

List of available Next Generation NOG mice

NOG Ins1 KI	
Strain name	NOD.Cg-Prkdc<scid> Il2rg<tm1Sug> Ins1<em1(C96Y)Okt>/Jic
Strain description	NOG mice exhibiting persistent severe hyperglycemia associated with β -cell depletion.
Strain development	The C96Y mutation in Insulin1 gene was introduced into NOG mice using platinum TALEN-mediated genome editing. (Established in collaboration with Dr. Tadashi Okamura of the National Center for Global Health and Medicine Research Institute (NCGM))
Research application	All male and female homozygous exhibited persistent severe hyperglycemia associated with β -cell depletion as early as four weeks of age. These mice will be useful for long-term evaluations of the efficacy and safety of xenogeneic islets without the interference of immune responses. This strain can be maintained using homozygous mice by in vitro fertilization.
References	Nakano K, et al. (2024) A Novel Immunodeficient Hyperglycemic Mouse Carrying the Ins1 Akita Mutation for Xenogeneic Islet Cell Transplantation. Transplantation. 2024 Aug 6.
URL	https://pubmed.ncbi.nlm.nih.gov/39104009/
Remarks	Limited distribution in Japan