(LC-FR1)-(HVR-L1)-(LC-FR2)-(HVR-L2)-(LC-FR3)-(HVR-L3)-(LC-FR4). In yet another example, the framework sequences are derived from human consensus framework sequences. In a further example, the heavy chain framework sequences are derived from a Kabat subgroup I, II, or III sequence. In a still further example, the heavy chain framework sequence is a VH subgroup III consensus framework. In a still further example, one or more of the heavy chain framework sequences is the following:

HC-FR1	EVQLVESGGGLVQPGGSLRLSCAAS	(SEQ ID NO:4)
HC-FR2	WVRQAPGKGLEWV	(SEQ ID NO:5)
HC-FR3	RFTISADTSKNTAYLQMNSLRAEDTAVYYCAR	(SEQ ID NO:6)
HC-FR4	WGQGTLVTVSA	(SEQ ID NO:7).

In a still further example, the light chain framework sequences are derived from a Kabat kappa I, II, II or IV subgroup sequence. In a still further example, the light chain framework sequences are VL kappa I consensus framework. In a still further example, one or more of the light chain framework sequences is the following:

LC-FR1	DIQMTQSPSSLSASVGDRVTITC	(SEQ ID NO:11)
LC-FR2	WYQQKPGKAPKLLIY	(SEQ ID NO:12)
LC-FR3	GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC	(SEQ ID NO:13)
LC-FR4	FGQGTKVEIKR	(SEQ ID NO:14).

In a still further specific example, the antibody further comprises a human or murine constant region. In a still further example, the human constant region is selected from the group consisting of IgG1, IgG2, IgG2, IgG3, IgG4. In a still further specific example, the human constant region is IgG1. In a still further example, the murine constant region is selected from the group consisting of IgG1, IgG2A, IgG2B, IgG3. In a still further example, the murine constant region if IgG2A. In a still further specific example, the antibody has reduced or minimal effector function. In a still further specific example, the minimal effector function results from production in prokaryotic cells. In a still further specific example the minimal effector function results from an "effector-less Fc mutation" or aglycosylation. In still a further example, the effector-less Fc mutation is an N297A or D265A/N297A substitution in the constant region.

In one aspect, the present disclosure refers to use of an anti-PD-L1 antibody or antigen binding fragment thereof in the manufacture of a medicament for treating cancer or infection in a subject, wherein the antibody or antigen binding fragment comprises a heavy chain and a light chain variable region sequence, wherein:

(a) the heavy chain variable region amino acid sequence has at least 90% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO:20, and

(b) the light chain variable region amino acid sequence has at least 90% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO:21; and wherein:

(c) the heavy chain comprises an HVR-H1, HVR-H2 and HVR-H3, wherein:

(i) the HVR-H1 comprises the amino acid sequence of SEQ ID NO: 15;

(ii) the HVR-H2 comprises the amino acid sequence of SEQ ID NO: 16;

(iii) the HVR-H3 comprises the amino acid sequence of SEQ ID NO: 3;

(d) the light chain comprises an HVR-L1, HVR-L2 and HVR-L3, wherein:

(iv) the HVR-L1 comprises the amino acid sequence of SEQ ID NO: 17;

(v) the HVR-L2 comprises the amino acid sequence of SEQ ID NO: 18;

(vi) the HVR-L3 comprises the amino acid sequence of SEQ ID NO: 19.

In a still further example, the disclosure provides for compositions comprising any of the above described anti-PD-L1 antibodies in combination with at least one pharmaceutically-acceptable carrier.

WHAT IS CLAIMED IS:

1. Use of an anti-PD-L1 antibody or antigen binding fragment thereof in the manufacture of a medicament for treating cancer or infection in a subject, wherein the anti-PD-L1 antibody or antigen binding fragment thereof comprises a heavy chain and a light chain variable region sequence, wherein:

(a) the heavy chain comprises an HVR-H1, HVR-H2 and HVR-H3, wherein:

(i) the HVR-H1 comprises the amino acid sequence of SEQ ID NO: 15;

(ii) the HVR-H2 comprises the amino acid sequence of SEQ ID NO: 16;

(iii) the HVR-H3 comprises the amino acid sequence of SEQ ID NO: 3;

(b) the light chain comprises an HVR-L1, HVR-L2 and HVR-L3, wherein:

(iv) the HVR-L1 comprises the amino acid sequence of SEQ ID NO: 17;

(v) the HVR-L2 comprises the amino acid sequence of SEQ ID NO: 18;

(vi) the HVR-L3 comprises the amino acid sequence of SEQ ID NO: 19.

