

LONG EVANS Rat



Origin: CSAL (Orléans, provenant de la Rockland Farm) - 1966

Strain name: RjOrl:LE

Type : Outbred rat

Colour and related genotype: Black hooded rat

Breeding: Animal with good reproductive performances but not very docile

Detailed specifications

Main application and research fields

- Metabolic research
- Behaviour
- Toxicology

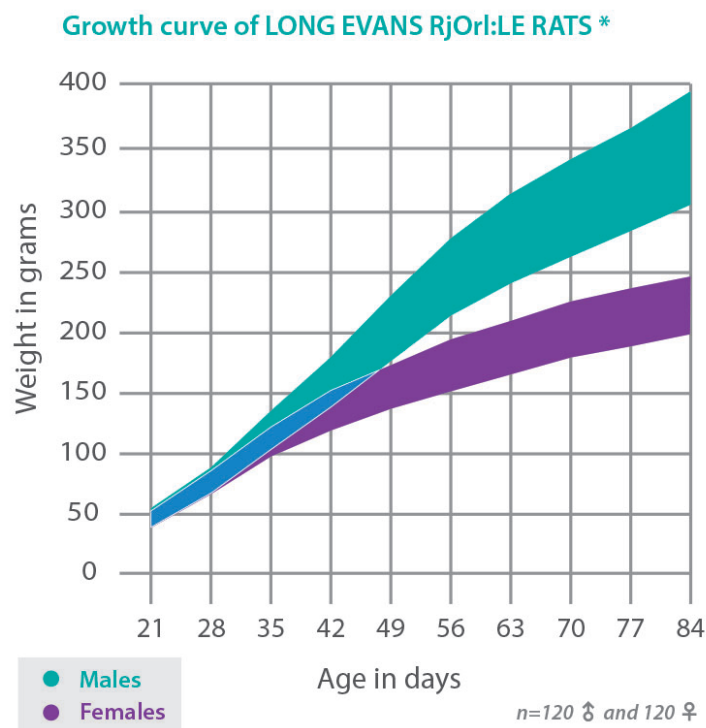
- Ageing

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.

Growth curve



Reproduction data

Monogamous mating according Robertson system

	Mâle	Femelle
Litter size at birth	10,39	
Weaning %	92,4	
Productivity index	2,66	

	Mâle	Femelle
Sterility %	2	
Gestation time	Entre 20 et 23 jours	

JANVIER LABS 2011 Data, for an indicative basis

Biochemical and hematological parameters

Hematological parameters* of 10-week old LONG EVANS RjOrl:LE rats

Parameters	Male	Female
Red blood cells (10 ¹² /l)	8,2 ± 0,7	8,1 ± 0,2
Hematocrit (l/l)	0,52 ± 0,05	0,48 ± 0,01
Mean corpuscular volume (fl)	63 ± 1	60 ± 1
Mean corpuscular rate (pg)	18,8 ± 0,4	18,8 ± 0,4
Hemoglobin concentration (g/dl)	30 ± 1	31 ± 1
Blood platelets (10 ⁹ /l)	716 ± 203	688 ± 141
Leukocytes (10 ⁹ /l)	8,7 ± 1,8	6,9 ± 1,0
Neutrophils (10 ⁹ /l)	1,32 ± 0,57	0,87 ± 0,25
Lymphocytes (10 ⁹ /l)	6,80 ± 1,64	5,49 ± 0,88
Eosinophils (10 ⁹ /l)	0,19 ± 0,05	0,18 ± 0,06
Monocytes (10 ⁹ /l)	0,20 ± 0,07	0,15 ± 0,04
Basophils (10 ⁹ /l)	0,09 ± 0,02	0,09 ± 0,04

Biochemical blood parameters* of 10-week old LONG EVANS RjOrl: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

Parameters	Male	Female
Creatinine (mg/l)	5,1 ± 0,3	5,0 ± 0,0
Monitoring reports		

