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(54) Title: VECTORS, GENETICALLY MODIFIED CELLS, AND GENETICALLY MODIFIED NON-HUMAN ANIMALS COMPRISING THE SAME

(57) Abstract: Provided herein are genetically modified cells and genetically modified non-human animals (e.g., rodents such as rats and mice) comprising: (i) a homozygous null mutation in Rag2 gene; (ii) a homozygous null mutation in IL2rg gene; (iii) a homozygous null mutation in the non-human animal FMS-like tyrosine kinase 3 (Flt3) gene, and (iv) a Flt3 ligand (Flt3l) gene that comprises a non-human animal portion and a human portion operably linked to a Flt3l promoter, and optionally expressing one or more human or humanized polypeptides. Methods and compositions of making and using such genetically modified cells and non-human animals are also provided.



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