**B6.129P2-Akt1tm1Mbb/J**

**Stock No: 004912 | Akt1 KO**

- Congenic, Targeted Mutation

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**CRYO RECOVERY**

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

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**Also Known As: Akt1 KO, Akt1/PKB KO**

These thymoma viral proto-oncogene 1 knock-out mice have defects in both fetal and postnatal growth persisting into adulthood, and may be useful in studies related to organismal growth.

**Donating Investigator**

Morris J. Birnbaum, Un of Pennsylvania Sch of Medicine

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**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td>Akt1tm1Mbb</td>
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- **Allele Type**: Targeted (Null/Knockout)
- **Gene Symbol**: Akt1
- **Gene Name**: thymoma viral proto-oncogene 1

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**RESEARCH APPLICATIONS**

Cell Biology Research
Developmental Biology Research

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**BASE PRICE**

Starting at:
Details

Detailed Description

Mice that are homozygous for the targeted mutation are viable and do not display any gross behavioral abnormalities. Homozygotes exhibit lower fertility. Female homozygotes do not nurse well; up to 50% perinatal mortality can occur. No gene product (mRNA or protein) is detected by Northern or Western blot analysis of mouse embryonic fibroblasts. Homozygotes are only 80% of wildtype body weight at birth, and remain small. This mutant mouse strain may be useful in related to organismal growth.

Development

Control Suggestions

Selected References

Genetics

Akt1^{tm1Mbb}

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols

Standard PCR: Akt1^{tm1Mbb}

Genotyping resources and troubleshooting
Breeding Considerations
This strain originated on a B6;129 background and has been backcrossed to C57BL/6 for at least 10 generations (March 2003). The strain is maintained as a heterozygote. Homozygotes are reported to be less fertile. Female homozygotes do not nurse well; up to 50% perinatal mortality can occur.

Additional Breeding and Husbandry Support

Citation
When using the Act1 KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #004912 in your Materials and Methods section.

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

Pricing & Availability

Typically mice are recovered in 10-14 weeks. Contact Customer Service to place an order or for more information.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous or Wildtype for Akt1&lt;tm1Mbb&gt;</td>
<td>$2,595.00</td>
</tr>
</tbody>
</table>

We will fulfill your order by providing at least two carriers for each strain ordered. The total number, sex, and genotypes provided will vary, although typically 8 or more animals are provided. Please check genotypes which will be recovered. While the genotypes of all animals produced will be communicated to you prior to scheduling shipment, the genotypes of animals provided may not reflect the mating scheme and genotypes described in the strain description. Animals are typically ready to ship in 11-14 weeks. If a second recovery is required to produce the minimum number of animals, then delivery time would increase to approximately 25 weeks. If we fail to produce animals of the correct genotype, you will not be charged. We cannot guarantee the reproductive success of mice shipped to your facility. If the mice are lost after the first three days (post-arrival) or do not produce progeny at your facility, a new order and fee will be necessary.

Cryorecovery to establish a Dedicated Supply for greater quantities of mice. Mice recovered can be used to establish a dedicated colony to contractually supply you mice according to your requirements. Price by quotation.

Related Products and Services

Frozen Mouse Embryo $2,595.00 per straw or vial

Payment Terms and Conditions
Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.
The Jackson Laboratory’s Genotype Promise

The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. Therefore, we cannot guarantee a strain’s phenotype will meet all expectations. To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project.

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🔗 Related Strains

- All
- By Allele
- By Gene
- By Collection

All Related Strains
Leading the search for
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