CLAIMS:

1. An antibody or antigen-binding fragment thereof comprising:

a V_H CDR1, comprising the sequence of amino acid residues set forth in SEQ ID NO:2;

a V_H CDR2, comprising the sequence of amino acid residues set forth in SEQ ID NO:3;

a V_H CDR3, comprising the sequence of amino acid residues set forth in SEQ ID NO:4;

a V_L CDR1, comprising the sequence of amino acid residues set forth in SEQ ID NO:6;

a V_L CDR2, comprising the sequence of amino acid residues set forth in SEQ ID NO:7; and

a V_L CDR3, comprising the sequence of amino acid residues set forth in SEQ ID NO:8,

wherein the antibody or antigen-binding fragment immunospecifically binds to Respiratory Syncytial Virus (RSV) fusion (F) protein and neutralizes RSV.

2. The antibody or antigen-binding fragment of claim 1, comprising a heavy chain set forth in SEQ ID NO:1 and a light chain set forth in SEQ ID NO:5.

3. The antibody or antigen-binding fragment of claim 1 or 2, comprising a V_H domain, wherein the amino acid sequence of the V_H domain is set forth as amino acids 1-125 of SEQ ID NO:1.

4. The antibody or antigen-binding fragment of any of claims 1-3, comprising a heavy chain, wherein the amino acid sequence of the heavy chain is set forth in SEQ ID NO:1.

5. The antibody or antigen-binding fragment of any of claims 1-4, comprising a V_L domain, wherein the amino acid sequence of the V_L domain is set forth as amino acids 1-107 of SEQ ID NO:5.

6. The antibody or antigen-binding fragment of any of claims 1-5, comprising a light chain, wherein the amino acid sequence of the light chain is set forth in SEQ ID NO:5.

7. The antibody or antigen-binding fragment of any of claims 1-6 that is linked directly or via linker to a multimerization domain or is linked to a polypeptide linker.

8. The antibody or antigen-binding fragment of any of claims 1-7, further comprising a protein transduction domain.

9. The antibody or antigen-binding fragment of claim 8, wherein the protein transduction domain comprises a sequence of amino acids set forth in one of SEQ ID NOS:1529-1600.

10. A multivalent antibody, comprising:

a first antigen-binding portion comprising an antibody or antigen-binding fragment thereof of claim 7 wherein the first antigen-binding portion comprising an antibody or antigen-binding fragment thereof is conjugated to a multimerization domain; and

a second antigen-binding portion comprising an antigen-binding fragment of an antiviral antibody conjugated to a second multimerization domain, wherein:

the first multimerization domain and the second multimerization domain are complementary or the same, whereby the first antigen-binding portion and second antigen-binding portion form a multivalent antibody; and

the first and second antigen binding portions are the same or different.

11. The multivalent antibody of claim 10, wherein the second antigen-binding portion comprises an anti-RSV antibody or antigen-binding fragment thereof.

12. The multivalent antibody of claim 10 or claim 11, wherein the anti-RSV antibody is selected from among palivizumab, motavizumab, AFFF, P12f2, P12f4, P11d4, A1e9, A12a6, A13c4, A17d4, A4B4, A8c7, 1X-493L1, FR H3-3F4, M3H9, Y10H6, DG, AFFF(1), 6H8, L1-7E5, L2-15B10, A13a11, A1h5, A4B4(1), A4B4L1FR-S28R, A4B4-F52S, rsv6, rsv11, rsv13, rsv19, rsv21, rsv22, rsv23, RF-1, RF-2 and antigen-binding fragments thereof or an antibody comprising 58c or sc5 or is an antigen-binding fragment thereof.

13. The multivalent antibody of claim 12, wherein the second antigen-binding portion immunospecifically binds to an antigen of parainfluenza virus (PIV) or human metapneumovirus (hMPV).

14. The multivalent antibody of any of claims 10-13, wherein the multimerization domain is selected from among an immunoglobulin constant region (Fc), a leucine zipper, complementary hydrophobic regions, complementary hydrophilic regions and compatible protein-protein interaction domains.

15. A combination, comprising:

an isolated antibody or antigen-binding fragment of any of claims 1-9 or a multivalent antibody of any of claims 10-14; and

one or both of an antiviral agent and one more additional antiviral antibodies

that differ from the first antibody.

