The BXD set of RI strains is used in the genetic analysis of numerous complex or potentially complex physiologic phenotypes. The BXD strains are derived from the C57BL/6J (Stock No. 000664) and DBA/2J (Stock No. 000671) progenitor strains.

**GENETIC OVERVIEW**

<table>
<thead>
<tr>
<th>Genetic Background</th>
<th>Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>F128p+25</em></td>
</tr>
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<td>(2020-09-17 00:00:00)</td>
</tr>
</tbody>
</table>

**Myo5a<sup>d</sup>**

<table>
<thead>
<tr>
<th>Allele Type</th>
<th>Gene Symbol</th>
<th>Gene Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td><em>Myo5a</em></td>
<td>myosin VA</td>
</tr>
</tbody>
</table>

**RESEARCH APPLICATIONS**

- Research Tools
- Neurobiology Research
- Dermatology Research
- Mouse/Human Gene Homologs
The BXD RI strains are used to study the genetics of behavioral phenotypes including alcohol and drug addiction, stress, and locomotor activity. The BXD set of RI strains also is used in the genetic analysis of numerous complex or potentially complex physiologic phenotypes including differences in organ weight and bone mineral density.

The strain distribution pattern (SDP) for the BXD RI strains is available through the Mouse Genome Informatics Contributed Data Sets and Gene Network.

Additional tools and information are presented through the Mouse Phenome Database Specialized Strain Panel Query Form, and Gene Network.

### Development

### Selected References

### Genetics

**Myo5ad**

### Disease/Phenotype

### Disease Terms
Genotyping Protocols
Genotyping resources and troubleshooting
Dietary Information
LabDiet® 5K52 formulation (6% fat)

Mating System
Sibling x Sibling

Appearance
steel grey

Related Genotype: a/a Tyrp1+/Tyrp1+ Myo5ad/Myo5ad

Citation
When using the BXD22/TyJ mouse strain in a publication, please cite the originating article(s) and include JAX stock #000043 in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

FGB29 (Standard)

Pricing & Availability

Live mice available in varying quantities. Ask Customer Service for details.
### RELATED PRODUCTS AND SERVICES

| Frozen Mouse Embryo               | BXD22/TyJ Frozen Embryos | $2595.00 |

### 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. We do not guarantee breeding performance and therefore suggest that investigators order more than one breeding pair to avoid delays in their research.