FVB.129P2(B6)-Fmr1<sup>tm1Cgr</sup>/J

**Stock No:** 003024 | Fmr1 KO

- Congenic, Targeted Mutation

**CRYO RECOVERY**

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

**Also Known As: Fmr1 KO**

These Fmr1 knockout mice may be useful in applications related to the study of Fragile X Syndrome.

**Donating Investigator**

Ben A Oostra, Erasmus University
IMR Colony, The Jackson Laboratory

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>001800 FVB/NJ</td>
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</tbody>
</table>

**Fmr1<sup>tm1Cgr</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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</thead>
<tbody>
<tr>
<td>Targeted (Null/Knockout)</td>
<td>Fmr1</td>
<td>fragile X mental retardation 1</td>
</tr>
</tbody>
</table>

**RESEARCH APPLICATIONS**

- Neurobiology Research
- Mouse/Human Gene Homologs
- Developmental Biology Research

**BASE PRICE**

Starting at:
**Details**

**Important Note**
This strain is homozygous for the retinal degeneration allele Pde6b<sup>rd1</sup>. 

**Detailed Description**
Mice homozygous for the Fmr1<sup>tm1Cgr</sup> targeted mutation show macroorchidism (enlarged testes), learning deficits, and hyperactivity. Macroorchidism is caused by an increased rate of Sertoli cell proliferation during embryogenesis which may be independent of FSH signalling. Comparison of homozygotes to wildtype littermates in hidden- and visible-platform water maze learning showed deficits in spatial learning and motor performance. This strain is homozygous for the retinal degeneration allele Pde6b<sup>rd1</sup>. 

**Development**

**Control Suggestions**

**Selected References**

**Genetics**

**Fmr1<sup>tm1Cgr</sup>**

**Disease/Phenotype**

**Disease Terms**

**Research Areas By Genotype**

**Mammalian Phenotype Terms by Genotype**

**References**

**Technical Support**

**Genotyping Protocols**
Melt Curve Analysis: Fmr1<sup>tm1Cgr</sup>
Standard PCR: Fmr1<sup>tm1Cgr</sup>
Genotyping resources and troubleshooting
Breeding Considerations
When maintaining a live colony, homozygous females can be bred with hemizygous males. Fmr1 is an X linked gene. The expected coat color from breeding is albino.

Additional Breeding and Husbandry Support

Appearance
albino
Related Genotype: Tyr<sup>C</sup>/Tyr<sup>C</sup>

Citation
When using the Fmr1 KO mouse strain in a publication, please cite the originating article(s) and include JAX stock #003024 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>Cryo Recovery</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Please inquire</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. \textbf{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. \textbf{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 \textbf{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
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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.

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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