



RESEARCH MODELS

Rats

Mice

Other rodents



C3H Mouse

- **Strain name:** C3H/HeNRj
- **Type:** Inbred mouse
- **Origin:** National Institutes of Health (USA) - 1996 (F169)
- **Colour and related genotype:** Agouti mouse, A/A - MHC: Haplotype H2^k
- **Breeding:** Excellent breeder

Description of our model

The **C3H** strain was developed by STRONG in 1920 from a cross of BAGG ALBINO female with DBA male. It was selected for a high incidence of mammary tumours. This sensitivity to mammary tumours is due to an exogenous virus transmitted by the mother's milk (the Mouse Mammary Tumour Virus – MMTV). In 1930, STRONG sent a colony to ANDERVONT who in turn sent one to HESTON (at generation F35). HESTON stock was then transferred to the NIH in 1951 (generation F51). **C3H/HeN** mice are used in a wide range of studies. They are homozygous for the *Pde6b*^{rd1} allele and have an early onset severe retinal degeneration that causes blindness at weaning age. This strain has a high incidence of hepatoma. Even if MMTV is not present, virgin and breeding females can develop mammary tumours. Despite an atherogenic diet, **C3H/HeN** mice do not develop aortic atherosclerosis, in contrast to the C57BL/6J. There is a genetically mediated difference between the **C3H/HeN** and the C3H/HeJ regarding their response to bacterial endotoxin (LPS). This response is linked to the TL4 protein (Toll-like receptor 4; previously *Ips*). C3H/HeN are *Tlr4*^{lps-n} (toll-like receptor 4; normal LPS response), previously *LPS*ⁿ. This strain will have a normal response to an LPS challenge, it is said to be endotoxin-sensitive. Per contra, the C3H/HeJ strain is *Tlr4*^{lps-d}, previously *LPS*^d and said to be endotoxin-resistant.

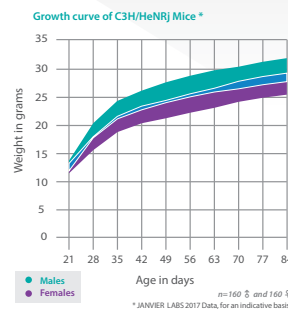
Important: This strain no longer carries MMTV (Mouse Mammary Tumour Virus).



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Main application and research fields

- Cardiovascular research
- General studies
- Inflammation
- Neuro-sensorial biology
- Oncology



Reproductive data*	
Bigamous mating	
Litter size at birth	5.23
Weaning %	90
Productivity index	0.62
Sterility %	2
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.

Our additional offer



Laboratory Services



Transgenic Services