(vi) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 22,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 25 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 29;
(vii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 12,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 20,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 23,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 26 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 30; or
(viii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 12,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 20,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27.

In another aspect, the present disclosure provides a host cell comprising the polynucleotide as disclosed herein.

In another aspect, the present disclosure provides a method of producing an antibody comprising culturing the host cell as disclosed so that the antibody is produced.

In another aspect, the present disclosure provides a method of detecting the presence of DENV and/or DENV E protein in a biological sample using the pharmaceutical composition as disclosed.

In another aspect, the present disclosure provides a method of selecting subjects eligible for therapy with an anti-DENV antibody using the pharmaceutical composition as disclosed, wherein DENV or DENV E protein is a biomarker of selection for patients.

In another aspect, the present disclosure provides the use of the pharmaceutical composition as disclosed herein in the manufacture of a medicament for treating an individual having a DENV infection, wherein at least one additional therapeutic agent is to be further administered to the individual.

WHAT IS CLAIMED IS:

1. A pharmaceutical composition comprising an isolated antibody that binds to dengue virus (DENV) E protein, wherein the antibody comprises:

(i) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 14,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(ii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(iii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 18,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(iv) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 19,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(v) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 25 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 28;

(vi) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 22,

(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 25 and

(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 29;

(vii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 12,

(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,

(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 20,

(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 23,

(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 26 and

(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 30; or

(viii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 12,

(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,

(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 20,

(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,

(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and

(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27.

2. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for treating an individual having a DENV infection.

3. An isolated polynucleotide encoding an antibody that binds to dengue virus (DENV) E protein, wherein the antibody comprises:

(i) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,

(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 14,

(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,

(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,

(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and

(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(ii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,

(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,

(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,

(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,

(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and

(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(iii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,

(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,

(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 18,

(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,

(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and

(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;

(iv) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,

(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 19,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27;
(v) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 25 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 28;
(vi) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 11,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 17,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 22,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 25 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 29;
(vii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 12,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 20,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 23,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 26 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 30; or
(viii) (a) HVR-H1 comprising the amino acid sequence of SEQ ID NO: 12,
(b) HVR-H2 comprising the amino acid sequence of SEQ ID NO: 15,
(c) HVR-H3 comprising the amino acid sequence of SEQ ID NO: 20,
(d) HVR-L1 comprising the amino acid sequence of SEQ ID NO: 21,
(e) HVR-L2 comprising the amino acid sequence of SEQ ID NO: 24 and
(f) HVR-L3 comprising the amino acid sequence of SEQ ID NO: 27.

4. A host cell comprising the polynucleotide of claim 3.

5. A method of producing an antibody comprising culturing the host cell of claim 4 so that the antibody is produced.

6. A method of detecting the presence of DENV and/or DENV E protein in a biological sample using the pharmaceutical composition of claim 1.

7. A method of selecting subjects eligible for therapy with an anti-DENV antibody using the pharmaceutical composition of claim 1, wherein DENV or DENV E protein is a biomarker of selection for patients.

8. Use of the pharmaceutical composition of claim 1 in the manufacture of a medicament for treating an individual having a DENV infection, wherein at least one additional therapeutic agent is to be further administered to the individual.