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(54) Title: HUMANIZED NON-HUMAN ANIMALS WITH RESTRICTED IMMUNOGLOBULIN HEAVY CHAIN LOCI

(57) Abstract: Mice, embryos, cells, and tissues having a restricted immunoglobulin heavy chain locus and an ectopic sequence encoding one or more ADAM6 proteins are provided, in various embodiments, mice are described that have humanized endogenous immunoglobulin heavy chain loci and are capable of expressing an ADAM6 protein or ortholog or homolog or functional fragment thereof that is functional in a male mouse. Mice, embryos, cells, and tissues having an immunoglobulin heavy chain locus characterized by a single human V_H gene segment, a plurality of human D_H gene segments and a plurality of human J_H gene segments and capable expressing an ADAM6 protein or ortholog or homolog or functional fragment thereof are also provided.



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