Overview

Also Known As: Erk3^{-}

These Mapk6 (Erk3) lacZ knockin/knockout mice exhibit homozygous neonatal lethality characterized by delayed lung maturation, pulmonary hypoplasia, and intrauterine growth restriction. They may be useful for studying fetal growth, lung maturation, neuromuscular phenotypes and immune function.

Donating Investigator
GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapk6&lt;sup&gt;tm1Melo&lt;/sup&gt;</td>
<td></td>
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<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Targeted (Reporter, Null/Knockout)</td>
<td>Mapk6</td>
<td>mitogen-activated protein kinase 6</td>
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RESEARCH APPLICATIONS

- Neurobiology Research
- Developmental Biology Research
- Internal/Organ Research
- Research Tools

BASE PRICE

Starting at:

$2,854.50 Domestic price Cryo Recovery

Details

*Mapk6* (Erk3) knockin/knockout mice contain a *lacZ* neomycin cassette in place of exons 2-4 of the mitogen-activated protein kinase 6 (*Mapk6*), abolishing gene function. Beta-galactosidase activity is detected in a range of developing tissues in E15.5 embryos. MAPK6 is a member of the mitogen-activated protein kinases also known as extracellular signal-regulated kinases (ERKs) that are activated in response to extracellular stimuli. Homozygous neonates die within 24 hours; 40% within 15 minutes due to acute respiratory failure. Pups exhibit delayed lung maturation, pulmonary hypoplasia, impaired saccular development, atelectasis, defective type II pulmonary differentiation, and neuromuscular defects. Intrauterine growth is restricted resulting in reduced fetal lung, heart and liver weights. *Mapk6* deficiency also results in defective thymocyte development. This strain may be useful for studying fetal growth, lung maturation, neuromuscular phenotypes and immune function.
Breeding Considerations
While maintaining a live colony, these mice are bred as heterozygotes. Mice homozygous for the mutation are not viable.

Additional Breeding and Husbandry Support

Citation
When using the Erk3 mouse strain in a publication, please cite the originating article(s) and include JAX stock #027186 in your Materials and Methods section.

Production of mice from cryopreserved embryos or sperm occurs in a maximum barrier room, G200
Cryo Recovery

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

Domestic

Pricing effective for USA, Canada and Mexico shipping destinations

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<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 Mapk6&lt;tm1Melo&gt;</td>
<td>$2,854.50</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.

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.

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Terms Of Use

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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Related Strains

All

By Allele

By Gene

By Collection

All Related Strains