B6.129-Pfdn1 Gl(GTR1.3)1Ruj/WkhnJ

Stock No: 028765 | Pfdn1 -

Congenic Gene Trap

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: Pfdn1

Pfdn1 KO mice may be useful in studying the role of cytoskeletal function and remodeling on immune cell signaling and axon guidance.

Donating Investigator

Dr. Wasif Khan, University of Miami

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GENETIC OVERVIEW

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
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<tbody>
<tr>
<td>Pfdn1&lt;sup&gt;Gt(GTR1.3)1Rul&lt;/sup&gt;</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
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<tbody>
<tr>
<td>Gene trapped</td>
<td>Pfdn1</td>
<td>prefoldin 1</td>
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RESEARCH APPLICATIONS

- Cell Biology Research
- Immunology, Inflammation and Autoimmunity Research
- Developmental Biology Research
- Neurobiology Research

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BASE PRICE

Starting at:

$2,595.00 Domestic price Cryo Recovery

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Details

Detailed Description

Pfdn1 KO mice have a gene trap cassette inserted into intron 3 of the prefoldin 1 (Pfdn1) gene. PFDN1 encodes the first subunit of a
molecular chaperone complex that binds and stabilizes newly synthesized actins and cytoskeletal proteins, allowing them to fold correctly. Heterozygous mice are viable and fertile, while homozygous mice die before five weeks of age due to neuromuscular dysfunction and physical wasting. Insertion of the gene trap sequence results in deletion of the coiled-coil domain required for interactions between Prefoldin and peptide substrates. These mice exhibit defects in cytoskeletal function such as ciliary dyskinesia, neuronal loss, and defects in B and T cell development and function. B and T cell maturation is impaired at the transitions from pre-pro-B to pre-B cells in the bone marrow and from CD4^+CD8^− double-negative to CD4^+CD8^+ double-positive T cells in the thymus.

Development

Control Suggestions

Selected References

Genetics

Pfdn1^{Gftr1-31}{Rul}

Disease/Phenotype

Disease Terms

Research Areas By Genotype

Mammalian Phenotype Terms by Genotype

References

Technical Support

CONTACT TECHNICAL SUPPORT

Genotyping Protocols
MELT: Pfdn1^{Gftr1-31}{Rul}-alternate3
MELT: Generic Neo
Probe: Generic Neo
Genotyping resources and troubleshooting

Breeding Considerations
When maintaining a live colony, heterozygous mice may be bred to wildtype mice from the colony or C57BL/6j inbred mice (Stock No. 000664). Homozygous mice die before five weeks of age due to neuromuscular dysfunction and physical wasting.
Additional Breeding and Husbandry Support

Citation
When using the Pfdn1^mouse strain in a publication, please cite the originating article(s) and include JAX stock #028765 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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</table>

**Pricing effective for USA, Canada and Mexico shipping destinations**

#### Cryorecovery - Domestic Pricing

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>GENOTYPE</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryo Recovery</td>
<td>Heerozygous or wildtype for Pfdn1&lt;Gt(GTR1.3)1Rul&gt;</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.

#### Related Products and Services

| Frozen Mouse Embryo | $2,595.00 per straw or vial |

### 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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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**

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All

By Allele

By Gene

By Collection

All Related Strains