2. The use of claim 1, wherein the variable region light chain framework sequences of said antibody or antigen binding fragment thereof are VL kappa I consensus framework and/or the variable region heavy chain framework sequences of said antibody or antigen binding fragment thereof are VH subgroup III consensus framework.

3. The use of claim 1 or 2, wherein the antibody or antigen binding fragment thereof further comprises variable region light chain framework sequences juxtaposed between the HVRs according to the formula: (LC-FR1)-(HVR-L1)-(LC-FR2)-(HVR-L2)-(LC-FR3)-(HVR-L3)-(LC-FR4), wherein one or more of the variable region light chain framework amino acid sequences comprises the following:

LC-FR1 comprises the amino acid sequence of SEQ ID NO: 11;

LC-FR2 comprises the amino acid sequence of SEQ ID NO: 12;

LC-FR3 comprises the amino acid sequence of SEQ ID NO: 13;

LC-FR4 comprises the amino acid sequence of SEQ ID NO: 14.

4. The use of any one of claims 1-3, wherein the antibody or antigen binding fragment thereof further comprises variable region heavy chain framework sequences juxtaposed between the HVRs according to the formula: (HC-FR1)-(HVR-H1)-(HC-FR2)-(HVR-H2)-(HC-FR3)-(HVR-H3)-(HC-FR4), wherein one or more of the variable region heavy chain framework amino acid sequences comprises the following:

HC-FR1 comprises the amino acid sequence of SEQ ID NO: 4;
HC-FR2 comprises the amino acid sequence of SEQ ID NO: 5;
HC-FR3 comprises the amino acid sequence of SEQ ID NO: 6;
HC-FR4 comprises the amino acid sequence of SEQ ID NO: 7.

5. The use of any one of claims 1-4, wherein:

(a) the heavy chain variable region amino acid sequence of said antibody or antigen binding fragment thereof has at least 90% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO: 20, and

(b) the light chain variable region amino acid sequence of said antibody or antigen binding fragment thereof has at least 90% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO: 21.

6. The use of claim 5, wherein the light chain variable region amino acid sequence has at least 95% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO: 21.

7. The use of claim 5, wherein the light chain variable region amino acid sequence has at least 99% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO: 21.

8. The use of claim 5, wherein the light chain variable region amino acid sequence comprises the light chain variable region amino acid sequence of SEQ ID NO: 21.

9. The use of any one of claims 5-8, wherein the heavy chain variable region amino acid sequence has at least 95% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO: 20.

10. The use of any one of claims 5-8, wherein the heavy chain variable region amino acid sequence has at least 99% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO: 20.

11. The use of any one of claims 5-8, wherein the heavy chain variable region amino acid sequence comprises the heavy chain variable region amino acid sequence of SEQ ID NO: 20.

12. Use of an anti-PD-L1 antibody or antigen binding fragment thereof in the manufacture of a medicament for treating cancer or infection in a subject, wherein the antibody or antigen binding fragment comprises a heavy chain and a light chain variable region sequence, wherein:

(a) the heavy chain variable region amino acid sequence has at least 90% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO:20, and

(b) the light chain variable region amino acid sequence has at least 90% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO:21; and wherein:

(c) the heavy chain comprises an HVR-H1, HVR-H2 and HVR-H3, wherein:

(i) the HVR-H1 comprises the amino acid sequence of SEQ ID NO: 15;

(ii) the HVR-H2 comprises the amino acid sequence of SEQ ID NO: 16;

(iii) the HVR-H3 comprises the amino acid sequence of SEQ ID NO: 3;

(d) the light chain comprises an HVR-L1, HVR-L2 and HVR-L3, wherein:

(iv) the HVR-L1 comprises the amino acid sequence of SEQ ID NO: 17;

(v) the HVR-L2 comprises the amino acid sequence of SEQ ID NO: 18;

(vi) the HVR-L3 comprises the amino acid sequence of SEQ ID NO: 19.

