CLAIMS

1. An isolated antibody that specifically binds to IL-13, comprising one or more of the following:
   (i) a heavy chain variable region (IL13-VH) and a light chain variable region (IL13-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 41; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 42; the CDR-H3 comprises the amino acid sequence of SEQ ID NO:-50; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 53; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 37, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 38;
   (ii) an IL13-VH of SEQ ID NO: 51, and an IL13-VL of SEQ ID NO: 54;
   (iii) an IL13-VH sequence encoded a nucleic acid sequence of SEQ ID NO: 198, and an IL13- VL sequence encoded a nucleic acid sequence of SEQ ID NO: 199;
   (iv) an IL13-VH bearing polypeptide sequence encoded a nucleic acid sequence of SEQ ID NO: 187, and an IL13- VL bearing polypeptide sequence encoded a nucleic acid sequence of SEQ ID NO: 188;
   (v) an IL13-VH sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127196, and an IL13-VL sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127195; or
   (vi) an IL13-VH bearing polypeptide sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127193, and an IL13-VL bearing polypeptide sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127192.

2. The antibody of claim 1, characterized by one or more of the following:
   (i) the antibody binds human IL-13 with a K_D less than a value selected from the group consisting of 10nM, 5nM, 2nM, 1nM, 900pM, 800pM, 700pM, 600pM, 500pM, 400pM, 300pM, 250pM, 200pM, 150pM, 100pM, and 60pM;
   (ii) the antibody binds cynomolgus IL-13, optionally within 1 order of magnitude of the binding K_D of the antibody to human IL-13;
   (iii) the IL-13 IC_{50} is less than 100pM as measured by neutralization of IL-13 pSTAT6 phosphorylation in HT-29 cells;
   (iv) the IL-13 IC_{50} is less than 20pM as measured in a human monocyte assay for neutralization of IL-13 induction of CD23;
   (v) the antibody has a terminal half-life of at least 14 days in cynomolgus monkeys;

(vi) the antibody has a terminal half-life of at least 18 days in TG32 mice;

(vii) the antibody does not bind IL-13 from one or more species selected from the group consisting of dog, rabbit, and mouse.

3. The antibody of claim 1 or claim 2, further comprising an antibody that binds to IL-4 comprising one or more of the following:

(i) a heavy chain variable region (IL4-VH) and a light chain variable region (IL4-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 18; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 2; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 3; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 24; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 12, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 25;

(ii) an IL4-VH sequence of SEQ ID NO: 22, and an IL4-VL of SEQ ID NO: 26;

(iii) an IL4-VH sequence encoded by a nucleic acid sequence of SEQ ID NO: 200, and an IL4-VL sequence encoded by a nucleic acid sequence of SEQ ID NO: 201;

(iv) an IL4-VH bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 188, and an IL4-VL bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 189;

(v) an IL4-VH sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127198, and an IL4-VL sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127197;

(vi) an IL4-VH bearing polypeptide sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127192, and an IL4-VL bearing polypeptide sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127194.

4. The antibody of claim 3, characterized by one or more of the following:

(i) the antibody binds human IL-4 with a K_D less than a value selected from the group consisting of about, 10pM, 5pM, 1pM, and 800fM;

(ii) the antibody binds cynomolgus IL-4;

(iii) the antibody does not bind IL-4 from one or more selected from the groups consisting of dog, sheep, rabbit, rat, and mouse;

(iv) the binding K_D of the antibody to cynomolgus IL-4 is within 1 order of magnitude of the binding K_D of the antibody to human IL-4;

(v) the antibody is characterized by an IC_{50} of less than 10pM in a human monocyte assay for neutralization of IL-4 induction of CD23;

(vi) the antibody has a viscosity of 20cP or less at 25°C at a concentration of 80mg/mL in a Histidine-sucrose pH 5.8 buffer;

(vii) the antibody comprises a lysine at residue 93 in the light chain.