16. The combination of claim 15:

the one or more additional antiviral antibodies is selected from among palivizumab, motavizumab, AFFF, P12f2, P12f4, P11d4, A1e9, A12a6, A13c4, A17d4, A4B4, A8c7, 1X-493L1, FR H3-3F4, M3H9, Y10H6, DG, AFFF(1), 6H8, L1-7E5, L2-15B10, A13a11, A1h5, A4B4(1), A4B4L1FR-S28R, A4B4-F52S, rsv6, rsv11, rsv13, rsv19, rsv21, rsv22, rsv23, RF-1, RF-2 and antigen-binding fragments thereof; and/or

the one or more additional antiviral antibodies is selected from among an antibody or antigen-binding fragment thereof that immunospecifically binds to an antigen of parainfluenza virus (PIV) or human metapneumovirus (hMPV).

17. A method of detecting RSV infection comprising:

(a) assaying the level of RSV antigen in a fluid, cell, or tissue sample using an antibody or antigen-binding fragment of any of claims 1-9;

(b) comparing the assayed level of RSV antigen with a control level whereby an increase in the assayed level of RSV antigen compared to the control level of the RSV antigen is indicative of a RSV infection.

18. A nucleic acid molecule(s) that encodes the antibody or antigen-binding fragment of any of claims 1-9.

19. An isolated cell, comprising the antibody or antigen-binding fragment of any of claims 1-9, or the nucleic acid molecule of claim 18.

20. A method of producing an antibody or antigen-binding fragment thereof, comprising culturing the cell of claim 19 under conditions in which the encoded antibody or antigen binding fragment is expressed.

21. Antibody or antigen-binding fragment of any of claims 1-9 or a multivalent antibody of any of claims 10-14 for use in the treatment or prevention of a viral infection.

CLAIMS:

1. An antibody or antigen-binding fragment thereof comprising:

a V_H CDR1, comprising the sequence of amino acid residues set forth in SEQ ID NO:2 or 1627 or a sequence of amino acids having at least or at least about 80 %, 90 %, 91 %, 92 %, 93 %, 94 %, 95 %, 96 %, 97 %, 98 %, 99 % or more sequence identity to SEQ ID NO:2 or 1627;

a V_H CDR2, comprising the sequence of amino acid residues set forth in SEQ ID NO:3 or a sequence of amino acids having at least or at least about 80 %, 90 %, 91 %, 92 %, 93 %, 94 %, 95 %, 96 %, 97 %, 98 %, 99 % or more sequence identity thereto;

a V_H CDR3, comprising the sequence of amino acid residues set forth in SEQ ID NO:4 or a sequence of amino acids having at least or at least about 80 %, 90 %, 91 %, 92 %, 93 %, 94 %, 95 %, 96 %, 97 %, 98 %, 99 % or more sequence identity thereto;

a V_L CDR1, comprising the sequence of amino acid residues set forth in SEQ ID NO:6 or a sequence of amino acids having at least or at least about 80 %, 90 %, 91 %, 92 %, 93 %, 94 %, 95 %, 96 %, 97 %, 98 %, 99 % or more sequence identity thereto;

a V_L CDR2, comprising the sequence of amino acid residues set forth in SEQ ID NO:7 or a sequence of amino acids having at least or at least about 80 %, 90 %, 91 %, 92 %, 93 %, 94 %, 95 %, 96 %, 97 %, 98 %, 99 % or more sequence identity thereto; and

a V_L CDR3, comprising the sequence of amino acid residues set forth in SEQ ID NO:8 or a sequence of amino acids having at least or at least about 80 %, 90 %, 91 %, 92 %, 93 %, 94 %, 95 %, 96 %, 97 %, 98 %, 99 % or more sequence identity thereto,

wherein the antibody or antigen-binding fragment immunospecifically binds to Respiratory Syncytial Virus (RSV) fusion (F) protein and/or neutralizes RSV.

2. An antibody or antigen-binding fragment thereof that immunospecifically binds to the same epitope on a RSV F protein or on an RSV virion as the antibody of claim 1.

3. An antibody or antigen-binding fragment thereof of claim 1 or claim 2, that immunospecifically binds to the same epitope on a RSV F protein or on a RSV virus as an antibody comprising a heavy chain set forth in SEQ ID NO:1 and/or a light chain set forth in SEQ ID NO:5.

4. The antibody or antigen-binding fragment of any of claims 1-3, comprising a heavy chain set forth in SEQ ID NO:1 and a light chain set forth in SEQ ID NO:5.

5. The antibody or antigen-binding fragment of any of claims 1-4, comprising a V_H domain, wherein the amino acid sequence of the V_H domain is set forth as amino acids 1-125 of SEQ ID NO:1.

6. The antibody or antigen-binding fragment of any of claims 1-5, comprising a heavy chain, wherein the amino acid sequence of the heavy chain is set forth in SEQ ID NO:1.

