What is claimed:

1. An isolated human antibody or antigen-binding fragment thereof that specifically binds human TNF-like ligand 1A (hTL1A), comprising a heavy chain complementarity determining region 1 (HCDR1), HCDR2 and HCDR3 sequence combination of SEQ ID NO: 20/22/24; and/or a light chain complementarity determining region 1 (LCDR1), LCDR2 and LCDR3 sequence combination of SEQ ID NO: 28/30/32.

2. The antibody or antigen-binding fragment according to claim 1, wherein heavy and light chain CDR sequences, HCDR1/HCDR2/HCDR3/LCDR1/LCDR2/LCDR3, comprise a CDR sequence combination of SEQ ID NO: 20/22/24/28/30/32.

3. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment comprises a heavy chain variable region (HCVR) comprising the amino acid sequence of SEQ ID NO: 18.

4. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment comprises a light chain variable region (LCVR) comprising the amino acid sequence of SEQ ID NO: 26.

5. The antibody or antigen-binding fragment of claim 2, wherein the antibody or fragment does not cross-react with Fhm comprising the amino acid sequence of SEQ ID NO:246.

6. An antibody or antigen-binding fragment thereof which binds the same epitope on hTL1A as an antibody or antigen-binding fragment comprising heavy chain and light chain complementarity determining regions (CDRs) of SEQ ID NO:20/22/24/28/30/32.

7. An isolated human antibody or antigen-binding fragment thereof that specifically binds human TNF-like ligand 1A (hTL1A), comprising a heavy chain variable region (HCVR) comprising an amino acid sequence of SEQ ID NO: 18 and/or a light chain variable region (LCVR) comprising an amino acid sequence of SEQ ID NO: 26.

8. The antibody or antigen-binding fragment of claim 7, comprising a HCVR/LCVR sequence pair of SEQ ID NO: 18/26.

9. An isolated nucleic acid molecule encoding the antibody or antigen-binding fragment of claim 1.

10. An expression vector comprising the nucleic acid molecule of claim 9.

11. An isolated host cell comprising the expression vector of claim 10.

12. A method of producing an anti-hTL1A antibody or antigen-binding fragment thereof, comprising growing the host cell of claim 11 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

13. A pharmaceutical composition comprising the antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment thereof further neutralizes hTL1A, and a pharmaceutically acceptable carrier.

CLAIMS

1. An isolated human antibody or antigen-binding fragment thereof that specifically binds and neutralizes human TNF-like ligand 1A (hTL1A) activity.

2. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment thereof binds to hTL1A having the amino acid sequence of SEQ ID NO:244 with an equilibrium dissociation constant (K_D) of about 700 pM or less, about 300 pM or less, about 80 pM or less, or 50 pM or less.

3. An isolated human antibody or antigen-binding fragment thereof that specifically binds human TNF-like ligand 1A (hTL1A), comprising a heavy chain variable region (HCVR) comprising an amino acid sequence selected from SEQ ID NO: 2, 18, 34, 50, 66, 82, 98, 114, 118, 134, 138, 154, 158, 174, 178, 194, 198, 214, 218 and 234.

4. An isolated human antibody or antigen-binding fragment thereof that specifically binds human TNF-like ligand 1A (hTL1A), comprising a light chain variable region (LCVR) comprising an amino acid sequence selected from SEQ ID NO:10, 26, 42, 58, 74, 90, 106, 116, 126, 136, 146, 156, 166, 176, 186, 196, 206, 216, 226 and 236

5. The antibody or antigen-binding fragment of claim 3 or 4, comprising a HCVR/LCVR sequence pair selected from SEQ ID NO:2/10, 18/26, 34/42, 50/58, 66/74, 82/90, 98/106, 114/116, 118/126, 134/136, 138/146, 154/156, 158/166, 174/176, 178/186, 194/196, 198/206, 214/216, 218/226 and 234/236.

6. The antibody or antigen-binding fragment of any one of claims 3 to 5, comprising a HCVR/LCVR sequence pair of SEQ ID NO: 2/10, 18/26, 174/176 or 234/236.

7. An isolated human antibody or antigen-binding fragment thereof that specifically binds hTL1A, comprising heavy and light chain complementarity determining region (CDR) sequences contained in the HCVR/LCVR sequence pair of the antibody or antigen-binding fragment of claim 5 or 6.

8. An antibody or antigen-binding fragment thereof which competes for binding to hTL1A with the antibody or antigen-binding fragment of claim 6.

9. An antibody or antigen-binding fragment thereof which binds the same epitope on hTL1A that is recognized by the antibody or antigen-binding fragment of claim 6.

10. The antibody or antigen-binding fragment of any one of claims 3 to 9, wherein the antibody or antigen-binding fragment cross-reacts with cynomolgus monkey TL1A (MfTL1A).

11. The antibody or antigen-binding fragment of any one of claims 3 to 10, wherein the antibody or fragment cross-reacts with Fhm having the amino acid sequence of SEQ ID NO:246.

~~12. The antibody or antigen-binding fragment of any one of claims 3 to 10, wherein the antibody~~ or fragment does not cross-reacts with Fhm having the amino acid sequence of SEQ ID NO:246.

13. An isolated nucleic acid molecule encoding the antibody or antigen-binding fragment of any one of claims 1 to 12.

14. An expression vector comprising the nucleic acid molecule of claim 13.

15. A method of producing an anti-hTL1A antibody or antigen-binding fragment thereof, comprising growing a host cell comprising the expression vector of claim 14 under conditions permitting production of the antibody or fragment thereof, and recovering the antibody or fragment thereof so produced.

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

17. The pharmaceutical composition of claim 16, further comprising one or more additional therapeutic agents selected from an immunosuppressant, an anti-inflammatory agent, an analgesic, and an anti-allergy agent.

18. Use of the antibody or antigen-binding fragment thereof according to any one of claims 1 to 12 in the manufacture of a medicament for treating a disease or disorder which is prevented, ameliorated, improved or inhibited by removal, inhibition or reduction of TL1A activity.

19. Use of the pharmaceutical composition of claim 16 in the manufacture of a medicament for treating a disease or disorder which is prevented, ameliorated, improved or inhibited by removal, inhibition or reduction of TL1A activity.

20. The use according to claim 18 or claim 19, wherein said disease or disorder is selected from ulcerative colitis, Crohn's disease, rheumatoid arthritis, multiple sclerosis, diabetes, asthma and allergic lung inflammation.