the patent claims below. Covered examples of the disclosure are defined by the claims, not this summary. This summary is a high-level overview of various aspects of the disclosure and introduces some of the concepts that are described and illustrated in the present document and the accompanying figures. This summary is not intended to identify key or essential features of the claimed subject matter, nor is it intended to be used in isolation to determine the scope of the claimed subject matter. The subject matter should be understood by reference to appropriate portions of the entire specification, any or all figures and each claim. Some of the exemplary examples of the present disclosure are discussed below.

[0005a] In one aspect, disclosed herein is an antibody or antigen-binding fragment thereof that specifically binds human ILT7, the antibodies or antigen-binding fragments comprising: (1) as defined by Kabat, (a) a light chain variable region (VL) comprising VL CDR1, VL CDR2, and VL CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, and 13, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VL CDRs; and/or (b) a heavy chain variable region (VH) comprising VH CDR1, VH CDR2, and VH CDR3 having the amino acid sequences of SEQ ID NOs: 14, 15, and 16, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VH CDRs; or (2) as defined by Chothia, (a) a VL comprising VL CDR1, VL CDR2, and VL CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, and 13, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VL CDRs; and/or (b) a VH comprising VH CDR1, VH CDR2, and VH CDR3 having the amino acid sequences of SEQ ID NOs: 17, 18, and 16, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VH CDRs.

[0005b] In another aspect, disclosed herein is a polynucleotide encoding a polypeptide of the antibody or antigen-binding fragment as disclosed herein.

[0005c] In another aspect, disclosed herein is a vector comprising the polynucleotide as disclosed herein.

[0005d] In another aspect, disclosed herein is a host cell comprising the polynucleotide, or the vector as disclosed herein, optionally wherein the host cell: (1) overexpresses N-acetylglucosaminyltransferase III (GnTIII); (2) lacks a-1,6-fucosyltransferase (FUT8); or (3) has a low fucose content, or any combination of (1)-(3).

[0005e] In another aspect, disclosed herein is a method of making an antibody or antigen-binding fragment thereof that specifically binds human ILT7, the method comprising culturing the host cell as disclosed herein in a culture under conditions that allow expression of the antibody or antibody fragment, optionally further comprising isolating the antibody from the culture.

[0005f] In another aspect, disclosed herein is a pharmaceutical composition comprising a therapeutically effective amount of the antibody or antigen-binding fragment as disclosed herein, and a pharmaceutically acceptable carrier.

[0005g] In another aspect, disclosed herein is an antibody or antigen-binding fragment as disclosed herein for use in therapy.

[0005h] In another aspect, disclosed herein is a use of the antibody or antigen-binding fragment as disclosed herein in the manufacture of a medicament for: (i) reducing Type I IFN; (ii) suppressing or depleting pDCs; or (iii) reducing autoimmunity, in a subject in need thereof, optionally wherein the subject has an autoimmune disease, or wherein the subject is a human.

[0005i] In another aspect, disclosed herein is a use of the antibody or antigen-binding fragment as disclosed herein in the manufacture of a medicament for treating an autoimmune disease associated with Type I IFN or pDCs, optionally wherein the subject is a human, or wherein the autoimmune disease is SLE.

[0006] Provided herein are antibodies or antigen-binding fragments thereof that specifically bind human ILT7, the antibodies or antigen-binding fragments comprising: (1) as defined by Kabat, (a) a light chain variable region (VL) comprising VL CDR1, VL CDR2, and VL CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, and 13, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VL CDRs; and/or (b) a heavy chain variable region (VH) comprising VH CDR1, VH CDR2, and VH CDR3 having the amino acid sequences of SEQ ID NOs: 14, 15, and 16, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VH CDRs; or (2) as defined by Chothia, (a) a VL comprising VL CDR1, VL CDR2, and VL CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, and 13, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VL CDRs; and/or (b) a VH comprising VH CDR1, VH CDR2, and VH CDR3 having the amino acid sequences of SEQ ID NOs: 17, 18, and 16,

respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VH CDRs.