7. The antibody or antigen-binding fragment of any of claims 1-6, comprising a V_L domain, wherein the amino acid sequence of the V_L domain is set forth as amino acids 1-107 of SEQ ID NO:5.

8. The antibody or antigen-binding fragment of any of claims 1-7, comprising a light chain, wherein the amino acid sequence of the light chain is set forth in SEQ ID NO:5.

9. The antibody or antigen-binding fragment of any of claims 1-8 that is linked directly or via linker to a multimerization domain or is linked to a polypeptide linker.

10. The antibody or antigen-binding fragment of any of claims 1-9, further comprising a protein transduction domain.

11. The antibody or antigen-binding fragment of claim 10, wherein the protein transduction domain comprises a sequence of amino acids set forth in one of SEQ ID NOS:1529-1600.

12. A multivalent antibody, comprising:

a first antigen-binding portion comprising an antibody or antigen-binding fragment thereof of claim 9, wherein the first antigen-binding portion comprising an antibody or antigen-binding fragment thereof is conjugated to a multimerization domain; and

a second antigen-binding portion comprising an antigen-binding fragment of an antiviral antibody conjugated to a second multimerization domain, wherein:

the first multimerization domain and the second multimerization domain are complementary or the same, whereby the first antigen-binding portion and second antigen-binding portion form a multivalent antibody; and

the first and second antigen binding portions are the same or different.

13. The multivalent antibody of claim 12, wherein the second antigen-binding portion comprises an anti-RSV antibody or antigen-binding fragment thereof.

14. The multivalent antibody of claim 12 or claim 13, wherein the anti-RSV antibody is selected from among palivizumab, motavizumab, AFFF, P12f2, P12f4, P11d4, A1e9, A12a6, A13c4, A17d4, A4B4, A8c7, 1X-493L1, FR H3-3F4, M3H9, Y10H6, DG, AFFF(1), 6H8, L1-7E5, L2-15B10, A13a11, A1h5, A4B4(1), A4B4L1FR-S28R, A4B4-F52S, rsv6, rsv11, rsv13, rsv19, rsv21, rsv22, rsv23, RF-1, RF-2 and antigen-binding fragments thereof or an antibody comprising 58c or 5c5 or is an antigen-binding fragment thereof.

15. The multivalent antibody of claim 14, wherein the second antigen-binding portion immunospecifically binds to an antigen of parainfluenza virus (PIV) or human metapneumovirus (hMPV).

16. The multivalent antibody of any of claims 12-15, wherein the multimerization domain is selected from among an immunoglobulin constant region (Fc), a leucine zipper, complementary hydrophobic regions, complementary hydrophilic regions and compatible protein-protein interaction domains.

17. A combination, comprising:

an isolated antibody or antigen-binding fragment of any of claims 1-11 or a multivalent antibody of any of claims 12-16; and

one or both of an antiviral agent and one more additional antiviral antibodies that differ from the first antibody.

18. The combination of claim 17:

the one or more additional antiviral antibodies is selected from among palivizumab,

motavizumab, AFFF, P12f2, P12f4, P11d4, A1e9, A12a6, A13c4, A17d4, A4B4, A8c7, 1X-493L1, FR H3-3F4, M3H9, Y10H6, DG, AFFF(1), 6H8, L1-7E5, L2-15B10, A13a11, A1h5, A4B4(1), A4B4L1FR-S28R, A4B4-F52S, rsv6, rsv11, rsv13, rsv19, rsv21, rsv22, rsv23, RF-1, RF-2 and antigen-binding fragments thereof; and/or

the one or more additional antiviral antibodies is selected from among an antibody or antigen-binding fragment thereof that immunospecifically binds to an antigen of parainfluenza virus (PIV) or human metapneumovirus (hMPV).

19. A method of detecting RSV infection comprising:

(a) assaying the level of RSV antigen in a fluid, cell, or tissue sample using an antibody or antigen-binding fragment of any of claims 1-11;

(b) comparing the assayed level of RSV antigen with a control level whereby an increase in the assayed level of RSV antigen compared to the control level of the RSV antigen is indicative of a RSV infection.

20. A nucleic acid molecule(s) that encodes the antibody or antigen-binding fragment of any of claims 1-11.

21. An isolated cell, comprising the antibody or antigen-binding fragment of any of claims 1-11, or the nucleic acid molecule of claim 20.

22. A method of producing an antibody or antigen-binding fragment thereof, comprising culturing the cell of claim 21 under conditions in which the encoded antibody or antigen binding fragment is expressed.

23. Antibody or antigen-binding fragment of any of claims 1-11 or a multivalent antibody of any of claims 12-16 for use in the treatment or prevention of a viral infection.