation
When using the *Rab11a* mouse strain in a publication, please cite the originating article(s) and include JAX stock #024110 in your Materials and Methods sections.

Animal Health Reports
Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200

Pricing & Availability

Cryo Recovery
Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.
Payment Terms and Conditions
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Related Strains

All

By Allele

By Gene

By Collection

All Related Strains

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