CLAIMS

1. A method of selecting a combination of antibodies or antigen-binding fragments thereof for use in the treatment or prevention of a SARS-CoV-2 infection, the method, comprising determining that a first antibody or antigen-binding fragment thereof binds to an epitope of the spike protein of SARS-CoV-2 comprising amino acid F486 and/or N487, determining that a second antibody or antigen-binding fragment thereof binds to an epitope of the spike protein of SARS-CoV-2 comprising amino acid G447 and/or K444, and selecting the two antibodies or antigen-binding fragments thereof,

optionally wherein the determining comprises measuring the ability of the first antibody or antigen-binding fragment thereof to bind to a mutant spike protein of SARS-CoV-2 comprising F486A and/or N487A and/or measuring the ability of the second antibody or antigen-binding fragment thereof to bind to a mutant spike protein of SARS-CoV-2 comprising G447R and/or K444A, and wherein the antibody or antigen-binding fragment thereof is not selected if it binds to the mutant protein.

2. A composition comprising the combination of antibodies or antigen-binding fragments thereof selected by the method of claim 1.

3. A composition comprising (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to the ACE2-interface of the receptor binding domain (RBD) of the spike protein of SARS-CoV-2 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to the apex domain of the RBD of the spike protein, optionally wherein the composition further comprises a pharmaceutically acceptable carrier.

4. A composition comprising (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising F486 and/or N487 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds

to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising G447 and/or K444, optionally wherein the composition further comprises a pharmaceutically acceptable carrier.

5. An antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising amino acid F486 and/or N487.

6. An antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising amino acid G447 and/or K444.

7. The antibody or antigen-binding fragment thereof of claim 5 or 6, wherein the antibody or antigen-binding fragment inhibits binding of SARS-CoV-2 to angiotensin converting enzyme 2 (ACE2) and/or wherein the antibody or antigen-binding fragment neutralizes SARS-CoV-2.

8. The antibody or antigen-binding fragment thereof of any one of claims 5-7, wherein the antibody or antigen-binding fragment is humanized.

9. The antibody or antigen-binding fragment thereof of any one of claims 5-8, wherein the antibody or antigen-binding fragment (i) comprises a heavy chain constant region, wherein the heavy chain constant region is selected from the group consisting of human immunoglobulins IgG1, IgG2, IgG3, IgG4, IgA1, and IgA2 heavy chain constant regions, optionally wherein the heavy chain constant region is a human IgG1 and/or (ii) comprises a light chain constant region, wherein the light chain constant region is selected from the group consisting of human immunoglobulins IgGκ and IgGλ light chain constant regions, optionally wherein the light chain constant region is a human IgGκ light chain constant region.

10. The antibody or antigen-binding fragment thereof of any one of claims 5-9, wherein (i) the antibody or antigen-binding fragment further comprises a heavy chain constant region comprising a YTE mutation, optionally wherein the heavy chain constant region is a human IgG1 heavy chain constant region, and a light chain constant region, optionally wherein the light chain constant region is a human IgGκ light chain constant region and/or (ii) wherein the antibody or

antigen-binding fragment further comprises a heavy chain constant region comprising a TM mutation, optionally wherein the heavy chain constant region is a human IgG1 heavy chain constant region, and a ight chain constant region, optionally wherein the light chain constant region is a human IgGκ light chain constant region.

11. The antibody or antigen binding fragment thereof of any one of claims 5-10, which is a full length antibody.

12. The antibody or antigen binding fragment thereof of any one of claims 5-10, which is an antigen binding fragment, wherein the antigen binding fragment comprises a Fab, Fab', F(ab')2, single chain Fv (scFv), disulfide linked Fv, V-NAR domain, IgNar, IgGΔCH2, minibody, F(ab')3, tetrabody, triabody, diabody, single-domain antibody, (scFv)2, or scFv-Fc.

