What is claimed is:

1. An isolated antibody, or antigen-binding fragment thereof, that specifically binds human CD48 (SEQ ID NO:384) and blocks the interaction between human CD48 and a CD48 receptor.

2. The antibody or antigen-binding fragment of claim 1, wherein the CD48 receptor is human CD2 (SEQ ID NO:392).

3. The antibody or antigen-binding fragment of claim 1, wherein the CD48 receptor is human 2B4 (SEQ ID NO:390).

4. The antibody or antigen-binding fragment of any one of claims 1 to 3, wherein the antibody or antigen-binding fragment inhibits activation of primary human peripheral blood mononuclear cells (PBMCs) *in vitro*.

5. The antibody or antigen-binding fragment of any one of claims 1 to 4, wherein the antibody or antigen-binding fragment binds an epitope within Ig domain 1 of human CD48 (amino acids 29 to 127 of SEQ ID NO:384).

6. The antibody or antigen-binding fragment of claim 5, wherein the antibody or antigen-binding fragment interacts with one or more amino acids located within amino acids 60 to 125 of SEQ ID NO:384.

7. The antibody or antigen-binding fragment of claim 6, wherein the antibody or antigen-binding fragment interacts with one or more amino acids located within amino acids 60 to 68 of SEQ ID NO:384 and/or amino acids 107 to 125 of SEQ ID NO:384.

8. The antibody or antigen-binding fragment of claim 7, wherein the antibody or antigen-binding fragment interacts with one or more amino acids located within amino acids 60 to 68 of SEQ ID NO:384 and with one or more amino acids located within amino acids 107 to 125 of SEQ ID NO:384.

9. The antibody or antigen-binding fragment of any one of claims 1 to 8, wherein the antibody or antigen-binding fragment comprises the complementarity determining regions (CDRs) of a heavy chain variable region (HCVR) having the amino acid sequence of SEQ ID NO:368 and the CDRs of a light chain variable region (LCVR) having the amino acid sequence of SEQ ID NO:370.

10. The antibody or antigen-binding fragment of claim 9, wherein the antibody or antigen-binding fragment comprises heavy and light chain CDRs having the amino acid sequences of SEQ ID NOs:354, 356, 358, 362, 364 and 366.

11. The antibody or antigen-binding fragment of claim 10, wherein the antibody or antigen-binding fragment comprises an HCVR having the amino acid sequence of SEQ ID NO:368, and an LCVR having the amino acid sequence of SEQ ID NO:370.

12. An isolated antibody, or antigen-binding fragment thereof, that competes with a reference antibody for binding to a polypeptide comprising Ig domain 1 of human CD48 (amino acids 29 to 127 of SEQ ID NO:384), wherein the reference antibody is an antibody or antigen-binding fragment as defined in any one of claims 1 to 11.

13. A pharmaceutical composition comprising the antibody or antigen-binding fragment of any one of claims 1 to 12 and a pharmaceutically acceptable carrier or diluent.

14. The pharmaceutical composition of claim 13, for use in treating a patient afflicted with, diagnosed with, or at risk of being afflicted with a disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor.

15. The pharmaceutical composition of claim 14, wherein the disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor is a disease or disorder selected from the group consisting of celiac disease, systemic lupus erythematosus, ulcerative colitis, and psoriasis.

16. Use of the isolated antibody or antigen-binding fragment of any one of claims 1 to 12, or the pharmaceutical composition of claim 13, in the manufacture of a medicament for use in treating a patient afflicted with, diagnosed with, or at risk of being afflicted with a disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor.

17. The use as defined in claim 16, wherein the disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor is a disease or disorder selected from the group consisting of celiac disease, systemic lupus erythematosus, ulcerative colitis, and psoriasis.

Claims

1. An isolated antibody, or antigen-binding fragment thereof, that specifically binds human CD48 (SEQ ID NO:384) and blocks the interaction between human CD48 and a CD48 receptor, wherein the antibody or antigen binding fragment thereof comprises complementarity determining regions (CDRs) of a heavy chain variable region (HCVR) amino acid sequence having an amino acid sequence of SEQ ID NO:368 and the CDRs of a light chain variable region (LCVR) having an amino acid sequence of SEQ ID NO:370.

2. The antibody or antigen-binding fragment of claim 1, wherein the CD48 receptor is human CD2 (SEQ ID NO:392).

3. The antibody or antigen-binding fragment of claim 1, wherein the CD48 receptor is human 2B4 (SEQ ID NO:390).

4. The antibody or antigen-binding fragment of any one of claims 1 to 3, wherein the antibody or antigen-binding fragment inhibits activation of primary human peripheral blood mononuclear cells (PBMCs) *in vitro*.

5. The antibody or antigen-binding fragment of any one of claims 1 to 4, wherein the antibody or antigen-binding fragment binds an epitope within Ig domain 1 of human CD48 (amino acids 29 to 127 of SEQ ID NO:384).

6. The antibody or antigen-binding fragment of claim 5, wherein the antibody or antigen-binding fragment interacts with one or more amino acids located within amino acids 60 to 125 of SEQ ID NO:384.

7. The antibody or antigen-binding fragment of claim 6, wherein the antibody or antigen-binding fragment interacts with one or more amino acids located within amino acids 60 to 68 of SEQ ID NO:384 and/or amino acids 107 to 125 of SEQ ID NO:384.

8. The antibody or antigen-binding fragment of claim 7, wherein the antibody or antigen-binding fragment interacts with one or more amino acids located within amino acids 60 to 68 of SEQ ID NO:384 and with one or more amino acids located within amino acids 107 to 125 of SEQ ID NO:384.

9. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment comprises heavy and light chain CDRs HCDR1, HCDR2, HCDR3, LCDR1, LCDR2, and LCDR3, respectively, having the amino acid sequences of SEQ ID NOs:354, 356, 358, 362, 364 and 366.

10. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment comprises an HCVR having the amino acid sequence of SEQ ID NO:368, and an LCVR having the amino acid sequence of SEQ ID NO:370.

11. A pharmaceutical composition comprising the antibody or antigen-binding fragment of any one of claims 1 to 10 and a pharmaceutically acceptable carrier or diluent.

12. The pharmaceutical composition of claim 11, for use in treating a patient afflicted with, diagnosed with, or at risk of being afflicted with a disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor.

13. The pharmaceutical composition of claim 12, wherein the disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor is a disease or disorder selected from the group consisting of celiac disease, systemic lupus erythematosus, ulcerative colitis, and psoriasis.

14. Use of the isolated antibody or antigen-binding fragment of any one of claims 1 to 10, or the pharmaceutical composition of claim 11 , in the manufacture of a medicament for use in treating a patient afflicted with, diagnosed with, or at risk of being afflicted with a disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor.

15. The use as defined in claim 14, wherein the disease or disorder that is treatable by blocking the interaction between CD48 and a CD48 receptor is a disease or disorder selected from the group consisting of celiac disease, systemic lupus erythematosus, ulcerative colitis, and psoriasis.