5. The antibody of claim 3 or claim 4, wherein the antibody comprises a first, second, third, fourth, and fifth polypeptide chain, such that

(i) the second and fifth polypeptide chains together form a first Fab domain comprising a first antigen binding site;

(ii) the second and fourth polypeptide chains together form a second Fab domain comprising a second antigen binding site;

(iii) the first and third polypeptide chains together form a third Fab domain comprising a third antigen binding site; and

wherein the first and second polypeptide chains associate together to form an antibody comprising two arms; a dual Fab arm comprising the first Fab domain and the second Fab domain, and a single Fab arm comprising the third Fab domain, wherein

a) the first antigen binding site specifically binds IL-13, the second antibody binding site specifically binds IL-4, and the third antigen binding site specifically binds the at least one additional target;

b) first antigen binding site specifically binds IL-4, the second antibody binding site specifically binds IL-13, and the third antigen binding site specifically binds to the at least one additional target;

c) the first antigen binding site specifically binds IL-4, the second antibody binding site specifically binds the at least one additional target, and the third antigen binding site specifically binds IL-13;

d) wherein the first antigen binding site specifically binds IL-13, the second antibody binding site specifically binds the at least one additional target, and the third antigen binding site specifically binds IL-4;

e) the first antigen binding site specifically binds the at least one additional target, the second antibody binding site specifically binds IL-13, and the third antigen binding site specifically binds IL-4; or

f) the first antigen binding site specifically binds the at least one additional target, the second antibody binding site specifically binds IL-4, and the third antigen binding site specifically binds IL-13.

6. The antibody of any one of claims 3-5, wherein the antibody further comprises an antibody that specifically binds to at least one additional target, comprising a first, second, third, fourth, and fifth polypeptide chain and wherein the identity of the second, fourth, and fifth polypeptide chains is selected from the group consisting of

(i) the second polypeptide chain comprises SEQ ID NO: 145, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 103;

(ii) the second polypeptide chain comprises SEQ ID NO: 107, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 103;

(iii) the second polypeptide chain comprises SEQ ID NO 115, the fourth polypeptide chain comprises SEQ ID NO: 116, and the fifth polypeptide chain comprises SEQ ID NO: 103;

(iv) the second polypeptide chain comprises SEQ ID NO: 121, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 103;

(v) the second polypeptide chain comprises SEQ ID NO: 125, the fourth polypeptide chain comprises SEQ ID NO: 208, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(vi) the second polypeptide chain comprises SEQ ID NO: 130, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(vii) the second polypeptide chain comprises SEQ ID NO: 133, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(viii) the second polypeptide chain comprises SEQ ID NO: 144, the fourth polypeptide chain comprises SEQ ID NO: 136, and the fifth polypeptide chain comprises SEQ ID NO: 143;

(ix) the second polypeptide chain comprises SEQ ID NO: 135, the fourth polypeptide chain comprises SEQ ID NO: 136, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(x) the second polypeptide chain comprises SEQ ID NO: 140, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(xi) the second polypeptide chain comprises SEQ ID NO: 149, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 150;

(xii) the second polypeptide chain comprises SEQ ID NO: 151, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 150;

(xiii) the second polypeptide chain comprises SEQ ID NO 159, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 150;

(xiv) the second polypeptide chain comprises SEQ ID NO: 162, the fourth polypeptide chain comprises SEQ ID NO: 197, and the fifth polypeptide chain comprises SEQ ID NO: 163;

(xv) the second polypeptide chain comprises SEQ ID NO: 154, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 155;

(xvi) the second polypeptide chain comprises SEQ ID NO: 156, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 155;

(xvii) the second polypeptide chain comprises SEQ ID NO: 152, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 98;

(xviii) the second polypeptide chain comprises SEQ ID NO: 153, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 98;

(xix) the second polypeptide chain comprises SEQ ID NO: 157, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 158;

(xx) the second polypeptide chain comprises SEQ ID NO: 160, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 158;

(xxi) the second polypeptide chain comprises SEQ ID NO: 164, the fourth polypeptide chain comprises SEQ ID NO: 197, and the fifth polypeptide chain comprises SEQ ID NO: 122; and

(xxii) the second polypeptide chain comprises SEQ ID NO: 178, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 177;

(xxiii) the second polypeptide chain comprises SEQ ID NO: 179, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 177;

(xxiv) the second polypeptide chain comprises SEQ ID NO 180, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(xxv) the second polypeptide chain comprises SEQ ID NO: 183, the fourth polypeptide chain comprises SEQ ID NO: 116, and the fifth polypeptide chain comprises SEQ ID NO: 177;

(xxvi) the second polypeptide chain comprises SEQ ID NO: 125, the fourth polypeptide chain comprises SEQ ID NO: 207, and the fifth polypeptide chain comprises SEQ ID NO: 122; and

(xxvii) the second polypeptide chain comprises SEQ ID NO: 125, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122.

