



RESEARCH MODELS

Rats

Mice

Other rodents



FVB Mouse

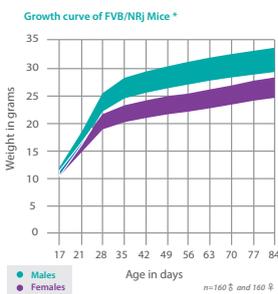
- **Strain name:** FVB/NRj
- **Type:** Inbred mouse
- **Origin:** National Institutes of Health (USA) - 1996
- **Colour and related genotype:** Albino mouse, *Tyr^c/Tyr^c, A/A* - MHC: Haplotype *H2^d*
- **Breeding:** Good breeder, aggressive male, moderate growth

Description of our model

In 1966, 2 strains of NIH SWISS mice, HSFN/N and HSFS/N, were selected based on their resistance or sensitivity, respectively, to histamine following pertussis (whooping cough) vaccination.

At the 8th generation (in 1970), the presence of the Fv1b allele, which induces sensitivity to the B strain of the Friend murine leukemia virus, was highlighted in the HSFS/N strain. Mice homozygous for this allele were inbred thus creating the **FVB/N** strain. The presence of large pronuclei in the embryos, which helps micro-injection and their large litters contribute to the suitability of the **FVB/N** strain for transgenesis. When compared to other inbred strains, **FVB/N**'s respiratory system is sensitive to asthma with an important production of antigen-specific IgE antibodies. Its *H2^d* MHC haplotype non-withstanding, **FVB/N** mice are resistant to the induction of arthritis by collagen injection.

FVB/N mice are very active and develop a mild hyperthermia under stress. The **FVB/N** strain does not develop spontaneous tumours and shows a certain resistance to the chemical induction of papillomas, which, when they do appear, most of the time progress to carcinomas. This strain is homozygous for the *Pde6b^{del}* allele which leads to retinal degeneration.



Hematological parameters* of 10-week old FVB/NRj mice			Reproductive data*	
Parameters	Male	Female		
Erythrocytes (10 ¹² /l)	9.6 ± 0.8	9.1 ± 0.3	Bigamous mating	
Hematocrit (l/l)	0.50 ± 0.03	0.49 ± 0.02	Litter size at birth	7.89
Hemoglobin (g/dl)	14.2 ± 1.1	14.1 ± 0.4	Weaning %	93
Mean corpuscular volume (fl)	53 ± 1	54 ± 1	Productivity index	1.05
Mean corpuscular rate (pg)	15.0 ± 0.5	15.4 ± 0.5	Sterility %	10
Hemoglobin concentration (g/dl)	29 ± 1	29 ± 1	Gestation time	Between 18 and 20 days
Blood platelets (10 ⁹ /l)	1165 ± 240	1073 ± 219		
Leukocytes (10 ⁹ /l)	9.2 ± 1.5	7.8 ± 1.9		
Neutrophils (10 ⁹ /l)	1.95 ± 0.37	0.55 ± 0.12		
Lymphocytes (10 ⁹ /l)	6.53 ± 1.39	6.55 ± 1.76		
Eosinophils (10 ⁹ /l)	0.21 ± 0.07	0.14 ± 0.07		
Monocytes (10 ⁹ /l)	0.16 ± 0.06	0.08 ± 0.02		
Basophils (10 ⁹ /l)	0.06 ± 0.05	0.07 ± 0.04		

Biochemical blood parameters* of 10-week old FVB/NRj mice		
Parameters	Male	Female
Glucose (g/l)	2.5 ± 0.3	2.5 ± 0.2
Urea (g/l)	0.4 ± 0.0	0.4 ± 0.0
AST (ASAT) (U/l)	141 ± 42	121 ± 41
ALT (ALAT) (U/l)	88 ± 16	50 ± 8
Alkaline phosphatase (U/l)	94 ± 14	104 ± 7
Cholesterolaemia (g/l)	1.6 ± 0.1	1.1 ± 0.2
Triglycerides (g/l)	2.2 ± 0.5	3.8 ± 0.8
Creatinine (mg/l)	4.0 ± 0.0	4.6 ± 0.8

* JANVIER LABS 2013 Data, for an indicative basis



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Main application and research fields

- Immunology
- Oncology
- Transgenesis

Our additional offer



Laboratory Services



Transgenic Services

Our added value

- The « JANVIER LABS Genetic Policy », a specific programme, guarantees homozygosity of autosomal pairs.
- Animals with the SPF or SOPF standards.
- A gentling policy for docile and easy-to-handle animals.
- Optimal stability conditions of our models during shipments, thanks to our dedicated and internal transport service.
- A scientific support with a team of Veterinarians and PhD.

The available scientific bibliography:

Research has been conducted, all over the world, from models bred in our laboratories. Discover our updated bibliography of available studies on our Internet website, heading: Customer Support.