C57BL/6J-Tg(pPGKneobpA)3Ems/J

Stock No: 002356 | TgN3Ems

Coisogenic, Transgenic

CRYO RECOVERY

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: TgN3Ems

These TgN3Ems transgenic mice express a neomycin resistance cassette ($neo^R$), rendering the mice resistant to the lethal effects of the neomycin analog, G418. These TgN3Ems mice may be useful in drug design.
**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tr>
<td>Tg(pPGKneobpA)3Ems</td>
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**Allele Type**  
Transgenic (Inserted expressed sequence)

**RESEARCH APPLICATIONS**

**Research Tools**

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

**Details**

**Detailed Description**

Homozygous neo^R^ transgenic mice (TgN3Ems) are viable and fertile with no apparent gross phenotype. The pPGKneobpA transgene has the mouse Pgk1 promoter directing widespread (but not necessarily uniform) expression of neo^R^; this renders TgN3Ems mice highly G418-resistant and results in a 5-fold increase in the approximate lethal dose of G418 (~680 mg/kg) compared to wildtype mice (~103 mg/kg). Treatment with G418 lethal dose (or higher) in transgenic mice leads to rapid onset of decreased movement, respiratory arrest, and death within minutes. Compared to wildtype mouse embryonic fibroblasts (MEFs), TgN3Ems MEFs exhibit greatly diminished G418 sensitivity; wildtype MEFs show essentially no resistance to G418 while TgN3Ems MEFs survive approximately 20-fold higher G418 levels. Importantly, TgN3Ems heterozygotes and TgN3Ems homozygotes are equally resistant to G418. These TgN3Ems transgenic mice may be useful as source of G418-resistant feeder cells for gene targeting; specifically TgN3Ems MEFs may be ideal for two-allele, as well as for standard, targeting due to their high resistance to selection drugs. Additionally, because the expression of drug-resistance genes in transgenic animals confers resistance to toxicity, the TgN3Ems mice may also serve as a tool strain for testing drug design.
Genotyping Protocols
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, homozygous mice may be bred together. Alternatively, hemizygous mice may be bred to wildtype siblings or to C57BL/6J inbred mice (Stock No. 000664). The expected coat color from these breedings is Black.

Additional Breeding and Husbandry Support

Appearance
black
Related Genotype: a/a

Citation
When using the TgPGKneobpA3Em mice strain in a publication, please cite the originating article(s) and include JAX stock #002356 in your Materials and Methods section.

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.

<table>
<thead>
<tr>
<th>Domestic</th>
<th>International</th>
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<tr>
<td>Pricing effective for USA, Canada and Mexico shipping destinations</td>
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<table>
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<tr>
<th>Cryo Recovery</th>
<th>GENOTYPE</th>
<th>PRICE</th>
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<tbody>
<tr>
<td></td>
<td>Homozygous for Tg(pPGKneobpA)3Ems, 1 pair minimum</td>
<td>$2,854.50</td>
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</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.

Cryo recovery 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

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

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Related Strains

All

By Allele

By Gene

By Collection

All Related Strains