7. The antibody of any one of the preceding claims, comprising a first, second, third, fourth, and fifth polypeptide chain and wherein

(i) the second and fifth polypeptide chains together form a first Fab domain comprising an IL-13 binding site;

(ii) the second and fourth polypeptide chains together form a second Fab domain comprising an IL-4 binding site;

(iii) the first and third polypeptide chains together form a third Fab domain comprising an at least one additional target binding site, and

wherein the second polypeptide chain comprises from N-terminal, SEQ ID NO: 54, SEQ ID NO: 16, an optional linker comprising SEQ ID NO: 10, SEQ ID NO: 22, SEQ ID NO: 6, a CH2 domain, and a CH3 domain; the fourth polypeptide chain comprises SEQ ID NO: 27; and the fifth polypeptide chain comprises SEQ ID NO: 122.

8. The antibody of any one of the preceding claims, wherein the antibody further comprises an isolated antibody that specifically binds to TSLP, comprising on or more of the following:
   (i) a heavy chain variable region (TSLP-VH) and a light chain variable region (TSLP-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 82; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 83; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 85; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 86; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 88, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 90;
   (ii) a heavy chain variable region (TSLP-VH) and a light chain variable region (TSLP-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 82; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 83; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 85; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 86; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 88, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 211; or
   (iii) a heavy chain variable region (TSLP-VH) and a light chain variable region (TSLP-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 82; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 83; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 85; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 86; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 88, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 212;
   (iv) a TSLP-VH sequence of SEQ ID NO: 92, and a TSLP-VL of SEQ ID NO: 94;
   (v) a TSLP-VH sequence of SEQ ID NO: 92, and a TSLP-VL of SEQ ID NO: 93;

(vi) a TSLP-VH sequence of SEQ ID NO: 92, and a TSLP-VL of SEQ ID NO: 213;

(vii) a TSLP-VH sequence of SEQ ID NO: 92, and a TSLP-VL of SEQ ID NO: 214;

(viii) a TSLP-VH sequence encoded by a nucleic acid sequence of SEQ ID NO: 204; and a TSLP-VL sequence encoded by a nucleic acid sequence of SEQ ID NO: 205,

(ix) a TSLP-VH sequence encoded by a nucleic acid sequence of SEQ ID NO: 204; and a TSLP-VL sequence encoded by a nucleic acid sequence of SEQ ID NO: 217;

(x) a TSLP-VH sequence encoded by a nucleic acid sequence of SEQ ID NO: 204; and a TSLP-VL sequence encoded by a nucleic acid sequence of SEQ ID NO: 218;

(xi) a TSLP-VH bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 192; and a TSLP-VL bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 193;

(xii) a TSLP-VH bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 192; and a TSLP-VL bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 193;

(xiii) a TSLP-VH bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 192; and a TSLP-VL bearing polypeptide sequence encoded by a nucleic acid sequence of SEQ ID NO: 193;

(xiv) a TSLP-VH sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127200, and a TSLP-VL sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127199; or

(xv) a TSLP-VH bearing polypeptide sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127202, and a TSLP-VL bearing polypeptide sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127201.