13. The use of claim 12, wherein the light chain variable region amino acid sequence has at least 95% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO:21.

14. The use of claim 12, wherein the light chain variable region amino acid sequence has at least 99% sequence identity to the light chain variable region amino acid sequence of SEQ ID NO:21.

15. The use of claim 12, wherein the light chain variable region amino acid sequence comprises the light chain variable region amino acid sequence of SEQ ID NO: 21.

16**.** The use of any one of claims 12-15, wherein the heavy chain variable region amino acid sequence has at least 95% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO: 20.

17. The use of any one of claims 12-15, wherein the heavy chain variable region amino acid sequence has at least 99% sequence identity to the heavy chain variable region amino acid sequence of SEQ ID NO: 20.

18. The use of any one of claims 12-15, wherein the heavy chain variable region amino acid sequence comprises the heavy chain variable region amino acid sequence of SEQ ID NO: 20.

19. The use of any one of claims 1-18, wherein the antibody or antigen binding fragment thereof further comprising a human constant region.

20. The use of claim 19, wherein the constant region is selected from the group consisting of IgG1, IgG2, IgG3 and IgG4.

21. The use of Claim 20, wherein the constant region is IgG1.

22. The use of any one of claims 1-21, wherein the antibody or antigen binding fragment thereof has reduced or minimal effector function.

23. The use of claim 22, wherein the minimal effector function results from an effector-less Fc mutation.

24. The use of claim 23, wherein the effector-less Fc mutation is N297A.

25. The use of claim 23, wherein the effector-less Fc mutation is D265A/N297A.

26. The use of claim 22, wherein the minimal effector function results from aglycosylation.

27. The use of any one of claims 1-26, wherein the use is for treating cancer in a subject.

28. The use of claim 27, wherein the cancer is selected from the group consisting of breast, lung, colon, ovarian, melanoma, bladder, kidney, liver, salivary, stomach, gliomas, thyroid, thymic, epithelial, head and neck, gastric and pancreatic.

29. The use of claim 27 or 28, wherein the medicament is to be administered with a chemotherapeutic agent.

30. The use of claim 29, wherein the chemotherapeutic agent is an anti-VEGF antibody.

31. The use of claim 30, wherein the anti-VEGF antibody is bevacizumab.

32. The use of claim 29, wherein the chemotherapeutic agent is FOLFOX.

33. The use of claim 32, wherein FOLFOX is a combination of oxaliplatin, 5-fluorouracil and leucovorin.

34. The use of claim 29, wherein the chemotherapeutic agent is oxaliplatin.

35. The use of claim 29, wherein the chemotherapeutic agent is a RAF inhibitor.

36. The use of any one of claims 1-26, wherein the use is for treating infection in a subject.

37. The use of claim 36, wherein the medicament is to be administered with an antibiotic.

38. The use of claim 36, wherein the medicament is to be administered with an anti-viral agent.

39. The use of claim 38, wherein the anti-viral agent is a reverse transcriptase inhibitor.

40. The use of claim 39, wherein the reverse transcriptase inhibitor is a polymerase inhibitor.

41. The use of claim 38, wherein the anti-viral agent is a protease inhibitor.

42. The use of claim 36, wherein the medicament is to be administered with at least one vaccine.

43. The use of any one of claims 36-42, wherein the infection is chronic.

44. The use of claim 43, wherein the chronic infection is persistent.

45. The use of claim 43, wherein the chronic infection is latent.

46. The use of claim 43, wherein the chronic infection is slow.

47. The use of any one of claims 36-46, wherein the infection results from a bacterium, and the medicament is to be administered with an anti-bacterial agent.

48. The use of any one of claims 36-46, wherein the infection results from a virus, and the medicament is to be administered with an anti-viral agent.

49. The use of any one of claims 36-46, wherein the infection results from a fungus, and the medicament is to be administered with an anti-fungal agent.

50. The use of any one of claims 36-46, wherein the infection results from a protozoan, and the medicament is to be administered with an anti-protozoan agent.