B6; 129p53 Nf1<sup>tm1Tyj</sup> Suz12<sup>1t(βtageo)<sub>1Khe</sub></sup> KcichJ

Stock No: 027678 | Nf1/p53/Suz12

Gene Trap, Targeted Mutation

**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: Nf1/p53/Suz12

These NPS+/- mice carry Trp53, Nf1, and Suz12 mutations on chromosome 11 (in cis) and develop high-grade gliomas and malignant peripheral nerve sheath tumors by approximately 3.5 months. They are suitable for use in applications related to the study of neurofibromatosis type 1 and tumor suppressor genes.

Donating Investigator

Karen Cichowski, Brigham and Women's Hospital - Harvard Medical School

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td><strong>Trp53</strong>&lt;sup&gt;tm1Tyj&lt;/sup&gt;</td>
<td></td>
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<tr>
<td>Allele Type</td>
<td>Gene Symbol</td>
</tr>
<tr>
<td>Targeted (Null/Knockout)</td>
<td><em>Trp53</em></td>
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| **Suz12**<sup>Gl(Betageo)1Khe</sup> |
| Allele Type | Gene Symbol | Gene Name |
| Gene trapped (Reporter, Null/Knockout) | *Suz12* | SUZ12 polycomb repressive complex 2 subunit |
### RESEARCH APPLICATIONS

Cancer Research  
Immunology, Inflammation and Autoimmunity Research  
Mouse/Human Gene Homologs  
Research Tools  
Apoptosis Research

### BASE PRICE

Starting at:  
$2,854.50 Domestic price  
Cryo Recovery

### Details

**Detailed Description**

These NPS+/- mice carry *Trp53*, *Nf1*, and *Suz12* mutations on chromosome 11 (in cis), which is similar to conditions found in some human neurofibromatosis type 1 patients. Triple homozygotes are embryonic lethal. By 3 months of age, more than half (54%) of mice heterozygous for all 3 alleles, in cis, develop high-grade gliomas. Triple heterozygotes develop malignant peripheral nerve sheath tumors by 3.5 months of age, develop histiocytic sarcoma, lymphoma, and angiosarcoma, and have a shortened lifespan (approximately 5 months).

**Development**

**Expression Data**

**Control Suggestions**

**Selected References**

**Genetics**

*Trp53\textsuperscript{tm1Tyj}*

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<tr>
<th>Allele Type</th>
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<tr>
<td>Targeted (Null/Knockout)</td>
<td><em>Nf1</em></td>
<td>neurofibromin 1</td>
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</table>
Genotyping Protocols
Standard PCR: Suz12<sup>Gt(Betageo)1Khe</sup>
Standard PCR: Trp53<sup>tm1Tyj</sup>
Standard PCR: Nf1<sup>tm1Tyj</sup>
Genotyping resources and troubleshooting

Breeding Considerations
These mice carry Trp53, Nf1, and Suz12 mutations on chromosome 11 (in cis). When maintained as a live colony, triple heterozygotes may be bred. Heterozygotes have shortened lifespans (approximately 5 months) due to tumor formation, however. Triple homozygotes are embryonic lethal. If breeding triple mutant mice to wildtype mice, the resulting offspring may be segregating for each mutation.

Additional Breeding and Husbandry Support
Mating System
Wildtype Trp53<sup>tm1Tyj</sup>, Wildtype Nf1<sup>tm1Tyj</sup>, Wildtype Suz12<sup>Gt(Betageo)1Khe</sup> x Heterozygous Trp53<sup>tm1Tyj</sup>, Heterozygous Nf1<sup>tm1Tyj</sup>, Heterozygous Suz12<sup>Gt(Betageo)1Khe</sup>. No reciprocal mating

Citation
When using the Nf1/p53/Suz12 mouse strain in a publication, please cite the originating article(s) and include JAX stock #027678 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.
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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Related Strains

- All
- By Allele
- By Gene