CLAIMS

1. A method for producing a humanized anti-C1q antibody or an antigen-binding fragment thereof, wherein the method comprises

(a) culturing a host cell comprising a nucleic acid sequence encoding the humanized anti-C1q antibody or antigen-binding fragment under conditions suitable for the expression of the humanized anti-C1q antibody or antigen-binding fragment, and

(b) optionally recovering the humanized anti-C1q antibody or antigen-binding fragment from the host cell or host cell culture medium,

wherein the humanized anti-C1q antibody or antigen-binding fragment comprises:

(i) a heavy chain variable domain, wherein the heavy chain variable domain comprises an amino acid sequence selected from SEQ ID NOs: 1-4, or an amino acid sequence with at least about 95% homology to the amino acid sequence selected from SEQ ID NOs: 1-4 and wherein the heavy chain variable domain comprises the hypervariable regions (HVRs) of SEQ ID NOs: 1-4; and

(ii) a light chain variable domain, wherein the light chain variable domain comprises an amino acid sequence selected from SEQ ID NOs: 5-8, or an amino acid sequence with at least about 95% homology to the amino acid sequence selected from SEQ ID NOs: 5-8 and wherein the light chain variable domain comprises the HVRs of SEQ ID NOs: 5-8.

2. The method of claim 1, comprising prior to (a)

(1) isolating and inserting a nucleic acid sequence encoding the humanized anti-C1q antibody or antigen-binding fragment into one or more vectors, and

(2) introducing the one or more vectors into the host cell.

3. The method of claim 1 or claim 2, wherein the host cell is a prokaryotic cell or a eukaryotic cell, optionally wherein the prokaryotic cell is a yeast cell or *E. coli* or the eukaryotic cell is a mammalian cell, optionally wherein the mammalian cell is a Chinese hamster ovary (CHO) cell.

4. A kit comprising a humanized anti-C1q antibody or an antigen-binding fragment thereof, wherein the humanized anti-C1q antibody or antigen-binding fragment comprises:

(i) a heavy chain variable domain, wherein the heavy chain variable domain comprises an amino acid sequence selected from SEQ ID NOs: 1-4, or an amino acid sequence with at least about 95% homology to the amino acid sequence selected from SEQ ID NOs: 1-4 and wherein the heavy chain variable domain comprises the hypervariable regions (HVRs) of SEQ ID NOs: 1-4; and

(ii) a light chain variable domain, wherein the light chain variable domain comprises an amino acid sequence selected from SEQ ID NOs: 5-8, or an amino acid sequence with at least about 95% homology to the amino acid sequence selected from SEQ ID NOs: 5-8 and wherein the light chain variable domain comprises the HVRs of SEQ ID NOs: 5-8.

5. A kit comprising a humanized anti-C1q antibody, or an antigen-binding fragment thereof produced by the method of any one of claims 1-3.

6. The kit of claim 4 or claim 5, further including instructions comprising a description of administration of the humanized anti-C1q antibody to treat or diagnose a disease associated with complement activation.

7. The kit of any one of claims 4-6, wherein the kit is in a packaging.

8. The method of any one of claims 1-3 or the kit of any one of claims 4-7, wherein the antibody or antigen-binding fragment comprises a human IgG4 heavy chain constant region.

9. The method or kit of any one of the preceding claims, wherein the human IgG4 heavy chain constant region comprises the amino acid sequence of SEQ ID NO: 37.

10. The method or kit of claim 8, wherein the Fc region comprises an amino acid substitution at position 248 and/or position 241 according to Kabat numbering convention.

11. The method or kit of claim 10, wherein the amino acid substitution at position 248 is a leucine to glutamate amino acid substitution.

12. The method or kit of claim 10, wherein the amino acid substitution at position 241 is a serine to proline amino acid substitution.

13. The method of any one of claims 1-3 or the kit of any one of claims 4-7, wherein the antigen-binding fragment is a Fab, F(ab')2 or Fab' fragment.

14. A vector comprising a nucleic acid sequence that encodes a humanized anti-C1q antibody, wherein the anti-C1q antibody comprises:

a heavy chain variable domain comprising an amino acid sequence selected from SEQ ID NOs: 1-4 and a light chain variable domain comprising an amino acid sequence selected from SEQ ID NOs: 5-8.

15. The vector of claim 14, wherein the vector is an expression vector.