Overview

Also Known As: Friend Virus B NIH Jackson, FVB, FVB/N, FVBN

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.
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

Details

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

Detailed Description
FVB/NJ was inbred for the Fv<sup>B</sup> 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 H<sup>2</sup><sup>q</sup> MHC haplotype, FVB/NJ are resistant to collagen-induced arthritis. This resistance stems from coding polymorphisms in Tcra-V11.1 and a genomic deletion of some Tc<sub>r</sub>b-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 Pde<sub>6b</sub><sup>rd1</sup> 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

- Pde6b<sup>rd1</sup>
- Hc<sup>0</sup>
- Disc<sup>1</sup>del
- mt-Atp8<sup>m1</sup>
- Gpr84<sup>del</sup>
- Bfsp2<sup>Dundee</sup>
- Mx1<sup>s1</sup>
- Cox7a2<sup>l</sup>
- Tyro3<sup>m1</sup>
- Fv1

Disease/Phenotype

- Disease Terms
- Research Areas By Phenotype
- Mammalian Phenotype Terms by Genotype
- Phenotype Information
- References
Genotyping Protocols
Sanger sequencing: \(H_2\) 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 Tyr^c/Tyr^c

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

Animal Health Reports
Facility Barrier Level Descriptions
- MP16 (Standard)
- RB15 (Maximum)
- RB09 (Maximum)
- EM02 (Maximum)

Pricing & Availability
Readily available in any quantity needed.

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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.

**RELATED PRODUCTS AND SERVICES**

- Mouse ES Cells
  - FVB/NJ-PB84.3 mES cells
  - $695.00
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General Terms and Conditions

LICENSING INFORMATION

Phone: 207-288-6470
Email: TechTran@jax.org

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All

By Allele

By Gene

By Collection

All Related Strains