

WHAT IS CLAIMED:

1. A binding agent comprising an antigen-binding domain, wherein the antigen binding domain binds specifically to both human immunoglobulin-like transcript 2 (ILT2) and human immunoglobulin-like transcript 4 (ILT4).
2. The binding agent of claim 1, wherein the antigen-binding domain comprises a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:144; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:145.
3. The binding agent of claim 2, wherein
 - (a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:115, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:112, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;
 - (b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:111, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:112, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;
 - (c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:76, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:113, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;
 - (d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:111, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:114, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91; or
 - (e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:116, the VH-CDR2

comprises the amino acid sequence of SEQ ID NO:124, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:110, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:99, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:100, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:101.

4. The binding agent of claim 2 or 3, wherein (a) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:144, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:145; or (b) the VH comprises the amino acid sequence of SEQ ID NO:144, and/or the VL comprises the amino acid sequence of SEQ ID NO:145.

5. The binding agent of any one of claims 2-4, wherein the antigen-binding domain comprises (a) a heavy chain comprising an amino acid sequence having at least 80% sequence identity to the amino acid sequence of SEQ ID NO:156, and/or a light chain comprising an amino acid sequence having at least 80% sequence identity to the amino acid sequence of SEQ ID NO:157; or (b) a heavy chain comprising the amino acid sequence of SEQ ID NO:156, and/or a light chain comprising the amino acid sequence of SEQ ID NO:157.

6. The binding agent of claim 1, wherein the antigen-binding domain comprises:

(i) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:139; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:140;

(ii) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:133; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:134;

(iii) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:143; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:142;

(iv) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:131; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:132;

(v) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:137; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:138;

(vi) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:135; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:136; or

(vii) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:141; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:142.

7. The binding agent of claim 6, wherein

(i) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:139; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:140, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:95, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:87, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:86, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:87, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:92, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:93, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:86, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:94, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:96, the VH-

CDR2 comprises the amino acid sequence of SEQ ID NO:97, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:123, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:105, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:100, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:101; or

(ii) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:133; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:134, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:79, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:118, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:70, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:118, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:76, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:119, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:70, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:120, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:80, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:121, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:82, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:83, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:122, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:85; or

(iii) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:143; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:142, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:115, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:112, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:111, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:112, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:76, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:113, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:111, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:114, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:116, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:117, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:110, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:99, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:100, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:101; or

(iv) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:131; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:132, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:79, the VH-

CDR2 comprises the amino acid sequence of SEQ ID NO:71, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:70, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:71, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:76, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:77, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:70, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:78, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:72, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:73, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:74, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:75; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:80, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:81, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:82, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:83, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:84, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:85; or

(v) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:137; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:138, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:95, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:87, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:86, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:87, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:92, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:93, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:86, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:94, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:102, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:103, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:96, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:97, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:104, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:105, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:100, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:101; or

(vi) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:135; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:136, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:95, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:87, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:88, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:86, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:87, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:88, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3

comprises the amino acid sequence of SEQ ID NO:91;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:92, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:93, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:88, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:86, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:94, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:88, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:96, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:97, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:98, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:99, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:100, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:101; or

(vii) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:141; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:142, and wherein

(a) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:79, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:106, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(b) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:70, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:106, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(c) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:76, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:77, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID

NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91;

(d) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:70, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:108, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:107, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:89, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:90, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:91; or

(e) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:80, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:109, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:110, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:99, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:100, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:101.

8. The binding agent of claim 6 or 7, wherein

(a) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:139, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:140; or the VH comprises the amino acid sequence of SEQ ID NO:139, and/or the VL comprises the amino acid sequence of SEQ ID NO:140,

(b) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:133, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:134; or the VH comprises the amino acid sequence of SEQ ID NO:133, and/or the VL comprises the amino acid sequence of SEQ ID NO:134,

(c) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:143, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:142; or the VH comprises the amino acid sequence of SEQ ID NO:143, and/or the VL comprises the amino acid sequence of SEQ ID NO:142,

(d) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:131, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:132; or the VH comprises the amino acid sequence of SEQ ID NO:131, and/or the VL comprises the amino acid sequence of SEQ ID NO:132,

(e) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:137, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID

NO:138; or the VH comprises the amino acid sequence of SEQ ID NO:137, and/or the VL comprises the amino acid sequence of SEQ ID NO:138,

(f) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:135, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:136; or the VH comprises the amino acid sequence of SEQ ID NO:135, and/or the VL comprises the amino acid sequence of SEQ ID NO:136, or

(g) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:141, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:142; or the VH comprises the amino acid sequence of SEQ ID NO:141, and/or the VL comprises the amino acid sequence of SEQ ID NO:142.