13. The antibody or antigen-binding fragment thereof of any one of claims 5-12, further comprising a detectable label.

14. A method of selecting an antibody or antigen-binding fragment thereof comprising determining that the antibody or antigen-binding fragment thereof binds to an epitope of the spike protein of SARS-CoV-2 comprising amino acid F486 and/or N487 and selecting the antibody or antigen-binding fragment thereof, optionally wherein the determining comprises measuring the ability of the antibody or antigen-binding fragment thereof to bind to a mutant spike protein of SARS-CoV-2 comprising F486A and/or N487A, and wherein the antibody or antigen-binding fragment thereof is not selected if it binds to the mutant protein.

15. An antibody or antigen-binding fragment thereof selected by the method of claim 14.

16. A method of selecting an antibody or antigen-binding fragment thereof comprising determining that the antibody or antigen-binding fragment thereof binds to an epitope of the spike protein of SARS-CoV-2 comprising amino acid G447 and/or K444 and selecting the antibody or antigen-binding fragment thereof, optionally wherein the determining comprises measuring the ability of the antibody or antigen-binding fragment thereof to bind to a mutant spike protein of SARS-CoV-2 comprising G447R and/or K444A, and wherein the antibody or antigen-binding fragment thereof is not selected if it binds to the mutant protein.

17. An antibody or antigen-binding fragment thereof selected by the method of claim 16.

18. A method for inhibiting the binding of SARS-CoV-2 to ACE2 comprising:

(a) contacting the SARS-CoV-2 with the antibody or antigen-binding fragment thereof of any one of claims 5-12 or the composition of any one of claims 2-4, 15, and 17,

(b) contacting the SARS-CoV-2 with (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to the ACE2-interface of the receptor binding domain (RBD) of the spike protein of SARS-CoV-2 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to the apex domain of the RBD of the spike protein, or

(c) contacting the SARS-CoV-2 with (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising F486 and/or N487 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising G447 and/or K444.

19. A method for neutralizing SARS-CoV-2 comprising:

(a) contacting the SARS-CoV-2 with the antibody or antigen-binding fragment thereof of any one of claims 5-12 or the composition of any one of claims 2-4, 15, and 17,

(b) contacting the SARS-CoV-2 with (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to the ACE2-interface of the receptor binding domain (RBD) of the spike protein of SARS-CoV-2 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second

antibody or antigen-binding fragment thereof specifically binds to the apex domain of the RBD of the spike protein, or

(c) contacting the SARS-CoV-2 with (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising F486 and/or N487 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising G447 and/or K444.

20. (a) The antibody or antigen-binding fragment thereof of any one of claims 5-12or the composition of any one of claims 2-4, 15, and 17,

(b) (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to the ACE2-interface of the receptor binding domain (RBD) of the spike protein of SARS-CoV-2 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to the apex domain of the RBD of the spike protein, or

(c) (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising F486 and/or N487 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising G447 and/or K444,

for use in treating or preventing a SARS-CoV-2 infection in a subject.

21. Use of

(a) the antibody or antigen-binding fragment thereof of any one of claims 5-12 or the composition of any one of claims 2-4, 15, and 17,

(b) (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to the ACE2-interface of the receptor binding domain (RBD) of the spike protein of SARS-CoV-2 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to the apex domain of the RBD of the spike protein, or

(c) (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising F486 and/or N487 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising G447 and/or K444,

in the manufacture of a medicament for treating or preventing a SARS-CoV-2 infection in a subject.

22. (a) The antibody or antigen-binding fragment thereof of any one of claims 5-12 or the composition of any one of claims 2-4, 15, and 17,

(b) (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to the ACE2-interface of the receptor binding domain (RBD) of the spike protein of SARS-CoV-2 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to the apex domain of the RBD of the spike protein, or

(c) (i) a first antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the first antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising F486 and/or N487 and (ii) a second antibody or antigen-binding fragment thereof that specifically binds to the spike protein of SARS-CoV-2, wherein the second antibody or antigen-binding fragment thereof specifically binds to an epitope of the spike protein comprising G447 and/or K444,

for use in reducing the viral load in a subject infected with SARS-CoV-2.

23. The antibody or antigen-binding fragment thereof or the composition for use of claim 20 or 22, or the use of claim 21, wherein the subject has been exposed to SARS-CoV-2 or is at risk of exposure to SARS-CoV-2.