TARGETED MODIFICATION OF RAT GENOME

ABSTRACT

Compositions and methods are provided for modifying a rat genomic locus of interest using a large targeting vector (LTVEC) comprising various endogenous or exogenous nucleic acid sequences as described herein. Compositions and methods for generating a genetically modified rat comprising one or more targeted genetic modifications in their germline are also provided. Compositions and methods are provided which comprise a genetically modified rat or rat cell comprising a targeted genetic modification in the rat interleukin-2 receptor gamma locus, the rat ApoE locus, the rat Rag2 locus, the rat Ragl locus and/or the rat Rag2/Ragl locus. The various methods and compositions provided herein allows for these modified loci to be transmitted through the germline.

[Figure 2]