

List of next generation immunodeficient mice

NOG-IL4 (NOG-hIL-4 Tg)	
Strain name	NOD.Cg-Prkdc<scid> Il2rg<tm1Sug> Tg(CMV-IL4)/Jic
Strain description	Transgenic NOG mice that systemically express the human IL-4 gene. When human PBMC is transferred, a large amount of human T cells are engrafted and GVHD does not occur, so long-term experiments are possible.
Strain development	To generate the NOG-IL-4-Tg mice, human IL-4 cDNA was replaced with the β -galactosidase gene from the pCMV β vector (Clontech, Inc., Mountain View, USA). The vector was digested with XhoI restriction enzyme, and the linearized fragment (~4.2 Kb) was microinjected into pre-nuclear-stage fertilized eggs obtained by mating NOD/Shi and NOD-IL-2R γ (null) mice.
Research application	Antibody production and responses in cancer research
References	Kametani Y. et al. (2017) NOG-hIL-4-Tg, a new humanized mouse model for producing tumor antigen-specific IgG antibody by peptide vaccination. PLoS One. Jun 15;12(6)
URL	https://pubmed.ncbi.nlm.nih.gov/28617827/
Remarks	-