FVB/NJ

Stock No: 001800

Inbred Strain

Also Known As: Friend Virus B NIH Jackson, FVB

FVB/NJ are a widely used multipurpose inbred strain. Due to the prominent pronuclei in their fertilized eggs and the large litter size, FVB/NJ are commonly used for transgenic injection. FVB/NJ mice are homozygous for the retinal degeneration 1 allele of Pde6b^{rd1}, resulting in blindness by wean age.
GENETIC OVERVIEW

Genetic Background

Contact Technical Support
(2018-07-27 00:00:00)

RESEARCH APPLICATIONS

Research Tools
Sensorineural Research
Immunology, Inflammation and Autoimmunity Research
Mouse/Human Gene Homologs

BASE PRICE
Starting at:

$22.27 Domestic price for male 3-week

Volume Pricing Available!
for select shipping destinations
Click for Details

Important Note
This strain is homozygous for the retinal degeneration allele $Pde6b^{rd1}$.

Detailed Description
FVB/NJ was inbred for the $Fv1^{b}$ allele which confers sensitivity to the Friend leukemia virus B strain. Due to the prominent pronuclei in their fertilized eggs and the large litter size, FVB/NJ mice are commonly used for transgenic injection. Compared to many other inbred strains, FVB/NJ is highly susceptible to asthma-like airway responsiveness with significant generation of antigen-specific IgE. Despite having the $H2^{d}$ MHC haplotype, FVB/NJ are resistant to collagen-induced arthritis. This resistance stems from coding polymorphisms in $TcrAv-V11.1$ and a genomic deletion of some $Tcrb-V$ genes that includes $Tcrb-V8.2$. FVB/NJ have higher than average activity, anxiety, and basal body temperature, low stress-induced hyperthermia, and are homozygous for the $Pde6b^{rd1}$ allele, which results in early onset retinal degeneration. Although FVB/N typically do not develop spontaneous tumors, they are highly susceptible to chemically induced squamous cell carcinomas with a high rate of malignant conversion from papilloma to carcinoma.

For more information, please refer to Michael Festing’s Index of Inbred Strain Characteristics.

Development
Selected References

Genetics

Bfsp2<sup>Dundee</sup>

Gpr84<sup>del</sup>

Hc<sup>0</sup>

Disc1<sup>del</sup>

Mx1<sup>s1</sup>

Pde6b<sup>d1</sup>

Tyro3<sup>m1</sup>

Cox7a2<sup>i</sup>

mt-Atp8<sup>m1</sup>

Fv1

Disease/Phenotype

Disease Terms

Research Areas By Phenotype

Mammalian Phenotype Terms by Genotype

Phenotype Information

References

Technical Support

CHAT OFFLINE

CONTACT TECHNICAL SUPPORT
Genotyping Protocols

Sanger sequencing: H2 rs50413633

Genotyping resources and troubleshooting

Inbred mouse strains are maintained through sibling (sister x brother) matings; no genotyping required.

Dietary Information

LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

This strain is an exceptional breeder.

Additional Breeding and Husbandry Support

Mating System

Sibling x Sibling

Appearance

albino

Related Genotype: A/A Tyr²/Tyr²

Animal Health Reports

Facility Barrier Level Descriptions

- MP16 (Standard)
- RB15 (Maximum)
- RB09 (Maximum)
- EM02 (Maximum)

Citation

When using the FVB/NJ mouse strain in a publication, please include JAX stock #001800 in your Materials and Methods section.

Pricing & Availability

Readily available in any quantity needed.

Domestic Internation

Pricing effective for USA, Canada and Mexico shipping destinations

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**Volume Pricing Details**

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**Volume Pricing Program**

Quantities: Volume pricing is automatically applied when a minimum quantity per strain for a shipment is reached.

Sexes: Sexes of the same strain may be combined to reach minimum quantity levels to receive the volume pricing.

Shipment: All shipping destinations qualify.

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### Related Strains

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All Related Strains