9. The binding agent of any one of claims 6-8, wherein the antigen-binding domain comprises:

(a) a heavy chain comprising an amino acid sequence having at least 80% sequence identity to the amino acid sequence of SEQ ID NO:148, and/or a light chain comprising an amino acid sequence having at least 80% sequence identity to the amino acid sequence of SEQ ID NO:149;

(b) a heavy chain comprising an amino acid sequence having at least 80% sequence identity to the amino acid sequence of SEQ ID NO:152, and/or a light chain comprising an amino acid sequence having at least 80% sequence identity to the amino acid sequence of SEQ ID NO:153;

(c) a heavy chain comprising the amino acid sequence of SEQ ID NO:148, and/or a light chain comprising the amino acid sequence of SEQ ID NO:149; or

(d) a heavy chain comprising the amino acid sequence of SEQ ID NO:152, and/or a light chain comprising the amino acid sequence of SEQ ID NO:153.

10. A binding agent that specifically binds human ILT2 comprising a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:125; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:126.

11. The binding agent of claim 10, wherein:

(i) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:31, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:23, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:24, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:25, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:26, and the VL-CDR3 comprises

the amino acid sequence of SEQ ID NO:27;

(ii) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:22, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:23, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:24, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:25, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:26, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:27;

(iii) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:28, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:29, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:24, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:25, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:26, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:27;

(iv) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:22, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:30, the VH-CDR3 the amino acid sequence of SEQ ID NO:24, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:25, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:26, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:27; or

(v) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:32, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:33, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:34, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:35, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:36, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:37.

12. The binding agent of claim 10 or 11, wherein:

(a) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:125, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:126; or

(b) the VH comprises the amino acid sequence of SEQ ID NO:125, and/or the VL comprises the amino acid sequence of SEQ ID NO:126.

13. A binding agent that specifically binds human ILT4 comprising:

(a) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:129; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:130; or

(b) a VH comprising a VH-CDR1, a VH-CDR2, and a VH-CDR3 from the amino acid sequence of SEQ ID NO:127; and a VL comprising a VL-CDR1, a VL-CDR2, and a VL-CDR3 from the amino acid sequence of SEQ ID NO:128.

14. The binding agent of claim 13, wherein:

(a) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:129; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:130, and wherein

(i) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:63, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:55, and the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:56, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:57, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:58, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:59;

(ii) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:54, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:55, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:56, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:57, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:58, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:59;

(iii) the VH comprises the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:60, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:61, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:56, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:57, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:58, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:59;

(iv) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:54, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:62, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:56, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:57, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:58, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:59; or

(v) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:64, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:65, and the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:66, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:67, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:68, and the VL-CDR3

comprises the amino acid sequence of SEQ ID NO:69; or

(b) the VH comprises the VH-CDR1, the VH-CDR2, and the VH-CDR3 from the amino acid sequence of SEQ ID NO:127; and the VL comprises the VL-CDR1, the VL-CDR2, and the VL-CDR3 from the amino acid sequence of SEQ ID NO:128, and wherein

(i) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:47, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:39, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:40, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:41, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:42, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:43;

(ii) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:38, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:39, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:40, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:41, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:42, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:43;

(iii) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:44, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:45, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:40, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:41, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:42, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:43;

(iv) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:38, the VH-CDR2 comprising the amino acid sequence of SEQ ID NO:46, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:40, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:41, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:42, and the VL-CDR3 comprises the amino acid sequence of SEQ ID NO:43; or

(v) the VH-CDR1 comprises the amino acid sequence of SEQ ID NO:48, the VH-CDR2 comprises the amino acid sequence of SEQ ID NO:49, the VH-CDR3 comprises the amino acid sequence of SEQ ID NO:50, the VL-CDR1 comprises the amino acid sequence of SEQ ID NO:51, the VL-CDR2 comprises the amino acid sequence of SEQ ID NO:52, and the VL-CDR3 comprises an amino acid sequence of SEQ ID NO:53.

