

What Is Claimed Is:

CLAIMS

1. An antibody or antigen-binding portion thereof, wherein said antibody or antigen-binding portion thereof specifically binds to an E-DII epitope of Yellow Fever Virus, and wherein the E-DII epitope comprises an asparagine at position 106, a lysine at position 93, and a lysine at position 104 of Yellow Fever Virus E-protein.
2. The antibody or antigen-binding portion thereof of claim 1, wherein the antibody or antigen-binding portion thereof comprises three CDRs of a heavy chain variable region (VH), wherein the VH comprises an amino acid sequence selected from the group consisting of SEQ ID. NOs: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36.
3. The antibody or antigen-binding portion thereof of claim 1 or 2, wherein the antibody or antigen-binding portion thereof comprises three CDRs of a light chain variable region (VL), wherein the VL comprises an amino acid sequence selected from the group consisting of SEQ ID. NOs: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, and 73.
4. The antibody or antigen-binding portion thereof of any one of the preceding claims, wherein the antibody or antigen-binding portion thereof comprises a VH, wherein the VH comprises an amino acid sequence selected from the group consisting of SEQ ID. NOs: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36.
5. The antibody or antigen-binding portion thereof of any of claims 1-4, wherein the antibody or antigen-binding portion thereof comprises a VL, wherein the VL comprises an amino acid sequence selected from the group consisting of SEQ ID. NOs: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, and 73.
6. The antibody or antigen-binding portion thereof of any of the preceding claims,

wherein the antibody or antigen-binding portion thereof is a human antibody or antigen-binding portion thereof, a monoclonal antibody or antigen-binding portion thereof, a chimeric antibody or antigen-binding portion thereof, or a humanized antibody or antigen-binding portion thereof.

7. The antibody or antigen-binding portion thereof of any of the preceding claims, wherein the antibody or antigen-binding portion thereof is a single chain antibody or antigen-binding portion thereof, a F(ab')₂ fragment, a dAb fragment, a Fab fragment, or a Fv fragment.

8. The antibody or antigen-binding portion thereof of any of the preceding claims, wherein the antibody or antigen-binding portion thereof is an isolated antibody or antigen-binding portion thereof.

9. A composition comprising an antibody or antigen-binding portion thereof of any of the preceding claims and a carrier.

10. The composition of claim 9, wherein the composition is a pharmaceutical composition that comprises a pharmaceutically acceptable carrier.

11. An antibody or antigen-binding portion thereof for use in medicament, wherein the antibody or antigen-binding portion thereof is any of claims 1-8.

12. A method for treating Yellow Fever, or a disease or condition associated with Yellow Fever Virus, comprising administering to a subject in need thereof a therapeutically effective amount of an antibody or antigen-binding portion thereof of any of claims 1-8.

13. Use of the antibody or antigen-binding portion thereof of any of claims 1-8 in the manufacture of a medicament for treating a disease or condition associated with Yellow Fever Virus.

14. A nucleic acid comprising a nucleotide sequence encoding an antibody heavy chain variable region (VH), an antibody light chain variable region (VL) or both, wherein the VH and VL is set forth in any of claims 2-7.

15. A vector comprising the nucleic acid of claim 14.
16. The vector of claim 15, wherein the vector is an expression vector.
17. A host cell comprising the nucleic acid of claim 14 or the vector of claims 15 or 16.
18. A method for producing an antibody or antigen-binding portion thereof that binds to Yellow Fever Virus E-protein, comprising:
culturing the host cell of claim 17 under conditions allowing for expression of the antibody.
19. The method of claim 18, further comprising harvesting the antibody or antigen-binding portion thereof.
20. The method of claim 18 or 19, wherein the antibody or antigen-binding portion thereof specifically binds to the E-DII epitope of Yellow Fever Virus E-protein.
21. The method of claim 20, wherein the E-DII epitope comprises residues 93, 104, and 106 of Yellow Fever Virus E-protein.