CLAIMS

1. A method for inhibiting the alternative pathway of complement activation comprising administering to a subject in need an effective amount of an isolated anti-C3b antibody or antigen-binding fragment thereof that selectively binds to C3b and not to C3 and inhibits the binding of C5 to C3b, wherein said antibody comprises the heavy chain CDRH1, CDRH2 and CDRH3 sequences of SEQ ID NOS 2, 3, and 4, respectively, and the light chain CDRL1, CDRL2 and CDRL3 sequences of SEQ ID NOS 6, 7, and 8, respectively.

2. The method of claim 1 wherein said subject is a human.

3. The method of claim 1 wherein said antibody binds to an epitope including residues of the C3b epitope recognized by antibody S77.

4. The method of claim 1 wherein said antibody binds to the same epitope as antibody S77.

5. The method of claim 1 wherein said antibody competitively inhibits the binding of antibody S77.

6. The method of claim 1 wherein said antibody binds to a C3b epitope comprising residues that are in contact with antibody S77.

7. The method of claim 1 wherein said antibody comprises an antigen binding site comprising antibody S77 residues that are in contact with C3b.

8. The method of claim 1 wherein the antibody or antigen-binding fragment is human, humanized or chimeric.

9. The method of claim 1 wherein said antigen binding fragment is selected from the group consisting of Fab, Fab', $F(ab')_2$, scFv, $(scFv)_2$, dAb, a linear antibody, single-chain antibody molecule, minibody and diabody.

10. The method of claim 9 wherein said antigen binding fragment is a Fab, Fab', $F(ab')_2$, scFv, or $(scFv)_2$ fragment.

11. The method of claim 2 wherein said subject has a complement associated inflammatory disease.

12. The method of claim 2 wherein said complement-associated disorder is a complement-associated eye condition.

13. The method of claim 12 wherein the subject has age-related macular degeneration (AMD) or choroidal neovascularization (CNV).

14. The method of claim 1 wherein the antibody or antigen-binding fragment is antibody YW144.2.43S77 or a Fab fragment thereof.

Claims:

1. An isolated anti-C3b antibody or antigen-binding fragment thereof that selectively binds to C3b and not to C3 and inhibits the binding of C5 to C3b, which is a selective inhibitor of the alternative complement pathway and does not inhibit the classical complement pathway, for use as a medicament,,, wherein said antibody comprises the CDRH1, CDRH2 and CDRH3 sequences of the heavy chain variable domain sequence shown in Fig. 5, and the CDRL1, CDRL2 and CDRL3 sequences of the light chain variable domain shown in Fig. 5,

wherein:

the CDRH1 sequence consists of amino acid residues 31-35 and/or 26-32 of the heavy chain variable domain sequence;

the CDRH2 sequence consists of amino acid residues 50-65 and/or either 52a-55 or 53-55 of the heavy chain variable domain sequence;

the CDRH3 sequence consists of amino acid residues 95-102 and/or 96-101 of the heavy chain variable domain sequence;

the CDRL1 sequence consists of amino acid residues 24-34 and/or 26-32 of the light chain variable domain sequence;

the CDRL2 sequence consists of amino acid residues 50-56 and/or 50-52 of the light chain variable domain sequence; and

the CDRL3 sequence consists of amino acid residues 89-97 and/or 91-96 of the light chain variable domain sequence,

and wherein the amino acid sequence numbering is according to that of Kabat.

2. The antibody or fragment for use according to claim 1 wherein said subject is a human.

3. The antibody or fragment for use according to claim 1 wherein said antibody binds to an epitope including residues of the C3b epitope recognized by antibody S77.

4. The antibody or fragment for use according to claim 1 wherein said antibody binds to the same epitope as antibody S77.

5. The antibody or fragment for use according to claim 1 wherein said antibody competitively inhibits the binding of antibody S77.

6. The antibody or fragment for use according to claim 1 wherein said antibody binds to a C3b epitope comprising residues that are in contact with antibody S77.

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7. The antibody or fragment for use according to claim 1 wherein said antibody comprises an antigen binding site comprising antibody S77 residues that are in contact with C3b.

8. The antibody or fragment for use according to claim 1 wherein the antibody or antigen-binding fragment is human, humanized or chimeric.

9. The antibody or fragment for use according to claim 1 wherein said antigen binding fragment is selected from the group consisting of Fab, Fab', $F(ab')_2$, scFv, $(scFv)_2$, dAb, a linear antibody, single-chain antibody molecule, minibody and diabody.

10. The antibody or fragment for use according to of claim 9 wherein said antigen binding fragment is a Fab, Fab', $F(ab')_2$, scFv, or $(scFv)_2$ fragment.

11. The antibody or fragment for use according to claim 2 wherein said subject has a complement associated inflammatory disease.

12. The antibody or fragment for use according to claim 2 wherein said complement-associated disorder is a complement-associated eye condition.

13. The antibody or fragment for use according to claim 12 wherein the subject has age-related macular degeneration (AMD) or choroidal neovascularization (CNV).

14. The antibody or fragment for use according to claim 1 wherein the antibody or antigen-binding fragment is antibody YW144.2.43S77 or a Fab fragment thereof.

15. The antibody or fragment for use according to claim 2, which is for use in the prevention or treatment of a complement-associated disorder selected from the group consisting of rheumatoid arthritis (RA), acute respiratory distress syndrome (ARDS), remote tissue injury after ischemia and reperfusion, complement activation during cardiopulmonary bypass surgery, dermatomyositis, pemphigus, lupus nephritis and resultant glomerulonephritis and vasculitis, cardioplegia-induced coronary endothelial dysfunction, type II membranoproliferative glomerulonephritis, antiphospholipid syndrome, macular degenerative diseases, such as age-related macular degeneration (AMD), choroidal neovascularization (CNV), uveitis, diabetic and other ischemia-related retinopathies, endophthalmitis, and other intraocular neovascular diseases, such as diabetic macular edema, and asthma.