CLAIMS

1. An antibody or antigen binding fragment thereof that specifically binds to CD96, wherein the antibody or antigen binding fragment thereof comprises:
   CDRH1 of SEQ ID NO: 115;
   CDRH2 of SEQ ID NO: 145;
   CDRH3 of SEQ ID NO: 147;
   CDRL1 of SEQ ID NO: 97;
   CDRL2 of SEQ ID NO: 99; and
   CDRL3 of SEQ ID NO: 101.

2. The antibody or antigen binding fragment thereof according to claim 1, wherein the antibody or antigen binding fragment thereof comprises:
   a VH region that is at least 90% identical to SEQ ID NO: 86; and
   a VL region that is at least 90% identical to SEQ ID NO: 85.

3. The antibody or antigen binding fragment thereof according to claim 1, wherein the antibody or antigen binding fragment thereof comprises:
   a VH region that is 100% identical to SEQ ID NO: 86; and
   a VL region that is 100% identical to SEQ ID NO: 85.

4. The antibody or antigen binding fragment thereof according to claim 1, wherein the antibody or antigen binding fragment thereof comprises a humanized sequence or a chimeric sequence.

5. The antibody or antigen binding fragment thereof according to claim 1, which is an antibody.

6. The antibody or antigen binding fragment thereof according to claim 3, which is an antibody.

7. The antibody or antigen binding fragment thereof according to claim 5, wherein the antibody further comprises a human wild-type IgG1 Fc domain.

8. The antibody or antigen binding fragment thereof according to claim 6, wherein the antibody further comprises a human wild-type IgG1 Fc domain.

9. A nucleic acid molecule comprising a nucleic acid sequence encoding the antibody or antigen binding fragment thereof according to claim 1.

10. The nucleic acid molecule according to claim 9, wherein the nucleic acid sequence comprises SEQ ID NO: 87 encoding a VH region and SEQ ID NO: 88 encoding a VL region.

11. An expression vector comprising the nucleic acid molecule according to claim 10.

12. A recombinant host cell comprising the expression vector according to claim 11.

13. A cell line engineered to express the antibody or antigen binding fragment thereof according to claim 1.

14. A pharmaceutical composition comprising the antibody or antigen binding fragment thereof according to claim 1, and a pharmaceutically acceptable carrier.

15. A pharmaceutical composition comprising the antibody or antigen binding fragment thereof according to claim 3, and a pharmaceutically acceptable carrier.

16. A pharmaceutical composition comprising the antibody or antigen binding fragment thereof according to claim 7, and a pharmaceutically acceptable carrier.

17. A pharmaceutical composition comprising the antibody or antigen binding fragment thereof according to claim 8, and a pharmaceutically acceptable carrier.

18. The antibody or antigen binding fragment thereof according to claim 2, which is an antibody.

19. The antibody or antigen binding fragment thereof according to claim 18, wherein the antibody further comprises a human wild-type IgG1 Fc domain.

20. A pharmaceutical composition comprising the antibody or antigen binding fragment thereof according to claim 19, and a pharmaceutically acceptable carrier.