

## HUMANIZED C5 AND C3 ANIMALS

### ABSTRACT

Non-human animals comprising a human or humanized C3 and/or C5 nucleic acid sequence are provided as well as methods for using the same to identify compounds capable of modulating the complement system. Non-human animals that comprise a replacement of the endogenous C5 gene and/or C3 gene with a human or humanized C5 gene and/or C3 gene, and methods for making and using the non-human animals, are described. Non-human animals comprising a human or humanized C5 gene under control of non-human C5 regulatory elements is also provided, including non-human animals that have a replacement of non-human C5-encoding sequence with human C5-encoding sequence at an endogenous non-human C5 locus. Non-human animals comprising a human or humanized C3 gene under control of non-human C3 regulatory elements is also provided, including non-human animals that have a replacement of non-human C3 protein-encoding sequence with human or humanized C3 protein-encoding sequence at an endogenous non-human C3 locus. Non-human animals comprising human or humanized C3 and/or C5 sequences, wherein the non-human animals are rodents, *e.g.*, mice or rats, are provided.

[Figure 4]