15. The binding agent of claim 13 or 14, wherein:

(a) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID

NO:129, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:130;

(b) the VH has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:127, and/or the VL has at least 80% sequence identity to the amino acid sequence of SEQ ID NO:128;

(c) the VH comprises the amino acid sequence of SEQ ID NO:129, and/or the VL comprises the amino acid sequence of SEQ ID NO:130; or

(d) the VH comprises the amino acid sequence of SEQ ID NO:127, and/or the VL comprises the amino acid sequence of SEQ ID NO:128.

16. The binding agent of any one of claims 1-15, wherein the binding agent is

- (a) an antibody;
- (b) an antibody fragment comprising at least one antigen-binding site;
- (c) a chimeric antibody;
- (d) a humanized antibody;
- (e) a bispecific or multispecific antibody; or
- (f) attached to a half-life extending moiety.

17. The binding agent of claim 16, wherein the binding agent is an IgG1 antibody, an IgG2 antibody, or an IgG4 antibody; optionally wherein the binding agent is a human IgG1 antibody, a human IgG2 antibody, or a human IgG4 antibody; further optionally the human IgG1 antibody has reduced or no effector function.

18. The binding agent of claim 16 or 17, comprising a kappa light chain or a lambda light chain, optionally wherein the antibody comprises a human kappa light chain or a human lambda light chain.

19. The binding agent of claim 16, wherein the antibody fragment is a Fab, a Fab', a F(ab')₂, a Fv, a scFv, a (scFv)₂, a single chain antibody, a dual variable region antibody, a diabody, or a nanobody.

20. The binding agent of any one of claims 1-19, wherein the binding agent has one or more of the following properties:

- (1) binding rhesus ILT2;

- (2) binding cyno ILT2;
 - (3) not binding nd ILT3, ILT5, and LILRB5;
 - (4) not binding LILRA2, LILRA4, LILRA5, and LILRA6;
 - (5) being an ILT2 antagonist;
 - (6) being an ILT4 antagonist,
 - (7) inhibiting ILT2 activity;
 - (8) inhibiting ILT4 activity;
 - (9) inhibiting ILT2 signaling in cells that express ILT2;
 - (10) inhibiting ILT4 signaling in cells that express ILT4;
 - (11) inhibiting binding of ILT2 to MHC I molecules;
 - (12) inhibiting binding of ILT4 to MHC I molecules;
 - (13) inhibiting ILT2-induced suppression of myeloid cells;
 - (14) inhibiting ILT4-induced suppression of myeloid cells;
 - (15) inhibiting ILT2-induced suppression of myeloid cell activity;
 - (16) inhibiting ILT4-induced suppression of myeloid cell activity;
 - (17) restoring FcR activation in myeloid cells;
 - (18) enhancing NK cell activity;
 - (19) enhancing CTL activity;
 - (20) enhancing macrophage phagocytosis; and
 - (21) inhibiting MDSC mediated suppression of immune cells
21. A binding agent that competes with the binding agent of any one of claims 1-20 for binding to human ILT2 and/or human ILT4.
22. A pharmaceutical composition that comprises the binding agent of any one of claims 1-21 and a pharmaceutically acceptable carrier
23. An isolated polynucleotide or polynucleotides encoding the binding agent of any one of claims 1-21.
24. A vector or vectors comprising the polynucleotide or polynucleotides of claim 23.
25. An isolated cell comprising the polynucleotide or polynucleotides of claim 23 or the vector or vectors of claim 24, for producing the binding agent of any one of claims 1-21.

