



Research Models  
and Services

Outbred Mice

# ND4 (Swiss Webster) Notre Dame 4

## Origin

The original colony of Swiss mice in the US started from nine mice brought from Lausanne, Switzerland, in 1926 by Clara Lynch. In 1932, to LT Webster, Rockefeller Institute. From Webster to the University of Notre Dame, Notre Dame, Indiana

## Hsd:ND4

From the University of Notre Dame to Harlan Laboratories. Harlan became Envigo in 2015.

## Characteristics

The ND4 mouse is a Swiss-Webster mouse and is used as a general-purpose stock.

## Drugs

Embryo implantation and foetal loss after administration of a herbicide mixture has been described by Cavieres *et al*, 2002). Hypoactivity of the spinal cannabinoid system results in an NMDA-dependent hyperalgesia and thus may participate in the etiology of certain chronic pain states (Richardson *et al*, 1998). Endocrine, immune, and behavioral effects of pesticides have been described by Porter *et al* (1999).

## Genetics

Coat color genes - c : albino.

Other genes are variable (outbred stock).

## References

1. Cavieres MF, Jaeger J, Potter W (2002) Developmental toxicity of a commercial herbicide mixture in mice: I. Effects on embryo implantation and litter size. *Environmental Health Perspectives* 110, 1081-1085.
2. Porter WP, Jaeger JW, Carlson IH (1995) Endocrine, immune, and behavioral effects of aldicarb (carbamate), atrazine (triazine) and nitrate (fertilizer) mixtures at groundwater concentrations. *Toxicol. Ind. Health* 15, 133-150.
3. Richardson JD, Aanonsen L, Hargreaves KM (1998) Hypoactivity of the spinal cannabinoid system results in an NMDA-dependent hyperalgesia. *The Journal of Neuroscience* 18, 451-457.

## Contact us

North America 800.793.7287 EU and Asia [envigo.com/contactus](http://envigo.com/contactus) [info@envigo.com](mailto:info@envigo.com)