[0007] In some examples, the antibodies or antigen-binding fragments provided herein comprise VL CDR1, VL CDR2, VL CDR3, VH CDR1, VH CDR2 and VH CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, 13, 14, 15, and 16, respectively, as defined by Kabat. In some examples, the antibodies or antigen-binding fragments provided herein comprise VL CDR1, VL CDR2, VL CDR3, VH CDR1, VH CDR2 and VH CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, 13, 17, 18, and 16, respectively, as defined by Chothia.

[0008] Provided herein are also antibodies or antigen-binding fragments thereof that specifically bind human ILT7, the antibodies or antigen-binding fragments comprising: (a) a

VL having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of SEQ ID NO: 9; and/or (b) a VH having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of SEQ ID NO: 10. In some examples, the antibodies or antigen-binding fragments provided herein comprise a VL and a VH having the amino acid sequences of SEQ ID NOs: 9 and 10, respectively.

[0009] Provided herein are also antibodies or antigen-binding fragments thereof that specifically bind human ILT7, the antibodies or antigen-binding fragments comprising (a) a VL comprising VL CDR1, VL CDR2, and VL CDR3 from a VL having the amino acid sequence of SEQ ID NO: 9; and/or (b) a VH comprising VH CDR1, VH CDR2, and VH CDR3 from a VH having the amino acid sequence of SEQ ID NO: 10.

[0010] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein are chimeric antibodies or antigen-binding fragments, humanized antibodies or antigen-binding fragments, or human antibodies or antigen-binding fragments.

[0011] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein are humanized antibodies or antigen-binding fragments. In some examples, the humanized anti-ILT7 antibodies or antigen-binding fragments comprise: (a) a VL having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to an amino acid sequence selected from the group consisting of SEQ ID NOs: 19-22; and/or (b) a VH having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to an amino acid sequence selected from the group consisting of SEQ ID NOs: 23-28.

[0012] In some examples, the humanized anti-ILT7 antibodies or antigen-binding fragments comprise a VL and a VH having the amino acid sequences of (1) SEQ ID NOs: 19 and 23, respectively; (2) SEQ ID NOs: 19 and 24, respectively; (3) SEQ ID NOs: 19 and 25, respectively; (4) SEQ ID NOs: 19 and 26, respectively; (5) SEQ ID NOs: 19 and 27, respectively; (6) SEQ ID NOs: 19 and 28, respectively; (7) SEQ ID NOs: 20 and 23, respectively; (8) SEQ ID NOs: 20 and 24, respectively; (9) SEQ ID NOs: 20 and 25, respectively; (10) SEQ ID NOs: 20 and 26, respectively; (11) SEQ ID NOs: 20 and 27, respectively; (12) SEQ ID NOs: 20 and 28, respectively; (13) SEQ ID NOs: 21 and 23, respectively; (14) SEQ ID NOs: 21 and 24, respectively; (15) SEQ ID NOs: 21 and 25, respectively; (16) SEQ ID NOs: 21 and 26, respectively; (17) SEQ ID NOs: 21 and 27,

respectively; (18) SEQ ID NOs: 21 and 28, respectively; (19) SEQ ID NOs: 22 and 23, respectively; (20) SEQ ID NOs: 22 and 24, respectively; (21) SEQ ID NOs: 22 and 25, respectively; (22) SEQ ID NOs: 22 and 26, respectively; (23) SEQ ID NOs: 22 and 27, respectively; or (24) SEQ ID NOs: 22 and 28, respectively.

[0013] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein are selected from the group consisting of a Fab, a Fab′, a $F(ab')_2$, a Fv, a scFv, a $(scFv)_2$, a single domain antibody (sdAb), and a heavy chain antibody (HCAb). In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein can be IgG1 antibodies, IgG2 antibodies, IgG3 antibodies, or IgG4 antibodies.

[0014] In some examples, the anti-ILT7 antibodies provided herein are IgG1 antibodies. In some examples, the anti-ILT7 IgG1 antibodies provided herein comprise a light chain constant region (CL) having at least 85% sequence identity to kappa CL (Cκ; SEQ ID NO: 29). In some examples, the anti-ILT7 IgG1 antibodies provided herein comprise a light chain constant region (CL) having at least 85% sequence identity to lambda CL (Cλ; SEQ ID NO: 30).

