129-Fyn\textsuperscript{tm1Sor/J}

Stock No: 002271 | pp59 \textsuperscript{fyn} KO

Targeted Mutation

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

**Also Known As: pp59\textsuperscript{fyn} KO**

These Fyn knock-out mice fail to express the family non-receptor protein tyrosine kinase member pp59\textsuperscript{fyn} and have defective T-cell receptor signaling.

**Donating Investigator**

Dr. Philippe Soriano, Mount Sinai School of Medicine

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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</thead>
<tbody>
<tr>
<td>\texttt{Fyn}\textsuperscript{tm1Sor}</td>
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<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>Fyn</td>
<td>Fyn proto-oncogene</td>
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**RESEARCH APPLICATIONS**

- Cancer Research
- Immunology, Inflammation and Autoimmunity Research
- Neurobiology Research

**BASE PRICE**

Starting at:
Details

Detailed Description
Mice homozygous for the Fyn\(^{tm1Sor}\) targeted mutation are viable and fertile displaying no overt phenotype. T cell receptor signaling is defective in homozygous mutant mice and are characterized by a reduction in levels of tyrosine-phosphorylated proteins, failure to flux calcium in response to TCR cross-linking, and a reduction in production of calcium-related IL2. THY-1-induced proliferation is also reduced in thymocytes but not in splenic T cells. Neurological defects include blunted long-term potentiation (LTP), impaired special learning, and altered hippocampal development.

Development

Control Suggestions

Selected References

Genetics

Fyn\(^{tm1Sor}\)

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

Genotyping Protocols
High Resolution Melting: Fyn\(^{tm1Sor}\)
Standard PCR: Fyn\(^{tm1Sor}\)
Genotyping resources and troubleshooting
Breeding Considerations
Homozygotes are viable and fertile. The expected coat color from breeding is white-bellied agouti.

Additional Breeding and Husbandry Support

Citation
When using this JAX® strain in a publication, please cite the originating article(s) and include JAX stock #002271 in your Materials and Methods section.

Facility Barrier Level Descriptions
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><strong>Cryo Recovery - Domestic Pricing</strong></td>
<td><strong>GENOTYPE</strong></td>
</tr>
<tr>
<td>Cryo Recovery</td>
<td>Heterozygous or Wild-type for Fyn&lt;tm1Sor&gt;</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.

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.

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

General Terms and Conditions

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

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Leading the search for TONOWARD'S CURES