26. A method of making the binding agent of any one of claims 1-21, the method comprising:
- (a) culturing the cell of claim 25 under conditions that result in the expression of the binding agent, and
 - (b) isolating the binding agent.
27. A method of
- (a) disrupting, inhibiting, or blocking ILT2- and ILT4-induced suppression of myeloid cells;
 - (b) inhibiting or decreasing myeloid-derived suppressor cell (MDSC) activity;
 - (c) enhancing or increasing natural killer (NK) cell activity, or
 - (d) enhancing or increasing cytolytic T lymphocyte (CTL) activity;
- the method comprising contacting respectively the myeloid cells of (a); the MDSCs of (b); the NK cells of (c); or the CTLs of (d) with the binding agent of any one of claims 1-21.
28. A method of disrupting, inhibiting, or blocking in a mixture of cells at least one of the following:
- (a) the binding of ILT2 and/or ILT4 to an MHC I molecule, and
 - (b) MHC I-induced ILT2 and/or ILT4 activity;
- the method comprising contacting the cells with the binding agent of any one of claims 1-21 or the pharmaceutical composition of claim 22; optionally wherein the MHC I molecule is HLA-A, HLA-B, HLA-C, HLA-E, and/or HLA-G.
29. Use of the binding agent of any one of claims 1-21 or the pharmaceutical composition of claim 22 in the manufacture of a medicament for
- (a) disrupting, inhibiting, or blocking the binding of ILT2 and/or ILT4 to an MHC I molecule in a subject;
 - (b) disrupting, inhibiting, or blocking MHC I-induced ILT2 and/or ILT4 activity in a subject;
 - (c) disrupting, inhibiting, or blocking ILT2 or ILT4-induced suppression of myeloid cells in a subject;
 - (d) inhibiting or decreasing MDSC activity in a subject;
 - (e) enhancing or increasing NK cell activity in a subject;
 - (f) enhancing or increasing CTL activity in a subject;
 - (g) treating cancer in a subject;

- (h) inhibiting tumor growth in a subject;
- (i) increasing or enhancing an immune response to a tumor or tumor cells in a subject;
- (j) inhibiting tumor relapse or tumor regrowth in a subject; or
- (k) activating myeloid cells in the tumor microenvironment in a subject with a tumor;

wherein the binding agent of any one of claims 1-21 or the pharmaceutical composition of claim 22 is to be administered to the subject; optionally wherein the MHC I molecule is HLA-A, HLA-B, HLA-C, HLA-E, and/or HLA-G.

30. The use of claim 29, wherein the cancer is mesothelioma, glioblastoma, renal cell carcinoma, non-small cell lung cancer, melanoma, pancreatic ductal adenocarcinoma, gastric cancer, squamous cell carcinoma of the head and neck, biliary duct cancer, breast cancer, ovarian cancer, cervical cancer, endocervical cancer, colorectal cancer, or esophageal cancer.

31. The use of claim 29, wherein the tumor is a pancreatic tumor, a breast tumor, a lung tumor, a non-small cell lung tumor, a head and neck tumor, a colorectal tumor, a prostate tumor, a skin tumor, a melanoma, a gastric tumor, a colorectal tumor, an ovarian tumor, a cervical tumor, a uterine tumor, an endometrial tumor, an endocervical tumor, a bladder tumor, a brain tumor, an esophageal tumor, a liver tumor, a kidney tumor, a renal tumor, mesothelioma, glioblastoma, a biliary duct tumor, or a testicular tumor..

32. The use of claim 29, wherein the myeloid cells are dendritic cells, monocytes or macrophages.

33. The use of any one of claims 28-32, wherein the binding agent is to be administered as part of a combination therapy comprising at least one additional therapeutic agent.

34. The use of claim 33, wherein the additional therapeutic agent is a PD-1 antagonist, an anti-PD-1 antibody or anti-PD-L1 antibody.

35. The use of claim 34, wherein PD-1 antagonist is pembrolizumab, pidilizumab, nivolumab, durvalumab, cemiplimab, tislelizumab, spartalizumab, or STI-A1110.

36. A pharmaceutical composition, comprising:

- (a) a means for inhibiting the interaction between ILT2 and/or ILT4 and MHC Class I on

tumor cells; and

(b) a pharmaceutically acceptable carrier.

37. The pharmaceutical composition of claim 38, wherein the means for inhibiting the interaction between ILT2 and/or ILT4 and MHC Class I comprises an antibody comprising a heavy chain variable region comprising VH-CDR1, VH-CDR-2, and VH-CDR-3 and a light chain variable region comprising VL-CDR1, VL-CDR2, and VL-CDR3 from any one of 27F9, 47C8, 48A5, 47H6, Hz47H6.v2, 51A1, 64A12, Hz64A12, 73C4, 73D1, and Hz73D1.v1.

38. A combination comprising a means for inhibiting the interaction between ILT2 and/or ILT4 and MHC Class I (e.g., on tumor cells), and a modulator of PD-1 or PD-L1 activity.