List of next generation immunodeficient mice

NOG-DLL1 (NOG-Delta like 1 Tg)	
Strain name	NOD.Cg-Prkdc<scid> Il2rg<tm1Sug> Tg(Col1a1-DLL1)/Jic
Strain description	Osteopetrosis-like model
Strain development	Human DLL1 complementary DNA (2.2 kb) was donated by Dr. T. Saito (Toray Indus- tries, Inc., Kanagawa, Japan). A DNA fragment containing the 2.3-kb osteoblast-specific promoter region for the mouse Col1a1 promoter was provided by Dr. B. de Crombrugghe (University of Texas, Houston, TX, USA). The chicken b-globin 50 HS4 insulator (2.4 kb) was provided by Dr. G. M. Lefevre (National Institute of Health, Bethesda, MD, USA). These DNA fragments of the Col1a1 promoter, insulator, and human DLL1 were inserted into the pCMVb vector (Clontech, Inc., Mountain View, CA, USA). To generate transgenic mice, the vector was digested by the SfiI restriction enzyme, the linearized fragment was injected into NOD mouse embryos, and the offspring with transgenes were further backcross-mated to NOG mice to introduce the scid and IL-2rg (null) genes.
Research application	Analysis of human hematopoiesis in human Delta-like-1 expressed bone marrow micro environment
References	Ito R. et al. (2012) Osteosclerosis and inhibition of human hematopoiesis in NOG mice expressing human Delta-like 1 in osteoblasts. Exp Hematol. 2012 Nov;40(11):953-963.
URL	https://pubmed.ncbi.nlm.nih.gov/22771497/
Remarks	-