CLAIMS

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

(a) aCD38-a-309-HCDR3 amino acid sequence (SEQ ID NO: 3) as a variable heavy chain complementarity determining region 3;

(b) aCD38-a-309-HCDR1 amino acid sequence (SEQ ID NO: 1) as a variable heavy chain complementarity determining region 1;

(c) aCD38-a-309-HCDR2 amino acid sequence (SEQ ID NO: 2) as a variable heavy chain complementarity determining region 2;

(d) aCD38-a-309-LCDR1 amino acid sequence (SEQ ID NO: 5) as a variable light chain complementarity determining region 1;

(e) aCD38-a-309-LCDR2 amino acid sequence (SEQ ID NO: 6) as a variable light chain complementarity determining region 2; and

(f) aCD38-a-309-LCDR3 amino acid sequence (SEQ ID NO: 7) as a variable 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 variable heavy chain comprising aCD38-a-309-HCDR123 amino acid sequence (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 further comprises a variable light chain comprising aCD38-a-309-LCDR123 amino acid sequence (SEQ ID NO: 8).

4. An antibody or antigen-binding fragment thereof according to Claim 1, 2 or 3, in which the antibody or an 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 affinity matured variant of an antibody or antigen binding fragment thereof according to any preceding claim.

7. 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 domain antibody, a single chain antibody, a Fab fragment, a F(ab')2 fragment, a single chain variable fragment (scFv), a scFv-Fc fragment, a single chain antibody (scAb), or a single domain antibody.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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 and is a CD38 Modulating Antibody Agent.

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

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

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

16. A method for producing an antibody or antigen-binding fragment thereof according to any of Claims 1 to 12 by culturing a host cell according to Claim 15.

17. A composition comprising an antibody or antigen-binding fragment thereof according to any of Claims 1 to 12 and a pharmaceutically acceptable carrier or excipient.

18. A pharmaceutical composition according to Claim 17, in which the composition is for use in the treatment of cancer.

19. Use of an antibody or antigen-binding fragment thereof according to any of Claims 1 to 12, or of a composition according to Claim 17 in the manufacture of a medicament for treating cancer.

20. A composition for use according to Claim 18 or a use according to Claim 19, in which the antibody is to be administered simultaneously or sequentially in any order, with a second agent.

21. A composition for use according to Claim 18 or 20 or a use according to Claim 19 or 20, in which the subject has a solid tumor or a haematological cancer.