B6N.129S6-Bhlha15<sup>tm2(Kras)Skz</sup>/J

Stock No: 029232 | Mist<sup>1</sup> KrasG12D

Congenic, Targeted Mutation

PLACE ORDER

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

Also Known As: Mist1KrasG12D

In these Mist1KrasG12D mice, the entire coding region of the Bhlha15 gene is replaced by a KrasG12D cDNA and neomycin resistance cassette. They may be suitable for use in applications related to pancreatic tumorigenesis.

Donating Investigator

Stephen Konieczny, Purdue University

GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhlha15tm2(Kras)Skz</td>
<td></td>
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<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted</td>
<td>Bhlha15</td>
<td>basic helix-loop-helix family, member a15</td>
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RESEARCH APPLICATIONS

Endocrine Deficiency Research

BASE PRICE

Starting at:

$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description

Mist1KrasG12D mice have a KrasG12D cDNA and neomycin resistance (neo) cassette replacing the entire coding region of the basic helix-loop-helix family, member a15 (Bhlha15) gene. MIST1 is a basic helix-loop-helix transcription factor that is expressed in pancreatic
acinar cells but not in duct, islet, or centroacinar cells. The Mist1 locus is also expressed in most serous secretory cells including acinar cells of the salivary gland, chief cells of the stomach, paneth cells in the small intestine and in lactating mammary alveolar cells. Heterozygous mice exhibit acinar metaplasia and dysplasia. They have an accelerated frequency of death from invasive and metastatic pancreatic cancer with acinar, cystic, and ductal features. Many develop hepatocellular carcinoma. Additionally, female Mist1\textsuperscript{KrasG12D} mice exhibit difficulty with lactation due to KRAS\textsuperscript{G12D} expressed in the lactating alveolar cells. Homozygous mice are embryonic lethal.

### Development

### Control Suggestions

### Selected References

### Genetics

**Bhlha15\textsuperscript{m2(Kras)skz}**

### Disease/Phenotype

#### Disease Terms

#### Research Areas By Genotype

#### Mammalian Phenotype Terms by Genotype

### References

### Technical Support

#### CONTACT TECHNICAL SUPPORT

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**Genotyping Protocols**

MELT: Bhlha15\textsuperscript{m2(Kras)skz}

Genotyping resources and troubleshooting

**Breeding Considerations**

When maintaining a live colony, wild-type females may be bred to heterozygous males. Homozygous mice are embryonic lethal. Female heterozygous mice exhibit poor nursing capabilities due to alterations in the mammary gland epithelial cells following one round of pregnancy and nursing.

Additional Breeding and Husbandry Support

**Mating System**

Wild-type x Heterozygote
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>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous or wildtype for Bhlha15&lt;tm2(Kras)Skz&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.

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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

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Phone: 207-288-6470
Email: TechTran@jax.org

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