9. The antibody of claim 8, wherein the antibody is characterized by one or more of

(i) an IC_{50} of less than 10pM in a TARC production bioassay in human peripheral blood monocytes;

(ii) a melting temperature of 68°C;

(iii) wherein the pH3.4 hold Δ%HMMS is less than 5, such that the pH3.4 hold Δ%HMMS is defined as the difference between the percentage of high molecular weight species due to degradation after 5 hours of incubation of the antibody at room temperature at pH3.4 and the percentage of high molecular weight species due to degradation after 5 hours of incubation of the antibody at room temperature at pH 7.2;

(iv) an anti-TSLP bioactivity of an IC_{50} of less than 10 pM as measured a TARC production bioassay in human primary PBMCs;

(v) a viscosity of 20 cP at a concentration of at least 100 mg/mL in a buffer of 20 mM Histidine, 8.5% sucrose, 0.05 mg/mL EDTA pH 6.0;

(vi) a score of less than 2% high molecular mass species when determined by analytical size-exclusion chromatography (aSEC);

(vii) a score of less than 12 in an affinity-capture self-interaction nanoparticle spectroscopy (AC SINS) assay;

(viii) an IC_{50} of less than 15pM in a human TSLP neutralization in a TARC production bioassay in human primary PBMCs;

(ix) an IC_{50} of less than 35pM in a cynomolgus TSLP neutralization assay.

10. The antibody of claim 9, wherein

a) the IL-4 binding domain comprises a heavy chain variable region (IL4-VH) and a light chain variable region (IL4-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 18; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 2; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 3; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 24; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 12, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 25, and

b) the IL-13 binding domain comprises a heavy chain variable region (IL13-VH) and a light chain variable region (IL13-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 41; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 42; the CDR-H3 comprises the amino acid sequence of SEQ ID NO:-50; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 53; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 37, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 38; and

wherein:

a) the TSLP binding domain comprises a heavy chain variable region (TSLP-VH) and a light chain variable region (TSLP-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 82; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 83; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 85; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 86; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 88, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 90; OR

b) the TSLP binding domain comprises a heavy chain variable region (TSLP-VH) and a light chain variable region (TSLP-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 82; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 83; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 85; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 86; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 87, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 211; OR

c) the TSLP binding domain comprises a heavy chain variable region (TSLP-VH) and a light chain variable region (TSLP-VL), wherein the CDR-H1 comprises the amino acid sequence of SEQ ID NO: 82; the CDR-H2 comprises the amino acid sequence of SEQ ID NO: 83; the CDR-H3 comprises the amino acid sequence of SEQ ID NO: 85; the CDR-L1 comprises the amino acid sequence of SEQ ID NO: 86; the CDR-L2 comprises the amino acid sequence of SEQ ID NO: 87, and the CDR-L3 comprises the amino acid sequence of SEQ ID NO: 212.

11. The antibody of claim 9 or claim 10, wherein the antibody comprises a first, second, third, fourth, and fifth polypeptide chain, such that the second and fifth polypeptide chains together form a first Fab domain comprising a first antigen binding site; the second and fourth polypeptide chains together form a second Fab domain comprising a second antigen binding site; and the first and third polypeptide chains together form a third Fab domain comprising a third antigen binding site, and wherein the identity of the first, second, third, fourth, and fifth polypeptide chains is selected from the group consisting of

(i) the first polypeptide chain comprises SEQ ID NO: 165, the second polypeptide chain comprises SEQ ID NO: 130, the third polypeptide chain comprises SEQ ID NO: 99, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(ii) the first polypeptide chain comprises SEQ ID NO: 146, the second polypeptide chain comprises SEQ ID NO: 149, the third polypeptide chain comprises SEQ ID NO: 109, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 150;

(iii) the first polypeptide chain comprises SEQ ID NO: 112, the second polypeptide chain comprises SEQ ID NO: 151, the third polypeptide chain comprises SEQ ID NO: 196, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 150;

(iv) the first polypeptide chain comprises SEQ ID NO: 112, the second polypeptide chain comprises SEQ ID NO 159, the third polypeptide chain comprises SEQ ID NO: 196, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 150;

(v) the first polypeptide chain comprises SEQ ID NO: 161, the second polypeptide chain comprises SEQ ID NO: 162, the third polypeptide chain comprises SEQ ID NO: 98, the fourth polypeptide chain comprises SEQ ID NO: 197, and the fifth polypeptide chain comprises SEQ ID NO: 163;

(vi) the first polypeptide chain comprises SEQ ID NO: 146, the second polypeptide chain comprises SEQ ID NO: 154, the third polypeptide chain comprises SEQ ID NO: 109, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 155;