[0015] In some examples, the anti-ILT7 IgG1 antibodies provided herein comprise a heavy chain constant region (CH) having at least 85% sequence identity to an amino acid sequence selected from the group consisting of SEQ ID NOs: 31 and 40-44.

[0016] In some examples of the anti-ILT7 IgG1 antibodies provided herein, the heavy chain constant region (CH) comprises a wild-type IgG1 CH, or comprises at least one amino acid mutation that enhances ADCC (antibody-dependent cellular cytotoxicity) or ADCP (antibody-dependent cellular phagocytosis) of the antibody. In some examples, the CH region of the IgG1 antibodies provided herein has an amino acid substitution at L234, L235, G236, S239, F243, H268, D270, R292, S298, Y300, V305, K326, A330, I332, E333, K334, P396, or any combination thereof, numbered according to the EU Index. In some examples, the CH region of the IgG1 antibodies provided herein has an amino acid substitution that is L234Y, L235Q, L235V, G236A, G236W, S239D, S239M, F243L, H268D, D270E, R292P, S298A, Y300L, V305I, K326D, A330M, A330L, I332E, E333A, K334A, K334E, or P396L, or any combination thereof, numbered according to the EU Index. In some examples of the anti-ILT7 IgG1 antibodies provided herein, the CH region is modified by amino acid substitutions selected from the group consisting of (i) S298A, E333A, and K334A; (ii) S239D and I332E; (iii) S239D, A330L, and I332E; (iv) G236A; (v)

G236A, S239D, and I332E; (vi) G236A, A330L, and I332E; (vii) G236A, S239D, A330L, and I332E; (viii) F243L, R292P, Y300L, V305I, and P396L; (ix) L235V, F243L, R292P, Y300L, and P396L; (x) L234Y, L235Q, G236W, S239M, H268D, D270E, and S298A; and (xi) D270E, K326D, A330M, and K334E, numbered according to the EU Index. In some examples, the CH region has an amino acid sequence selected from the group consisting of SEQ ID NOs: 45-64.

[0017] In some examples of the anti-ILT7 IgG1 antibodies provided herein, the Fc is afucosylated.

[0018] Provided herein are also antibodies or antigen-binding fragments that compete with an antibody or antigen-binding fragment described herein for binding to human ILT7.

[0019] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein are bispecific antibodies or multispecific antibodies.

[0020] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein are monoclonal antibodies or antigen-binding fragments thereof.

[0021] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein (1) bind to human ILT7 with a K_D of 500 nM or less, as measured by SPR; (2) do not specifically bind to LILR family member LILRA1, LILRA2/ILT1, LILRA3/ILT6, LILRA5/ILT11, LILRA6/ILT8, LILRB1/ILT2, LILRB2/ILT4, LILRB3/ILT5, LILRB4/ILT3, or LILB5; (3) inhibit interferon alpha (IFNα) release by peripheral blood mononuclear cells (PBMCs); (4) selectively bind to plasmacytoid dendritic cells (pDCs) in human PBMC; (5) exhibit natural killer cell (NK)-dependent ADCC activity against ILT7-expressing cells; (6) exhibit neutrophil-dependent ADCC activity against ILT7-expressing cells; or (7) exhibit macrophage-dependent ADCP activity against ILT7-expressing cells; or any combination of (1)-(7).

[0022] Also provided herein are anti-ILT7 antibodies or antigen-binding fragments thereof that (1) bind to human ILT7 with a K_D of 500 nM or less, as measured by SPR; (2) do not specifically bind to LILR family member LILRA1, LILRA2/ILT1, LILRA3/ILT6, LILRA5/ILT11, LILRA6/ILT8, LILRB1/ILT2, LILRB2/ILT4, LILRB3/ILT5, LILRB4/ILT3, or LILB5; (3) inhibit IFNα release by PBMCs; (4) selectively bind to pDCs in human PBMCs; (5) exhibit NK-dependent ADCC activity against ILT7-expressing cells; (6) exhibit neutrophil-dependent ADCC activity against ILT7-expressing cells; or (7) exhibit

macrophage-dependent ADCP activity against ILT7-expressing cells; or any combination of (1)-(7).

