



RESEARCH MODELS

Rats

Mice

Other rodents



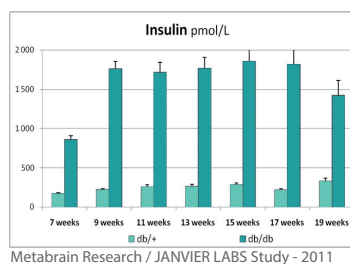
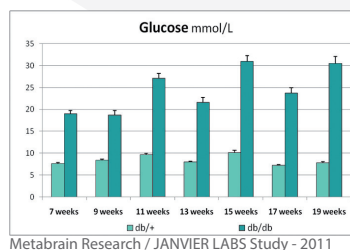
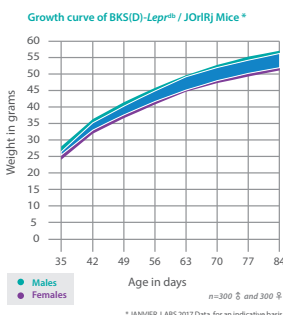
DIABETIC Mouse

- **Strain name:** BKS(D)-*Lepr^{db}*/JOrRj
- **Type:** Mutant congenic strain
- **Origin:** CSAL (Orléans) - 1981 (from The Jackson Laboratory in 1974)
- **Colour and related genotype:**
Obese black mouse: *Lepr^{db}*, related genotype: *a/a, Lepr^{db}/Lepr^{db}*
Non obese black mouse (control): *Lepr^{db}, Dock^{7m}*, related genotype: *a/a, Lepr^{db}/+, Dock^{7m}/+*
Non obese grey mouse (control): *Dock^{7m}*, related genotype: *a/a, Dock^{7m}/Dock^{7m}*
- **Breeding:** Good breeder, mating scheme: heterozygous ♂ x heterozygous ♀ (the homozygous mice are steriles.)

Description of our model

The db mutation arose spontaneously in a colony of the inbred strain C57BL/Ks/J. This mutation was backcrossed by Coleman onto a C57BL/6J background in order to maximize the expression of the mutant *Lepr^{db}* gene. This leads to a compensatory hyperplasia of the β cells in the islets of Langerhans. This gene is located on chromosome 4. The *Dock^{7m}* gene (dilution of coat colour) allows to identify WT individuals for the *Lepr⁺* gene.

This strain is a model of Type II diabetes (NIDDM) and is used in hyperglycemia, hyperinsulinaemia, insulin resistance, obesity-related diabetes, diabetic complications. (delayed scar formation, fertility problems, peripheral neuropathy, cardiomyopathy...), and endocrine disease (defects of lipocytes, hypothalamus, pituitary gland and pancreas) studies.



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Main application and research fields

- Immunology
- Metabolism
- Type II diabetes (NIDDM)
- Type II diabetes-related pathologies: peripheral neuropathy, myocardium pathology, obesity

Our added value

- The « JANVIER LABS Genetic Policy », a specific programme, guarantees 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