(vii) the first polypeptide chain comprises SEQ ID NO: 112, the second polypeptide chain comprises SEQ ID NO: 156, the third polypeptide chain comprises SEQ ID NO: 196, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 155;

(viii) the first polypeptide chain comprises SEQ ID NO: 146, the second polypeptide chain comprises SEQ ID NO: 152, the third polypeptide chain comprises SEQ ID NO: 109, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 98;

(ix) the first polypeptide chain comprises SEQ ID NO: 112, the second polypeptide chain comprises SEQ ID NO: 153, the third polypeptide chain comprises SEQ ID NO: 196, the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 98;

(x) the first polypeptide chain comprises SEQ ID NO: 112, the second polypeptide chain comprises SEQ ID NO: 157, the third polypeptide chain comprises SEQ ID NO: 196,

the fourth polypeptide chain comprises SEQ ID NO: 109, and the fifth polypeptide chain comprises SEQ ID NO: 158;

(xi) the first polypeptide chain comprises SEQ ID NO: 146, the second polypeptide chain comprises SEQ ID NO: 160, the third polypeptide chain comprises SEQ ID NO: 109, the fourth polypeptide chain comprises SEQ ID NO: 196, and the fifth polypeptide chain comprises SEQ ID NO: 158; and

(xii) the first polypeptide chain comprises SEQ ID NO: 161, the second polypeptide chain comprises SEQ ID NO: 164, the third polypeptide chain comprises SEQ ID NO: 98, the fourth polypeptide chain comprises SEQ ID NO: 197, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(xiii) the first polypeptide chain comprises SEQ ID NO: 165, the second polypeptide chain comprises SEQ ID NO: 130, the third polypeptide chain comprises SEQ ID NO: 215, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122; and

(xiv) the first polypeptide chain comprises SEQ ID NO: 165, the second polypeptide chain comprises SEQ ID NO: 130, the third polypeptide chain comprises SEQ ID NO: 216, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122;

(xv) the first polypeptide chain comprises a sequence encoded by a nucleic acid according to SEQ ID NO: 192, the second polypeptide chain comprises a sequence encoded by a nucleic acid according to SEQ ID NO: 188, the third polypeptide chain comprises a sequence encoded by a nucleic acid according to SEQ ID NO: 193, the fourth polypeptide chain comprises a sequence encoded by a nucleic acid according to SEQ ID NO: 187, and the fifth polypeptide chain comprises a sequence encoded by a nucleic acid according to SEQ ID NO: 122; and

(xvi) the first polypeptide chain comprises a sequence encoded by a nucleic acid corresponding to the ATCC deposit PTA-127202, the second polypeptide chain comprises a sequence encoded by a nucleic acid corresponding to the ATCC deposit PTA-127192, the third polypeptide chain comprises a sequence encoded by a nucleic acid corresponding to the ATCC deposit PTA-127201, the fourth polypeptide chain comprises a sequence encoded by a nucleic acid corresponding to the ATCC deposit PTA-127194, and the fifth polypeptide chain comprises a sequence encoded by a nucleic acid corresponding to the ATCC deposit PTA-127193.

12. The antibody of any one of claims 9-11, wherein

(i) the TSLP binding portion comprises the TSLP-VH of SEQ ID NO: 92, and the TSLP -VL of SEQ ID NO: 94;

(ii) the IL-4 binding portion comprises a IL4-VH of SEQ ID NO: 22, and a IL4-VL of SEQ ID NO: 26; and

(iii) the IL-13 binding portion comprises the IL13-VH of SEQ ID NO: 51, and the IL13-VL of SEQ ID NO: 54.

13. The antibody of any one of claims 9-12, comprising a first, second, third, fourth, and fifth polypeptide chain and wherein

(i) the second and fifth polypeptide chains together form a first Fab domain comprising an IL-13 binding site;

(ii) the second and fourth polypeptide chains together form a second Fab domain comprising an IL-4 binding site;

(iii) the first and third polypeptide chains together form a third Fab domain comprising an TSLP binding site; and

wherein the first polypeptide chain comprises SEQ ID NO: 165, the second polypeptide chain comprises SEQ ID NO: 130, the third polypeptide chain comprises SEQ ID NO: 99, the fourth polypeptide chain comprises SEQ ID NO: 27, and the fifth polypeptide chain comprises SEQ ID NO: 122.