[0023] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein (1) inhibit IFNα release by CpG-stimulated PBMCs *in vitro* with an EC50 of 1 nM or less; (2) exhibit NK-dependent ADCC activity against ILT7-expressing cells with an EC50 of 0.01 nM or less; (3) exhibit neutrophil-dependent ADCC activity against ILT7-expressing cells with an EC50 of 100 nM or less; (4) exhibit macrophage-dependent ADCP activity against ILT7-expressing cells with an EC50 of 10 nM or less; or (5) exhibit macrophage-dependent ADCP activity against ILT7-expressing cells with a maximum phagocytic index of 20% or higher; or any combination of (1)-(5).

[0024] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein (1) inhibit IFNα release by PBMCs with an EC50 ranging from 0.01 nM to 0.1 nM; (2) exhibit NK-dependent ADCC activity against ILT7-expressing cells with an EC50 ranging from 0.001 nM to 0.01 nM; (3) exhibit neutrophil-dependent ADCC activity against ILT7-expressing cells with an EC50 ranging from 1 nM to 50 nM; (4) exhibit macrophage-dependent ADCP activity against ILT7-expressing cells with an EC50 ranging from 0.5 nM to 5 nM; or (5) exhibit macrophage-dependent ADCP activity against ILT7-expressing cells with a maximum phagocytic index ranging from 20% to 80%; or any combination of (1)-(5).

[0025] In some examples, the anti-ILT7 antibodies or antigen-binding fragments provided herein exhibit neutrophil-dependent ADCC activity.

[0026] Provided herein are also polynucleotides encoding a polypeptide of the anti-ILT7 antibodies or antigen-binding fragments provided herein. Provided herein are also vectors comprising the polynucleotide described herein.

[0027] Provided herein are also host cells comprising the polynucleotide described herein, or the vector described herein. In some examples, the host cells described herein (1) overexpress N-acetylglucosaminyltransferase III (GnTIII), (2) lack a-1,6-fucosyltransferase (FUT8), or (3) have a low fucose content, or any combination of (1)-(3).

[0028] Provided herein are also methods of making the anti-ILT7 antibodies or antigen-binding fragments described herein, the methods comprising culturing the host cell described

herein under conditions that allow expression of the antibody or antibody fragment. In some examples, the methods provided herein comprises isolating the antibody from the culture.

[0029] Provided herein are also pharmaceutical compositions comprising a therapeutically effective amount of the anti-ILT7 antibodies or antigen-binding fragments described herein and a pharmaceutically acceptable carrier.

[0030] Provided herein are also methods of reducing Type I interferon (IFN) in a subject in need thereof, the method comprising administering to the subject a therapeutically effective amount of the anti-ILT7 antibodies or antigen-binding fragments described herein. In some examples, the Type I interferon is IFNα.

[0031] Provided herein are also methods of suppressing or depleting pDCs in a subject in need thereof, the method comprising administering to the subject a therapeutically effective amount of the anti-ILT7 antibodies or antigen-binding fragments described herein.

[0032] Provided herein are also methods of reducing autoimmunity in a subject in need thereof, the method comprising administering to the subject an effective amount of the anti-ILT7 antibodies or antigen-binding fragments described herein.

[0033] In some examples of the methods provided herein, the subject has an autoimmune disease.

[0034] Provided herein are also methods of treating an autoimmune disease associated with Type I IFN or pDCs in a subject in need thereof, the method comprising administering to the subject a therapeutically effective amount of the anti-ILT7 antibodies or antigen-binding fragments described herein.

[0035] In some examples, the autoimmune disease is systemic lupus erythematosus (SLE).

[0036] In some examples, the methods provided herein further comprise administering an additional therapy to the subject.

[0037] In some examples of the methods provided herein, the subject is a human.

[0038] In some examples, provided herein are uses of the anti-ILT7 antibodies or antigen-binding fragments described herein in reducing Type I IFN. Provided herein are also uses of the anti-ILT7 antibodies or antigen-binding fragments described herein for the

preparation of a medicament for reducing Type I IFN. In some examples of the uses provided herein, the Type I IFN is IFNα.

