



RESEARCH MODELS

Rats

Mice

Other rodents



DBA/1 Mouse

- **Strain name:** DBA/1Jrj
- **Type:** Inbred mouse
- **Colour and related genotype:** Dilute brown mouse, *a/a, Tyrp1^b/Tyrp1^b, Myo5a^d/Myo5a^d* - MHC: Haplotype H2^a
- **Breeding:** Difficult to rear (poor lactation)

Description of our model

The DBA is the oldest of all inbred strains of mice. Its story begins in 1909 when Dr. CC LITTLE began inbreeding and selecting for coat color. From 1929 until 1930 crosses were made among substrains, and several new strains were established including DBA/1 and DBA/2.

DBA/1 and DBA/2 differ at a large number of loci including the MHC (Major Histocompatibility Complex) H2 Haplotype. This heterozygosity is most likely a result of residual heterozygosity in the strain when the substrains were separated. **DBA/1JRj** is widely used as a model for rheumatoid arthritis. Immunisation with type-II collagen results in severe autoimmune polyarthritis. The rates of induced arthritis vary depending on chosen protocol but remain inferior to 100%. This collagen-induced arthritis leads to the same complications as in humans; there is synovial inflammation, cartilage and bone erosion. Furthermore, as is the case with humans, the sensitivity is linked to the expression of molecules belong to the MHC H2 haplotype. **DBA/1Rj** mice have a moderate sensitivity to the development of atherosclerotic lesions of the aorta following an atherogenic diet. Old breeders heart and tongue calcification with age. Females can develop mammary carcinomas.

Important notice: This strain is homozygous for the *Cdh23^{ahl}* mutation which leads to age-related hearing loss. Its expression on a DBA/1 background results in progressive hearing loss with onset after 10 months of age.



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Main application and research fields

- Behaviour
- Immunology: adjuvant-induced arthritis
- Inflammation
- Oncology
- Pharmacology

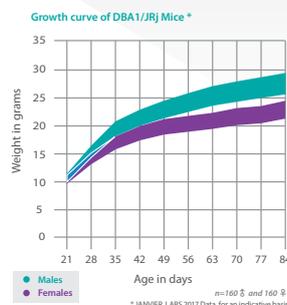
Our additional offer



Laboratory Services



Transgenic Services



Reproductive data*	
Bigamous mating	
Litter size at birth	4.48
Weaning %	86
Productivity index	0.49
Sterility %	3
Gestation time	Between 18 and 20 days

* JANVIER LABS 2011 Data, for an indicative basis

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.