## CLAIMS

What is claimed is:

1. A recombinant antibody, comprising a CDR sequence selected from at least one of the following sequences, or an amino acid sequence having at least 95% identity thereto:

CD3 antibody variable region CDR sequences: SEQ ID NO: 1 to SEQ ID NO: 6; and

B7H6 antibody variable region CDR sequences: SEQ ID NO: 7 to SEQ ID NO: 12.

2. The recombinant antibody according to claim 1, comprising CD3 antibody variable regions, wherein the CD3 antibody variable regions comprise:

a light chain variable region as set forth in SEQ ID NO: 13 and a heavy chain variable region as set forth in SEQ ID NO: 14; or

an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 13, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 14.

3. The recombinant antibody according to claim 1, comprising B7H6 antibody variable regions, wherein:

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 20 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 23; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 20, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 23;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 16 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 22; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set

forth in SEQ ID NO: 16, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 22;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 16 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 23; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 16, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 23;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 16 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 24; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 16, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 24;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 16 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 25; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 16, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 25;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 17 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 22; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 17, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence

as set forth in SEQ ID NO: 22;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 17 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 23; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 17, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 23;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 17 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 24; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 17, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 24;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 17 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 25; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 17, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 25;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 19 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 22; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 19, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 22;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in

SEQ ID NO: 19 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 23; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 19, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 23;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 19 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 24; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 19, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 24;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 19 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 25; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 19, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 25;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 20 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 22; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 20, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 22;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 20 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 24; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at

least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 20, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 24;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 20 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 25; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 20, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 25;

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 15 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 26; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 15, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 26; or

the B7H6 antibody variable regions comprise: a light chain variable region as set forth in SEQ ID NO: 18 and a heavy chain variable region of the amino acid sequence as set forth in SEQ ID NO: 21; or an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 18, and an amino acid sequence having at least 70%, at least 75%, at least 80%, at least 85%, at least 90%, at least 95%, or at least 99% identity to an amino acid sequence as set forth in SEQ ID NO: 21.

4. The recombinant antibody according to claim 1, further comprising a linker peptide;

optionally, the linker peptide having an amino acid sequence as set forth in SEQ ID NO: 46.

5. The recombinant antibody according to claim 4, wherein:

an N-end of the linker peptide is linked to a C-end of an CD3 antibody light chain variable

region; and

a C-end of the linker peptide is linked to an N-end of an CD3 antibody heavy chain variable region.

6. The recombinant antibody according to claim 4, wherein:

an N-end of the linker peptide is linked to a C-end of a B7H6 light chain variable region; and

a C-end of the linker peptide is linked to an N-end of the B7H6 heavy chain variable region.

7. The recombinant antibody according to claim 1, further comprising a first Fc region and a second Fc region, wherein at least a portion of the first Fc region and the second Fc region is derived from at least one of a murine antibody, a human antibody, a primate antibody, or a mutant thereof.

8. The recombinant antibody according to claim 7, wherein at least a portion of the first Fc region and the second Fc region is derived from human IgG or a mutant thereof;

optionally, at least a portion of the first Fc region and the second Fc region is derived from human IgG1 or a mutant thereof.

9. The recombinant antibody according to claim 7, wherein the first Fc region has at least one of S384C mutation and T396W mutation as compared to a Fc region of wild-type IgG1.

10. The recombinant antibody according to claim 9, wherein the second Fc region has at least one of Y380C mutation, T397S mutation, L399A mutation, and Y408V mutation as compared to the Fc region of wild-type IgG1.

11. The recombinant antibody according to any one of claims 7 to 10, wherein:

the first Fc region has an amino acid sequence as set forth in SEQ ID NO: 47; and

the second Fc region has an amino acid sequence as set forth in SEQ ID NO: 48.

12. A recombinant antibody, comprising amino acid sequences as set forth in SEQ ID NO: 49 and SEQ ID NO: 63.

13. A nucleic acid, encoding the recombinant antibody according to any one of claims 1 to 12.

14. The nucleic acid according to claim 13, having a nucleotide sequence as set forth in SEQ ID NO: 69 and at least one of nucleotide sequences as set forth in SEQ ID NO: 70 to SEQ ID NO: 87.

15. An expression vector, carrying the nucleic acid molecule according to claim 13 or 14.

16. A recombinant cell, carrying the nucleic acid molecule according to claim 13 or 14, the expression vector according to claim 15, or the recombinant antibody according to any one of claims 1 to 12.

17. A composition, comprising the recombinant antibody according to any one of claims 1 to 12, the nucleic acid molecule according to claim 13 or 14, the expression vector according to claim 15, or the recombinant cell according to claim 16.

18. Use of the recombinant antibody according to any one of claims 1 to 12, the nucleic acid molecule according to claim 13 or 14, the expression vector according to claim 15, the recombinant cell according to claim 16, or the composition according to claim 17 in the manufacture of a medicament for the treatment or prevention of cancer.

19. The use according to claim 18, wherein the cancer comprises at least one of rectal cancer, non-small cell lung cancer, breast cancer, and liver cancer.

20. A medicament for use in the treatment or prevention of cancer, the medicament comprising the recombinant antibody according to any one of claims 1 to 12, the nucleic acid molecule according to claim 13 or 14, the expression vector according to claim 15, the recombinant cell according to claim 16, or the composition according to claim 17.

21. The medicament according to claim 20, wherein the cancer comprises at least one of rectal cancer, non-small cell lung cancer, breast cancer, and liver cancer.

22. A kit, comprising the recombinant antibody according to any one of claims 1 to 12.

The kit according to claim 20, wherein the kit is used for diagnosing at least one of rectal cancer, non-small cell lung cancer, breast cancer, and liver cancer.

23. Use of the recombinant antibody according to any one of claims 1 to 12, the nucleic acid molecule according to claim 13 or 14, the expression vector according to claim 15, the recombinant cell according to claim 16, the composition according to claim 17, or the medicament according to any one of claims 21 and 22 in the treatment or prevention of cancer.

24. The use according to claim 24, wherein the cancer comprises at least one of rectal cancer, non-small cell lung cancer, breast cancer, and liver cancer.