14. The antibody of any one of claims 9-13, wherein the antibody is characterized by one or more of:

(i) a viscosity of less than 20 cP at concentrations of at least 100 mg/mL in a buffer of 20 mM Histidine, 8.5% sucrose, 0.05 mg/mL EDTA pH 6.0;

(ii) a viscosity of less than 12 cP at concentrations of at least 50 mg/m in a buffer of 20 mM Histidine, 8.5% sucrose, 0.05 mg/mL EDTA pH 6.0;

(iii) a terminal half-life of at least 12 days in cynomolgus monkeys;

(iv) a terminal half-life of at least 18 days in TG-32 mice;

(v) the antibody binds human IL-4 with an affinity constant of less than 220pM as measured by SPR;

(vi) the antibody binds human IL-13 with an affinity constant of less than 220pM as measured by SPR;

(vii) the antibody binds human IL-12 with an affinity constant of less than 130pM as measured by SPR;

(viii) the antibody binds human IL-23 with an affinity constant of less than 100pM as measured by SPR;

(ix) the antibody binds to human IL-4 with a binding affinity of less than 1pM, as measured by KinExA in a fixed antigen assay in PBS;

(x) the antibody binds to cynomolgus IL-13 with a binding affinity of less than 2pM, as measured by KinExA in a fixed antigen assay in PBS;

(xi) an IC_{50} of less than 12pM as measured in a human monocyte assay for neutralization of IL-4 induction of CD23;

(xii) an IC_{50} of less than 12pM as measured in a human monocyte assay for neutralization of cynomolgus monkey IL-4 induction of CD23;

(xiii) an IC_{50} of less than 12pM as measured in a human monocyte assay for neutralization of cynomolgus monkey IL-13 induction of CD23;

(xiv) an IC_{50} of less than 45pM as measured in a human monocyte assay for neutralization of IL-13 induction of CD23.

15. Use of the antibody of any one of claims 1-14, in the manufacture of a medicament for the treatment of one or more selected from the group consisting of atopic dermatitis, asthma, COPD, food allergy, allergic rhinitis, eosinophilic esophagitis, chronic rhinosinusitis with nasal polyps, alopecia areata, prurigo nodularis, keloids, bullous pemphigoid, chronic urticaria, IPF, scleroderma, systemic sclerosis, and fungal keratitis, and non-alcoholic steatohepatitis (NASH), cancer, bladder cancer, breast cancer, clear cell kidney cancer, head/neck squamous cell carcinoma, lung squamous cell carcinoma, malignant melanoma, non-small-cell lung cancer (NSCLC), ovarian cancer, pancreatic cancer, prostate cancer, renal cell carcinoma, small-cell lung cancer (SCLC), triple negative breast cancer, urothelial cancer, acute lymphoblastic leukemia (ALL), acute myeloid leukemia (AML), chronic lymphocytic leukemia (CLL), chronic myeloid leukemia (CML), diffuse large B-cell lymphoma (DLBCL), follicular lymphoma, Hodgkin's lymphoma (HL), mantle cell lymphoma (MCL), multiple myeloma (MM), myeloid cell leukemia-1 protein (Mcl-1), myelodysplastic syndrome (MDS), non-Hodgkin's lymphoma (NHL), or small lymphocytic lymphoma (SLL); Heme malignancy; acute lymphoblastic leukemia (ALL), acute myeloid leukemia (AML), chronic lymphocytic leukemia (CLL), chronic myeloid leukemia (CML), diffuse large B-cell lymphoma (DLBCL), EBV-positive DLBCL, primary mediastinal large B-cell lymphoma, T-cell/histiocyte-rich large B-cell lymphoma, follicular lymphoma, Hodgkin's

lymphoma (HL), mantle cell lymphoma (MCL), multiple myeloma (MM), myeloid cell leukemia-1 protein (Mcl-1), myelodysplastic syndrome (MDS), non-Hodgkin's lymphoma (NHL), and small lymphocytic lymphoma (SLL).

