

Rats Mice Other rodents



SHR Rat

- Strain name: SHR/KyoRj
- **Type:** Mutant rat
- Origin: Centre de Recherche Delalande (France) 1978
- Colour and related genotype: Albino rat Tyr^c/Tyr^c MHC: RT1^k
- Breeding: Animal easy to rear

Description of our model

In 1960, OKAMOTO detected within a stock of outbred WISTAR rats from Kyoto University a male with a spontaneous hypertension and a female with high blood pressure. He bred and selected the descendants based on the expression of this hypertension (OKAMAOTO 1969) thus giving us the SHR rat (Spontaneous Hypertensive Rat). At the same time, Wistar animals with "normal" blood pressure were selected to be used as a samegenetic-background normotensive control of the Spontaneously Hypertensive rats: the Wistar Kyoto Rat (WKY).

Due to its insulin resistance, the **SHR** rat is a good model studying hypertension in non-obese humans (Swislocki and Tsuzuki, 1993). This rat is hyperactive; it can be used as a model for attention-deficit hyperactivity disorder – ADHD (Sagvolden *and al.*, 1993). It's widely used for selecting antihypertensive drugs.

SHR rats develop a spontaneous hypertension around 7-15 weeks of age. This hypertension is polygenic in origin with at least 3 genes.



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Main application and research fields

- Atherosclerosis
- Cardiomyopathy
- Hypertension

Our additional offer





Growth curve of SHR/KyoRj RATS * 450 400 350 300 300 300 150 120 120 150 21 28 35 42 49 56 63 70 77 84 91 98 105 112 • Males • Females **Ref & and 24 \$\frac{1}{2}\$

Reproductive data*	
Monogamous mating	9
Litter size at birth	8.39
Weaning %	98
Productivity index	1.8
Sterility %	2
Gestation time	Between 20 and 23 days

* JANVIER LABS 2011 Data, for an indicative basis

Our added value

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

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