CLAIMS

1. An antibody or antigen-binding fragment thereof, comprising

(a) the sequence of SEQ ID NO: 3 as a heavy chain complementarity determining region 3;

(b) the sequence of SEQ ID NO: 1 as a heavy chain complementarity determining region 1;

(c) the sequence of SEQ ID NO: 2 as a heavy chain complementarity determining region 2;

(d) the sequence of SEQ ID NO: 5 as a light chain complementarity determining region 1;

(e) the sequence of SEQ ID NO: 6 as a light chain complementarity determining region 2; and

(f) the sequence of SEQ ID NO: 7 as a light chain complementarity determining region 3.

2. An antibody or antigen-binding fragment thereof according to Claim 1, in which the antibody or antigen-binding fragment thereof comprises a heavy chain variable region comprising the sequence of SEQ ID NO: 4.

3. An antibody or antigen-binding fragment thereof according to Claim 1 or 2, in which the antibody or antigen-binding fragment thereof comprises a light chain variable region comprising the sequence of SEQ ID NO: 8.

4. An antibody or antigen-binding fragment thereof according to Claim 1, in which the antibody or antigen-binding fragment thereof is selected from the group consisting of:

(a) an antibody or antigen binding fragment thereof comprising a heavy chain variable region comprising the sequence of SEQ ID NO: 4 and a light chain variable region comprising the sequence of SEQ ID NO: 8;

(b) an antibody or antigen binding fragment thereof comprising a heavy chain variable region comprising the sequence of SEQ ID NO: 10 and a light chain variable region comprising the sequence of SEQ ID NO: 11; and

(c) an antibody or antigen binding fragment thereof comprising a heavy chain variable region comprising the sequence of SEQ ID NO: 12 and a light chain variable region comprising the sequence of SEQ ID NO: 13.

5. An antibody or an antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof is a-fucosylated.

6. An antibody or antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof is a monoclonal antibody, a Fab fragment, a F(ab')2 fragment, a single chain variable fragment (scFv), a scFv-Fc fragment or a single chain antibody (scAb).

7. An antibody or antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof is a rabbit, mouse, chimeric, humanized or fully human antigen-binding antibody.

8. An antibody or antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof is selected from the group consisting of IgG1, IgG2, IgG3, and IgG4 isotype antibodies.

9. An antibody or antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof is comprised in a bispecific antibody, a multispecific antibody, or an immunoconjugate further comprising a therapeutic or diagnostic agent.

10. An antibody or antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof binds the extracellular domain of human CD38.

11. An antibody or antigen-binding fragment thereof according to any preceding claim, in which the antibody or antigen-binding fragment thereof binds cells expressing human CD38 on their surface.

12. A nucleic acid molecule encoding an antibody or antigen-binding fragment thereof according to any of Claims 1 to 11.

13. A nucleic acid vector comprising a nucleic acid molecule according to Claim 12.

14. A host cell comprising a nucleic acid vector according to Claim 13.

15. A method for producing an antibody or antigen-binding fragment thereof according to any of Claims 1 to 11 by culturing a host cell according to Claim 14.

16. A composition comprising an antibody or antigen-binding fragment thereof according to any of Claims 1 to 11 and a pharmaceutically acceptable carrier or excipient.

17. Use of an antibody according to any of Claims 1 to 11, or of a composition according to Claim 16 in the manufacture of a medicament for treating cancer.

18. Use according to Claim 17, in which the antibody is to be administered simultaneously or sequentially in any order, with a second agent.

19. Use according to Claim 17 or 18, in which the subject has a solid tumor or a haematological cancer.