[0039] In some examples, provided herein are uses of the anti-ILT7 antibodies or antigen-binding fragments described herein in suppressing or depleting pDCs. Provided herein are also uses of the anti-ILT7 antibodies or antigen-binding fragments described herein for the preparation of a medicament for suppressing or depleting pDCs.

[0040] In some examples, provided herein are uses of the anti-ILT7 antibodies or antigen-binding fragments described herein in reducing autoimmunity. In some examples, provided herein are uses of the anti-ILT7 antibodies or antigen-binding fragments described herein for the preparation of a medicament for reducing autoimmunity.

[0041] In some examples, provided herein are uses of the anti-ILT7 antibodies or antigen-binding fragments described herein in treating an autoimmune disease associated with Type I IFN or pDCs. In some examples, provided herein are uses of the anti-ILT7 antibodies or antigen-binding fragments described herein for the preparation of a medicament for treating an autoimmune disease associated with Type I IFN or pDCs. In some examples, the autoimmune disease is SLE.

BRIEF DESCRIPTION OF DRAWINGS

[0042] **FIG. 1** provides ELISA results showing the binding of ILT7 chimeric antibodies, reference antibody (Tab1) and negative control antibody (hIgG1) to human ILT7 protein.

[0043] **FIGs. 2A-2B** provides flow cytometry results showing the binding of ILT7 chimeric antibodies, reference antibody (Tab1) and negative control antibody (hIgG1) to 293F-human ILT7 cells (FIG. 2A) and CHOK1-cynomolgus ILT7 cells (FIG. 2B).

[0044] **FIG. 3** provides representative results of IFNα release assay on PBMCs stimulated with CpG. The inhibitory activities of ILT7 chimeric antibodies on IFNα release were measured; results from reference antibody (Tab1) and negative control antibody (hIgG1) were also shown.

[0045] **FIGs. 4A-4B** provide flow cytometry results showing the binding of humanized antibodies of cmAb12 (Hu12) and reference antibody (Tab1) to 293F-human ILT7 cells (FIG. 4A) and CHOK1-cynomolgus ILT7 cells (FIG. 4B).

WHAT IS CLAIMED IS:

1. An antibody or antigen-binding fragment thereof that specifically binds human ILT7, the antibodies or antigen-binding fragments comprising:

(1) as defined by Kabat,

(a) a light chain variable region (VL) comprising VL CDR1, VL CDR2, and VL CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, and 13, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VL CDRs; and/or

(b) a heavy chain variable region (VH) comprising VH CDR1, VH CDR2, and VH CDR3 having the amino acid sequences of SEQ ID NOs: 14, 15, and 16, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VH CDRs; or

(2) as defined by Chothia,

(a) a VL comprising VL CDR1, VL CDR2, and VL CDR3 having the amino acid sequences of SEQ ID NOs: 11, 12, and 13, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VL CDRs; and/or

(b) a VH comprising VH CDR1, VH CDR2, and VH CDR3 having the amino acid sequences of SEQ ID NOs: 17, 18, and 16, respectively; or a variant thereof having up to about 5 amino acid substitutions, additions, and/or deletions in the VH CDRs.

2. The antibody or antigen-binding fragment of claim 1, wherein the antibody or antigen-binding fragment is:

(i) a chimeric antibody or antigen-binding fragment, a humanized antibody or antigen-binding fragment, or a human antibody or antigen-binding fragment;

(ii) a Fab, a Fab′, a F(ab′)2, a Fv, a scFv, a (scFv)2, a single domain antibody (sdAb), or a heavy chain antibody (HCAb);

(iii) an IgG1 antibody, an IgG2 antibody, an IgG3 antibody, or an IgG4 antibody;

(iv) a bispecific antibody or a multispecific antibody; or

(v) a monoclonal antibody or antigen-binding fragment.

3. The antibody or antigen-binding fragment thereof of claim 1 or 2, comprising:

(a) a VL having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of SEQ ID NO: 9; and/or

(b) a VH having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of SEQ ID NO: 10,

optionally wherein the VL and the VH have the amino acid sequences of SEQ ID NOs: 9 and 10, respectively.

