NON-HUMAN ANIMALS HAVING A LIMITED LAMBDA LIGHT CHAIN REPERTOIRE EXPRESSED FROM THE KAPPA LOCUS AND USES THEREOF

ABSTRACT

The present disclosure provides, among other things, genetically modified non-human animals whose germline genome comprises an engineered endogenous immunoglobulin κ light chain locus comprising a single rearranged human immunoglobulin λ light chain variable region operably linked to a non-human Cλ gene segment, where the single rearranged human immunoglobulin λ light chain variable region comprises a human Vλ gene segment and a human Jλ gene segment. All immunoglobulin λ light chains expressed by B cells of the genetically modified non-human animal include human immunoglobulin λ light chain variable domains expressed from the single rearranged human immunoglobulin λ light chain variable region or a somatically hypermutated version thereof. Such animals, tissues from such animals, and cells from such animals represent an effective platform for producing antibodies, e.g., bispecific antibodies.

[Figure 1A]