



# RESEARCH MODELS

Rats

Mice

Other rodents



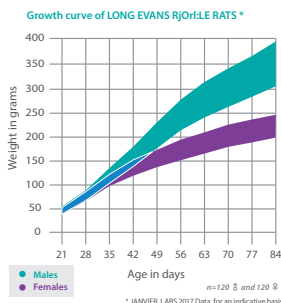
## LONG EVANS Rat

- **Strain name:** RjOrI:LE
- **Type:** Outbred rat
- **Origin:** CSAL (Orleans, from Rockland Farm) - 1966
- **Colour and related genotype:** black hooded rat - *a/a, h/h*
- **Breeding:** Animal with good reproductive performances but not very docile

### Description of our model

This model was developed by Dr Long and Dr Evans in 1915. The **LONG EVANS** rat is the result of a cross between a female albino from the WISTAR Institute and a wild male (*Rattus norvegicus*) captured near Berkeley and offspring selection.

The **LONG EVANS** rat is small and resistant to oncogenesis. This strain is widely used in behavioral, learning, ageing (visual acuity less affected than that of albino strains), addiction – especially to alcohol – studies.



Hematological parameters* of 10-week old LONG EVANS RjOrI:LE rats			Reproductive data*	
Parameters	Male	Female		
Erythrocytes (10 <sup>12</sup> /l)	8.2 ± 0.7	8.1 ± 0.2	Monogamous mating according Robertson system	
Hematocrit (l/l)	0.52 ± 0.05	0.48 ± 0.01	Litter size at birth	10.39
Hemoglobin (g/dl)	15.4 ± 1.1	15.2 ± 0.6	Weaning %	92.4
Mean corpuscular volume (fl)	63 ± 1	60 ± 1	Productivity index	2.66
Mean corpuscular rate (pg)	18.8 ± 0.4	18.8 ± 0.4	Sterility %	2
Hemoglobin concentration (g/dl)	30 ± 1	31 ± 1	Gestation time	Between 20 and 23 days
Blood platelets (10 <sup>9</sup> /l)	716 ± 203	688 ± 141		
Leukocytes (10 <sup>9</sup> /l)	8.7 ± 1.8	6.9 ± 1.0		
Neutrophils (10 <sup>9</sup> /l)	1.32 ± 0.57	0.87 ± 0.25		
Lymphocytes (10 <sup>9</sup> /l)	6.80 ± 1.64	5.49 ± 0.88		
Eosinophils (10 <sup>9</sup> /l)	0.19 ± 0.05	0.18 ± 0.06		
Monocytes (10 <sup>9</sup> /l)	0.20 ± 0.07	0.15 ± 0.04		
Basophils (10 <sup>9</sup> /l)	0.09 ± 0.02	0.09 ± 0.04		

Biochemical blood parameters* of 10-week old LONG EVANS RjOrI:LE rats		
Parameters	Male	Female
Glucose (g/l)	2.9 ± 0.7	2.2 ± 0.2
Urea (g/l)	0.5 ± 0.1	0.4 ± 0.1
AST (ASAT) (UI/l)	129 ± 25	95 ± 14
ALT (ALAT) (UI/l)	67 ± 9	58 ± 10
Alkaline phosphatase (UI/l)	309 ± 26	201 ± 20
Cholesterolaemia (g/l)	0.8 ± 0.1	0.6 ± 0.1
Triglycerides (g/l)	1.5 ± 0.4	0.9 ± 0.4
Creatinine (mg/l)	5.1 ± 0.3	5.0 ± 0.0

\* JANVIER LABS 2011 Data, for an indicative basis



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### Main application and research fields

- Ageing
- Behaviour: learning, stress, locomotion, circadian rhythm, aggressiveness
- Metabolism
- Nutrition
- Toxicology: drug addiction, alcohol

### Our additional offer



Laboratory Services



Transgenic Services

### Our added value

- The « JANVIER LABS Genetic Policy », a specific programme, guarantees less than 1% inbreeding per generation.
- 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.