16. A pharmaceutical composition comprising a therapeutically effective amount of the antibody of any one of claims 1-14 and a pharmaceutically acceptable carrier.

17. An isolated nucleic acid selected from the group consisting of:

(i) encoding an IL4-VH, an IL4-VL, or both, of an antibody that binds IL-4, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 200, the nucleic acid sequence of SEQ ID NO: 201, or both;

(ii) encoding an IL4-VH bearing polypeptide, an IL4-VL bearing polypeptide, or both, of an antibody that binds IL-4, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 188, the nucleic acid sequence of SEQ ID NO: 189, or both;

(iii) encoding an IL4-VH, an IL4-VL, or both, of an antibody that binds IL-4, and wherein the nucleic acid comprises: the nucleic acid sequence of a sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127198, and a sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127197, or both;

(iv) encoding an IL4-VH bearing polypeptide, an IL4-VL bearing polypeptide, or both, of an antibody that binds IL-4, and wherein the nucleic acid comprises: the nucleic acid sequence of a plasmid deposited at the ATCC and having ATCC Accession No. PTA-127192, and a plasmid deposited at the ATCC and having ATCC Accession No. PTA-127194, or both;

(v) encoding an IL13-VH, an IL13-VL, or both, of an antibody that binds IL-13, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 198, the nucleic acid sequence of SEQ ID NO: 199, or both;

(vi) encoding an IL13-VH bearing polypeptide, an IL13-VL bearing polypeptide, or both, of an antibody that binds IL-13, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 187, the nucleic acid sequence of SEQ ID NO: 188, or both;

(vii) encoding an IL13-VH, an IL13-VL, or both, of an antibody that binds IL-13, and wherein the nucleic acid comprises: the nucleic acid sequence of a sequence

encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127196, and a sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127195, or both;

(viii) encoding an IL13-VH bearing polypeptide, an IL13-VL bearing polypeptide, or both, of an antibody that binds IL-13, and wherein the nucleic acid comprises: the nucleic acid sequence of a plasmid deposited at the ATCC and having ATCC Accession No. PTA-127193, and a plasmid deposited at the ATCC and having ATCC Accession No. PTA-127192, or both;

(ix) encoding a TSLP-VH, a TSLP-VL, or both, of an antibody that binds TSLP, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 204, the nucleic acid sequence of SEQ ID NO: 205, or both;

(x) encoding a TSLP-VH bearing polypeptide, a TSLP-VL bearing polypeptide, or both, of an antibody that binds TSLP, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 192, the nucleic acid sequence of SEQ ID NO: 193, or both;

(xi) encoding a TSLP-VH, a TSLP-VL, or both, of an antibody that binds TSLP, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 204, the nucleic acid sequence of SEQ ID NO: 217, or both;

(xii) encoding a TSLP-VH, a TSLP-VL, or both, of an antibody that binds TSLP, and wherein the nucleic acid comprises: the nucleic acid sequence of SEQ ID NO: 204, the nucleic acid sequence of SEQ ID NO: 218, or both;

(xiii) encoding a TSLP-VH, a TSLP-VL, or both, of an antibody that binds TSLP, and wherein the nucleic acid comprises: the nucleic acid sequence of a sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127200, and a sequence encoded by the plasmid deposited at the ATCC and having ATCC Accession No. PTA-127199, or both;

(xiv) encoding a TSLP-VH bearing polypeptide, a TSLP-VL bearing polypeptide, or both, of an antibody that binds TSLP, and wherein the nucleic acid comprises: the nucleic acid sequence of a plasmid deposited at the ATCC and having ATCC Accession No. PTA-127202, and a plasmid deposited at the ATCC and having ATCC Accession No. PTA-127201, or both.

18. A vector comprising the polynucleotide of claim 17.

19. An isolated host cell comprising the polynucleotide of claim 17, or the vector of claim 18.

20. A method of producing an isolated antibody, comprising culturing the host cell of claim 19 under conditions that result in production of the antibody, and recovering the antibody.

21. The antibody of any one of claims 1-14, for use in therapy.