What is claimed is:

1. An anti-TMEM-180 antibody or an antigen-binding fragment thereof, wherein the anti-TMEM-180 antibody comprises the six CDRs indicated below:

heavy chain CDR1: DYWVS (SEQ ID NO: 72);

heavy chain CDR2: EIYPNSGATNFNENFK (SEQ ID NO: 73);

heavy chain CDR3: DGTMGIAYYFDY (SEQ ID NO: 74);

light chain CDR1: KASQNINRYLN (SEQ ID NO: 75);

light chain CDR2: NANSLQT (SEQ ID NO: 76); and

light chain CDR3: LQHNSWPYT (SEQ ID NO: 77).

2. An anti-TMEM-180 antibody or an antigen-binding fragment thereof, wherein the anti-TMEM-180 antibody comprises the six CDRs indicated below:

heavy chain CDR1: SNGVG (SEQ ID NO: 88);

heavy chain CDR2: TIWTGGGTNYNSGVQS (SEQ ID NO: 89);

heavy chain CDR3: EYMGFDY (SEQ ID NO: 90);

light chain CDR1: KASQNVGINVG (SEQ ID NO: 91);

light chain CDR2: WASNRDT (SEQ ID NO: 92); and

light chain CDR3: LQHNSYPRT (SEQ ID NO: 93).

3. An anti-TMEM-180 antibody or an antigen-binding fragment thereof , wherein the anti-TMEM-180 antibody comprises the six CDRs indicated below:

heavy chain CDR1: SNGVG (SEQ ID NO: 96);

heavy chain CDR2: TIWSGGGTNYNSAVQS (SEQ ID NO: 97);

heavy chain CDR3: EEKGFAY (SEQ ID NO: 98);

light chain CDR1: KASQNVGINVG (SEQ ID NO: 99);

light chain CDR2: WASNRDT (SEQ ID NO: 100); and

light chain CDR3: LQHNSYPRA (SEQ ID NO: 101).

4. An anti-TMEM-180 antibody or an antigen-binding fragment thereof, wherein the anti-TMEM-180 antibody contains:

a heavy chain containing the amino acid sequence represented by SEQ ID NO: 78, and

a light chain containing the amino acid sequence represented by SEQ ID NO: 79.

5. An anti-TMEM-180 antibody or an antigen-binding fragment thereof, wherein the anti-TMEM-180 antibody contains:

a heavy chain containing the amino acid sequence represented by SEQ ID NO: 94, and

a light chain containing the amino acid sequence represented by SEQ ID NO: 95.

6. An anti-TMEM-180 antibody or an antigen-binding fragment thereof, wherein the anti-TMEM-180 antibody contains:

a heavy chain containing the amino acid sequence represented by SEQ ID NO: 102, and

a light chain containing the amino acid sequence represented by SEQ ID NO: 103.

7. An anticancer drug for treating colon, brain, and/or breast cancers, the anticancer drug containing, as an active ingredient thereof, the anti-transmembrane protein 180 (TMEM-180) antibody or an antigen-binding fragment thereof according

to any one of claims 1 to 6.

8. An anticancer drug for treating colon, brain, and/or breast cancers, the anticancer drug containing, as an active ingredient thereof, the anti-TMEM-180 antibody according to any one of claims 1 to 6 having a substance having anticancer activity bound thereto, or an antigen-binding fragment thereof.

9. The anti-TMEM-180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6 for use in therapy.

10. Use of the anti-TMEM-180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6 in the manufacture of a medicament for the treatment of colon, brain, and/or breast cancers.

11. The anticancer drug according to any one of claims 7 and 8, the anti-TMEM-180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6 and 9, or the use according to claim 10, wherein the anti-TMEM-180 antibody has one or more N-linked oligosaccharides bound to the Fc region and fucose is not bound to N-acetylglucosamine on the reducing end of the N-linked oligosaccharide.

12. The anticancer drug according to any one of claims 7 and 8, the anti-TMEM-180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6 and 9, or the use according to claim 10, which is targeted at cancer expressing TMEM-180.

13. The anticancer drug according to any one of claims 7 and 8, the anti-TMEM-

180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6 and 9, or the use according to claim 10, which is targeted at colon cancer.

14. The anticancer drug according to any one of claims 7 and 8, the anti-TMEM-180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6 and 9, or the use according to claim 10, which is to be administered concomitantly with vaccine therapy using a composition containing at least one peptide comprising an amino acid sequence represented by SEQ ID NOs: 104 to 170.

15. A nucleic acid encoding any one of the heavy chains CDR1 to CDR3 and light chains CDR1 to CDR3 according to any one of claims 1 to 3.

16. A nucleic acid encoding any one of the heavy chains and light chains according to any one of claims 4 to 6.

17. An expression vector containing the nucleic acid according to claim 15 or 16.

18. A non-human transformant containing the expression vector according to claim 17.

19. A method for producing an anti-TMEM-180 antibody, or an antigen-binding fragment thereof, comprising the steps of:

expressing an antibody in the transformant according to claim 18; and

recovering the antibody.

20. A method for testing of colon, brain, and/or breast cancers, comprising a step of measuring the amount of TMEM-180 in a sample collected from a subject, wherein the amount of TMEM-180 is measured by immunoassay using the anti-TMEM-180 antibody or an antigen-binding fragment thereof according to any one of claims 1 to 6.

21. The method according to claim 20, which is targeted at colon cancer.

22. The method according to any one of claims 20 to 21, which is used to test for recurrence or metastasis following treatment.

23. A kit for testing of colon, brain, and/or breast cancers, the kit containing the anti-TMEM-180 antibody or antigen-binding fragment thereof according to any one of claims 1 to 6.

24. The kit according to claim 23, which is targeted at colon cancer.