FVB/NJ

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 \( \text{Pde6b}^{\text{rd1}} \), resulting in blindness by wean age.

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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 $H2^{b}$ MHC haplotype, FVB/NJ are resistant to collagen-induced arthritis. This resistance stems from coding polymorphisms in $Tcrb$-$V11.1$ 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.
Genetics

- Bfsp$^{2Dundee}$
- Gpr84$^{del}$
- Hc$^0$
- Disc1$^{del}$
- Mx1$^{s1}$
- Pde6b$^{rd1}$
- Tyro3$^{m1}$
- Cox7a2l$
- mt-Atp8$^{m1}$
- Fv1

Disease/Phenotype

- Disease Terms
- Research Areas By Phenotype
- Mammalian Phenotype Terms by Genotype
- Phenotype Information
- References

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

Citation
When using the FVB/NJ 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 |
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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Terms Of Use

Terms Of Use

General Terms and Conditions

Licensing Information

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

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Related Strains

All

By Allele

By Gene

By Collection

All Related Strains