

What is claimed is:

1. A mouse comprising, in its germline genome:
exactly two unrearranged human V κ gene segments and five unrearranged human J κ gene segments operably linked to a mouse light chain constant region at the endogenous kappa light chain loci of the mouse, wherein the exactly two unrearranged human V κ gene segments are a human V κ 1-39 gene segment and a human V κ 3-20 gene segment; and
one or more unrearranged human V H gene segments, one or more unrearranged human D H gene segments, and one or more unrearranged human J H gene segments operably linked to a mouse heavy chain constant region at the endogenous heavy chain loci of the mouse;
wherein the unrearranged human heavy chain and kappa light chain gene segments are capable of rearranging and encoding human variable domains of an antibody, and further wherein the mouse does not comprise an endogenous V κ gene segment that is capable of rearranging to form an immunoglobulin light chain variable region.
2. The mouse of claim 1, wherein the mouse light chain constant region gene is a mouse C κ region gene.
3. The mouse of claim 1, wherein the five human J κ gene segments are human J κ 1, J κ 2, J κ 3, J κ 4 and J κ 5.
4. The mouse of claim 1, wherein the one or more human V H gene segments, one or more human D H gene segments, and one or more human J H gene segments are operably linked to a mouse heavy chain constant region gene.
5. The mouse of claim 1, wherein the mouse comprises a functional λ light chain locus.

6. The mouse of claim 1, wherein the mouse does not comprise a functional λ light chain locus.
7. An isolated cell of the mouse of claim 1.
8. The cell of claim 7, wherein the cell is an embryonic stem (ES) cell.
9. A mouse embryo derived from the ES cell of claim 8.
10. The cell of claim 7, wherein the cell is a B cell.
11. A hybridoma made with the B cell of claim 10.
12. The mouse of claim 1, wherein the human Vk1-39 gene segment is a human germline Vk1-39 gene segment and the human Vk3-20 gene segment is a human germline Vk3-20 gene segment.