Overview

These transgenic mice express the human MUC1 gene and may be useful for crossing with existing cancer model strains to generate a MUC1-tolerant background for MUC1-targeted tumor immunotherapy.

Donating Investigator
GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td>Tg(MUC1)79.24Gend</td>
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Allele Type
Transgenic (Inserted expressed sequence, Humanized sequence)

RESEARCH APPLICATIONS

BASE PRICE
Starting at:

$2,595.00 Domestic price Cryo Recovery

Details

Detailed Description
The human MUC1 (mucin 1, cell surface associated) gene encodes an epithelial cell glycoprotein that is often overexpressed and hypoglycosylated in adenocarcinoma. These transgenic mice express the human MUC1 gene in a pattern and level similar to that observed in human tissues. Mice that are hemizygous for the targeted mutation are viable and fertile. The Donating Investigator reports that homozygous mice die prematurely at 6 to 12 months of age. Transgenic mice exhibit immunological tolerance to engrafted MUC1 expressing tumor cells. The Donating Investigator reports that these transgenic mice do not develop spontaneous tumors more frequently than what is observed in wildtype C57BL/6 mice.

When crossed with I110 knock out mice (see Stock No. 002251), the resulting double mutant mice exhibit a more severe phenotype, with an earlier onset and higher frequency of colon tumors.

Development
Genotyping Protocols
High Resolution Melting: Tg(MUC1)79.24Gend
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, hemizygous mice may be bred together, to wildtype siblings, or to C57BL/6J inbred mice (Stock No. 000664). The Donating Investigator reports that homozygous mice die prematurely at 6 to 12 months of age.
Additional Breeding and Husbandry Support

Citation
When using the C57BL/6-Tg(MUC1)79.24Gend/J mouse strain in a publication, please cite the originating article(s) and include JAX stock #024631 in your Materials and Methods section.

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>Domestic</th>
<th>International</th>
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<tbody>
<tr>
<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
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### Cryorecovery - Domestic Pricing

<table>
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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>Hemizygous or non carrier for Tg(MUC1)79.24Gend/</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.

### 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 statements 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.

### Terms Of Use

**Terms of Use**

**General Terms and Conditions**

**Additional Use Restrictions Apply**

Use of MICE by companies or for-profit entities requires a license prior to shipping.

**Licensing Information**

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

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**Related Strains**

- All
- By Allele
- By Gene
- By Collection