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

**Gene Symbol**
- **Gene Name**: myosin VA

### 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.

A mutation has been identified in the BXD16 strain in the amylase 1 gene from the parental $Amy^1$ allele to an allele that has an electrophoretic mobility closer to that of $Amy^1$. This allele is distinct from all others identified and no evidence of genetic contamination was found. Thus, this is believed to have resulted from a spontaneous mutation. (Hjorth, 1982.)

**Development**

**Control Suggestions**

**Selected References**

**Genetics**

$Myo5a^d$
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⁺ Myo5a⁰/Myo5a⁰

Citation
When using the BXD16/TyJ mouse strain in a publication, please cite the originating article(s) and include JAX stock number in your Materials and Methods section.

Animal Health Reports
Facility Barrier Level Descriptions

- FGB29 (Standard)

Pricing & Availability
Available

Live mice available in varying quantities. Ask Customer Service for details.

Domestic

International

Pricing effective for USA, Canada and Mexico shipping destinations

LIVE MOUSE

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