4. The antibody or antigen-binding fragment of claim 1 or 2, comprising:

(a) a VL having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of any one of SEQ ID NOs: 19-22; and/or

(b) a VH having at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid of any one of SEQ ID NOs: 23-28, optionally wherein:

(i) the VL and the VH have the amino acid sequences of (1) SEQ ID NOs: 19 and 23, respectively; (2) SEQ ID NOs: 19 and 24, respectively; (3) SEQ ID NOs: 19 and 25, respectively; (4) SEQ ID NOs: 19 and 26, respectively; (5) SEQ ID NOs: 19 and 27, respectively; (6) SEQ ID NOs: 19 and 28, respectively; (7) SEQ ID NOs: 20 and 23, respectively; (8) SEQ ID NOs: 20 and 24, respectively; (9) SEQ ID NOs: 20 and 25, respectively; (10) SEQ ID NOs: 20 and 26, respectively; (11) SEQ ID NOs: 20 and 27, respectively; (12) SEQ ID NOs: 20 and 28, respectively; (13) SEQ ID NOs: 21 and 23, respectively; (14) SEQ ID NOs: 21 and 24, respectively; (15) SEQ ID NOs: 21 and 25, respectively; (16) SEQ ID NOs: 21 and 26, respectively; (17) SEQ ID NOs: 21 and 27, respectively; (18) SEQ ID NOs: 21 and 28, respectively; (19) SEQ ID NOs: 22 and 23, respectively; (20) SEQ ID NOs: 22 and 24, respectively; (21) SEQ ID NOs: 22 and 25, respectively; (22) SEQ ID NOs: 22 and 26, respectively; (23) SEQ ID NOs: 22 and 27, respectively; or (24) SEQ ID NOs: 22 and 28, respectively;

(ii) the VL has at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of SEQ ID NO: 19; and

the VH has at least 85%, at least 90%, at least 95%, at least 98%, or 100% sequence identity to the amino acid sequence of SEQ ID NO: 26;

(iii) the VL and the VH have the amino acid sequences of SEQ ID NOs: 19 and 26, respectively; or

(iv) a VL having the amino acid sequence of SEQ ID NO: 19;

a VH having the amino acid sequence of SEQ ID NO: 26; and

a CH having the amino acid sequence of SEQ ID NO: 55; and optionally

a CL having the amino acid sequence of SEQ ID NO: 30.

5. The antibody or antigen-binding fragment of any preceding claim, wherein the antibody is an IgG1 antibody, optionally wherein:

(i) the antibody or antigen-binding fragment comprises a light chain constant region (CL) having at least 85% sequence identity to kappa CL (Cκ; SEQ ID NO: 29);

(ii) the antibody or antigen-binding fragment comprises a light chain constant region (CL) having at least 85% sequence identity to lambda CL (Cλ; SEQ ID NO: 30);

(iii) the antibody or antigen-binding fragment comprises a heavy chain constant region (CH) having at least 85% sequence identity to the amino acid sequence of any one of SEQ ID NOs: 31 and 40-44; or

(iv) the Fc region of the IgG1 antibody is afucosylated.

6. The antibody or antigen-binding fragment of claim 5, wherein the heavy chain constant region (CH) of the IgG1 antibody comprises a wildtype IgG1 CH, or comprises at least one amino acid mutation that enhances ADCC (antibody-dependent cellular cytotoxicity) or ADCP (antibody-dependent cellular phagocytosis) of the antibody,

optionally wherein:

(1) the CH region of the IgG1 antibody has an amino acid substitution at L234, L235, G236, S239, F243, H268, D270, R292, S298, Y300, V305, K326, A330, I332, E333, K334, P396, or any combination thereof, numbered according to the EU Index;

(2) the CH region of the IgG1 antibody has an amino acid substitution that is L234Y, L235Q, L235V, G236A, G236W, S239D, S239M, F243L, H268D, D270E, R292P, S298A, Y300L, V305I, K326D, A330M, A330L, I332E, E333A, K334A, K334E, or P396L, or any combination thereof, numbered according to the EU Index; or

(3) the CH region of the IgG1 antibody is modified by amino acid substitutions that are (i) S298A, E333A, and K334A; (ii) S239D and I332E; (iii) S239D, A330L, and I332E; (iv) G236A; (v) G236A, S239D, and I332E; (vi) G236A, A330L, and I332E; (vii) G236A, S239D, A330L, and I332E; (viii) F243L, R292P, Y300L, V305I, and P396L; (ix) L235V, F243L, R292P, Y300L, and P396L; (x) L234Y, L235Q, G236W, S239M, H268D, D270E, and S298A; or (xi) D270E, K326D, A330M, and K334E, numbered according to the EU Index, optionally wherein the CH region has the amino acid sequence of any one of SEQ ID NOs: 45-64.

