



# RESEARCH MODELS

Rats

Mice

Other rodents

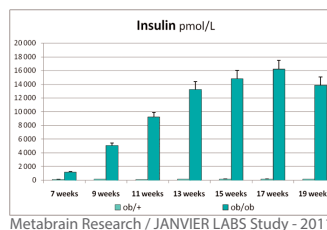
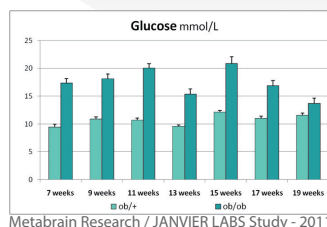
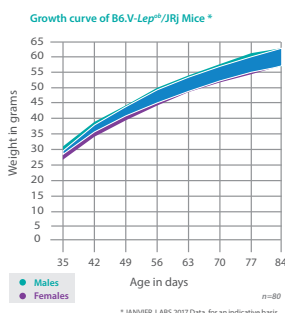


## OBESE Mouse

- **Strain name:** B6.V-Lep<sup>ob</sup>/JRj
- **Type:** Mutant congenic strain
- **Origin:** Bom Holtgard (Denmark) - 1996
- **Colour and related genotype:** Obese black mouse, *a/a, Lep<sup>ob</sup>/Lep<sup>ob</sup>*  
Non obese mouse (control): *a/a, Lep<sup>ob</sup>/+* or *a/a, +/+*
- **Breeding:** Good breeder, mating scheme: heterozygous ♂ x heterozygous ♀ (the homozygous mice are steriles.)

### Description of our model

The **ob** mutation is a spontaneous autosomal recessive mutation on chromosome 6 (leptin gene), it appeared in the V/Le stock at The JACKSON LABORATORY in 1949. The mutation was propagated in the C57BL/6J inbred strain by backcrossing for more than 45 generations. Homozygous mice are identifiable by their obesity at about 4-5 weeks of age. This obesity is characterized by hyperplasia and hypertrophy of adipocytes. It shows polyphagia, a Diabetic syndrome (type 2 diabetes) with hyperglycemia, hyperinsulinemia (increase in the number and size of the islets of Langerhans pancreatic cells β), insulin resistance, scar tissue formation defects, thermoregulation problems, hyperlipemia, increase in hormone production by pituitary and adrenal glands. This diabetic syndrome is genetic-background dependent. On a C57BL/6J background, hyperglycemia is mild and transient; it appears at around 1 month of age and disappears around 5 months of age.



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### Main application and research fields

- Immunology
- Endocrine deficiency
- Gerontology
- Metabolism
- Nutrition
- Obesity
- Type II diabetes (NIDDM)

### Our added value

- The « JANVIER LABS Genetic Policy », a specific programme, the homogeneity of the genetic background, identical to the wild types used as controls.
- Animals with the 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.

### Our additional offer



Laboratory Services



Transgenic Services