

## List of next generation immunodeficient mice

<b>NOG-IL34 (NOG-hIL-34 Tg)</b>	
Strain name	NOD.Cg-Prkdc<scid> Il2rg<tm1Sug> Tg(CMV-IL34)/Jic
Strain description	Transgenic NOG mice that systemically express the human IL-34 gene. When human hematopoietic stem cells are transferred, human microglia differentiate into the brain. The ability of monocytes to differentiate is also improved in the periphery.
Strain development	To generate the human IL-34 expressing transgenic NOG mouse (NOG-IL-34), a linearized DNA vector (pCMV6-XL4) containing human IL-34 cDNA (Origene Technologies, Inc., Rockville, MD, USA) under the control of a CMV promoter, was microinjected into fertilized eggs obtained by mating NOG and NOD mice. The positive pups were further backcrossed to NOG mice to establish NOG-IL-34 mice.
Research application	To investigate the role of human microglia in neural disease and HIV-1 infection
References	Mathews S. et al. (2019) Human Interleukin-34 facilitates microglia-like cell differentiation and persistent HIV-1 infection in humanized mice. Mol Neurodegener. Mar 5;14(1):12.
URL	<a href="https://pubmed.ncbi.nlm.nih.gov/30832693/">https://pubmed.ncbi.nlm.nih.gov/30832693/</a>
Remarks	-