8. An isolated antibody according to claim 6 wherein said light chain variable region comprises SEQ ID NO:12.

9. An isolated antibody according to claim 6 wherein said heavy chain variable region comprises SEQ ID NO:19 and said light chain variable region comprises SEQ ID NO:20.

10. An isolated antibody according to claim 6 wherein the heavy chain comprises SEQ ID NO:34 and the light chain comprises SEQ ID NO:35.

11. An isolated antibody according to claim 1 or 6 further comprising an Fc domain.

12. An isolated antibody according to claim 11 wherein said Fc domain is human.

13. An isolated antibody according to claim 7 wherein said Fc domain is a variant Fc domain.

14. An isolated nucleic acid encoding the heavy chain of claim 2 or 7.

15. An isolated nucleic acid encoding the light chain of claim 3 or 8.

16. A host cell comprising the isolated nucleic acids of claims 14 or 15.

17. A method of producing the antibody of claim 1 or 6 comprising culturing the host cell of claim 16 under conditions wherein said antibody is produced.

18. An in vitro method of inhibiting the biological activity of human CD38 protein (SEQ ID NO: 1) and cynomolgus CD38 (SEQ ID NO:2) by contacting said protein with an antibody that interacts with at least K121, F135, Q139, D141, E239, W241, C275, K276, F284, P291 and E292 of SEQ ID NO:1 and SEQ ID NO:2.

19. Use of an isolated antibody which specifically binds human CD38 (SEQ ID NO:1) and cynomolgus CD38 (SEQ ID NO:2) comprising:

a) a heavy chain variable region comprising:

i) a first CDR comprising SEQ ID NO:3;

ii) a second CDR comprising SEQ ID NO:4;

iii) a third CDR comprising SEQ ID NO:5; and

b) a light chain variable region comprising:

i) a first CDR comprising SEQ ID NO:6;

ii) a second CDR comprising SEQ ID NO:7;

iii) a third CDR comprising SEQ ID NO:8,

in the manufacture of a medicament for treating an autoimmune disease.

20. The use according to claim 19 wherein said autoimmune disease is selected from the group consisting of rheumatoid arthritis, systemic lupus erthematosus, inflammatory bowel disease, ulcerative colitis, and graft-versus-host disease.

8. An isolated antibody according to claim 6 wherein said light chain variable region comprises SEQ ID NO:12.

9. An isolated antibody according to claim 6 wherein said heavy chain variable region comprises SEQ ID NO:19 and said light chain variable region comprises SEQ ID NO:20.

10. An isolated antibody according to claim 6 wherein the heavy chain comprises SEQ ID NO:34 and the light chain comprises SEQ ID NO:35.

11. An isolated antibody according to claim 1 or 6 further comprising an Fc domain.

12. An isolated antibody according to claim 11 wherein said Fc domain is human.

13. An isolated antibody according to claim 7 wherein said Fc domain is a variant Fc domain.

14. An isolated nucleic acid encoding the heavy chain of claim 2 or 7.

15. An isolated nucleic acid encoding the light chain of claim 3 or 8.

16. A host cell comprising the isolated nucleic acids of claims 14 or 15.

17. A method of producing the antibody of claim 1 or 6 comprising culturing the host cell of claim 16 under conditions wherein said antibody is produced.

18. A method of inhibiting the biological activity of human CD38 protein (SEQ ID NO: 1) and cynomolgus CD38 (SEQ ID NO:2) by contacting said protein with an antibody that interacts with at least K121, F135, Q139, D141, E239, W241, C275, K276, F284, P291 and E292 of SEQ ID NO:1 and SEQ ID NO:2.

19. A method of treating an autoimmune disease comprising administering to a patient in need thereof an isolated antibody which specifically binds human CD38 (SEQ ID NO:1) and cynomolgus CD38 (SEQ ID NO:2) comprising:

a) a heavy chain variable region comprising:

i) a first CDR comprising SEQ ID NO:3;

ii) a second CDR comprising SEQ ID NO:4;

iii) a third CDR comprising SEQ ID NO:5; and

b) a light chain variable region comprising:

i) a first CDR comprising SEQ ID NO:6;

ii) a second CDR comprising SEQ ID NO:7;

iii) a third CDR comprising SEQ ID NO:8.

20. A method according to claim 19 wherein said autoimmune disease is selected from the group consisting of rheumatoid arthritis, systemic lupus erthematosus, inflammatory bowel disease, ulcerative colitis, and graft-versus-host disease.