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(54) Title: NON-HUMAN ANIMALS WITH MODIFIED IMMUNOGLOBULIN HEAVY CHAIN SEQUENCES

(57) Abstract: Non-human animals, e.g., mammals, e.g., mice or rats, are provided comprising an immunoglobulin heavy chain locus that comprises a rearranged human immunoglobulin heavy chain variable region nucleotide sequence. The rearranged human immunoglobulin heavy chain variable region nucleotide sequence may be operably linked to a heavy or light chain constant region nucleic acid sequence. Also described are genetically modified non-human animals comprising an immunoglobulin light chain locus comprising one or more but less than the wild type number of human immunoglobulin light chain variable region gene segments, which may be operably linked to a light chain constant region nucleic acid sequence. Also provided are methods for obtaining nucleic acid sequences that encode immunoglobulin light chain variable domains capable of binding an antigen in the absence of a heavy chain.