7. The antibody or antigen-binding fragment of any one of claims 1 to 6, wherein the antibody or antigen binding fragment:

(1) binds to human ILT7 with a K_D of 500 nM or less, as measured by SPR;

(2) does not specifically bind to LILR family member LILRA1, LILRA2/ILT1, LILRA3/ILT6, LILRA5/ILT11, LILRA6/ILT8, LILRB1/ILT2, LILRB2/ILT4, LILRB3/ILT5,LILRB4/ILT3, or LILB5;

(3) inhibits interferon alpha (IFNα) release by peripheral blood mononuclear cells (PBMCs);

(4) selectively binds to plasmacytoid dendritic cells (pDCs) in human PBMC;

(5) exhibits natural killer cell (NK)-dependent ADCC activity against ILT7-expressing cells;

(6) exhibits neutrophil-dependent ADCC activity against ILT7-expressing cells;

(7) exhibits macrophage-dependent ADCP activity against ILT7-expressing cells; or

(8) exhibits neutrophil-dependent ADCC activity;

optionally wherein the antibody or antigen-binding fragment:

(1) inhibits IFNα release by CpG-stimulated PBMCs *in vitro* with an EC50 of 1 nM or less, e.g. 0.01 nM to 0.1 nM;

(2) exhibits NK-dependent ADCC activity against ILT7-expressing cells with an EC50 of 0.01 nM or less, e.g. 0.001 nM to 0.01 nM;

(3) exhibits neutrophil-dependent ADCC activity against ILT7-expressing cells with an EC50 of 100 nM or less, e.g. 1 nM to 50 nM;

(4) exhibits macrophage-dependent ADCP activity against ILT7-expressing cells with an EC50 of 10 nM or less, e.g. 0.5 nM to 5 nM; or

(5) exhibits macrophage-dependent ADCP activity against ILT7-expressing cells with a maximum phagocytic index of 20% or higher, e.g. 20% to 80%; or any combination of (1)-(5).

8. A polynucleotide encoding a polypeptide of the antibody or antigen-binding fragment of any preceding claim.

9. A vector comprising the polynucleotide of claim 8.

10. A host cell comprising the polynucleotide of claim 8, or the vector of claim 9, optionally wherein the host cell:

(1) overexpresses N-acetylglucosaminyltransferase III (GnTIII);

(2) lacks a-1,6-fucosyltransferase (FUT8); or

(3) has a low fucose content, or any combination of (1)-(3).

11. A method of making an antibody or antigen-binding fragment thereof that specifically binds human ILT7, the method comprising culturing the host cell of claim 10in a culture under conditions that allow expression of the antibody or antibody fragment, optionally further comprising isolating the antibody from the culture.

12. A pharmaceutical composition comprising a therapeutically effective amount of the antibody or antigen-binding fragment of any one of claims 1 to 7, and a pharmaceutically acceptable carrier.

13. An antibody or antigen-binding fragment of any one of claims 1 to 7 for use in therapy.

14. Use of the antibody or antigen-binding fragment of any one of claims 1 to 35 in the manufacture of a medicament for:

(i) reducing Type I IFN;

(ii) suppressing or depleting pDCs; or

(iii) reducing autoimmunity,

in a subject in need thereof,

optionally wherein the subject has an autoimmune disease, or wherein the subject is a human.

15. Use of the antibody or antigen-binding fragment of any one of claims 1 to 7 in the manufacture of a medicament for treating an autoimmune disease associated with Type I IFN or pDCs,

optionally wherein the subject is a human, or wherein the autoimmune disease is SLE.