WHAT IS CLAIMED IS:

1. An isolated nucleic acid encoding a heavy chain variable region polypeptide that specifically binds to PD-L1 comprising an HVR-H1, HVR-H2 and HVR-H3 sequence, wherein:

(a) the HVR-H1 sequence is GFTFSX$_1$SWIH (SEQ ID NO:1);

(b) the HVR-H2 sequence is AWIX$_2$PYGGSX$_3$YYADSVKG (SEQ ID NO:2);

(c) the HVR-H3 sequence is RHWPGGFDY (SEQ ID NO:3);

further wherein: X$_1$ is D or G; X$_2$ is S or L; X$_3$ is T or S.

2. The nucleic acid of Claim 1 wherein X$_1$ is D; X$_2$ is S and X$_3$ is T.

3. The nucleic acid of Claim 1 further comprising 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).

4. The nucleic acid of Claim 3 wherein the framework sequences are human.

5. The nucleic acid of Claim 4 wherein the framework sequences are VH subgroup III consensus framework.

6. The nucleic acid of Claim 5 wherein one or more of the framework sequences is the following:

HC-FR1 is EVQLVESGGGLVQPGGSLRLSCAAS (SEQ ID NO:4)

HC-FR2 is WVRQAPGKGLEWV (SEQ ID NO:5)

HC-FR3 is RFTISADTSKNTAYLQMNSLRAEDTAVYYCAR (SEQ ID NO:6)

HC-FR4 is WGQGTLVTVSA (SEQ ID NO:7).

7. The nucleic acid of Claim 1, further comprising a second nucleic acid encoding a variable region light chain polypeptide comprising an HVR-L1, HVR-L2 and HVR-L3, wherein:

(a) the HVR-L1 sequence is RASQX$_4$X$_5$X$_6$TX$_7$X$_8$A (SEQ ID NOs:8);

(b) the HVR-L2 sequence is SASX$_9$LX$_{10}$S, and (SEQ ID NOs:9);

(c) the HVR-L3 sequence is QQX$_{11}$X$_{12}$X$_{13}$X$_{14}$PX$_{15}$T (SEQ ID NOs:10);

further wherein: X$_4$ is D or V; X$_5$ is V or I; X$_6$ is S or N; X$_7$ is A or F; X$_8$ is V or L; X$_9$ is F or T; X$_{10}$ is Y or A; X$_{11}$ is Y, G, F, or S; X$_{12}$ is L, Y, F or W; X$_{13}$ is Y, N, A, T, G, F or I; X$_{14}$ is H, V, P, T or I; X$_{15}$ is A, W, R, P or T.

8. The nucleic acid of Claim 7 wherein X_4 is D; X_5 is V; X_6 is S; X_7 is A; X_8 is V; X_9 is F; X_{10} is Y; X_{11} is Y; X_{12} is L; X_{13} is Y; X_{14} is H; X_{15} is A.

9. The nucleic acid of Claim 7 further comprising 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).

10. The nucleic acid of Claim 9 wherein the framework sequences are human.

11. The nucleic acid of Claim 10 wherein the framework sequences are VL kappa I consensus framework.

12. The nucleic acid of Claim 11 wherein one or more of the framework sequences is the following:

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

13. An isolated nucleic acid encoding a light chain variable region polypeptide that specifically binds to PD-L1 comprising an HVR-L1, HVR-L2 and HVR-L3, wherein:

(a) the HVR-L1 sequence is $RASQX_4X_5X_6TX_7X_8A$ (SEQ ID NOs:8);
(b) the HVR-L2 sequence is $SASX_9LX_{10}S$, and (SEQ ID NOs:9);
(c) the HVR-L3 sequence is $QQX_{11}X_{12}X_{13}X_{14}PX_{15}T$ (SEQ ID NOs:10);

further wherein: X_4 is D or V; X_5 is V or I; X_6 is S or N; X_7 is A or F; X_8 is V or L; X_9 is F or T; X_{10} is Y or A; X_{11} is Y, G, F, or S; X_{12} is L, Y, F or W; X_{13} is Y, N, A, T, G, F or I; X_{14} is H, V, P, T or I; X_{15} is A, W, R, P or T.

14. The nucleic acid of Claim 13 wherein X_4 is D; X_5 is V; X_6 is S; X_7 is A; X_8 is V; X_9 is F; X_{10} is Y; X_{11} is Y; X_{12} is L; X_{13} is Y; X_{14} is H; X_{15} is A.

15. The nucleic acid of Claim 13 further comprising 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).

16. The nucleic acid of Claim 15 wherein the framework sequences are human.

17. The nucleic acid of Claim 16 wherein the framework sequences are VL kappa I consensus framework.

18. The nucleic acid of Claim 17 wherein one or more of the framework sequences is the following:

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

19. The nucleic acid of Claim 13, further comprising a second nucleic acid encoding a heavy chain variable region polypeptide comprising an HVR-H1, HVR-H2 and HVR-H3 sequence, wherein:

(a) the HVR-H1 sequence is GFTFSX$_1$SWIH (SEQ ID NO:1);
(b) the HVR-H2 sequence is AWIX$_2$PYGGSX$_3$YYADSVKG (SEQ ID NO:2);
(c) the HVR-H3 sequence is RHWPGGFDY (SEQ ID NO:3);
further wherein: X$_1$ is D or G; X$_2$ is S or L; X$_3$ is T or S.

20. The nucleic acid of Claim 19 wherein X$_1$ is D; X$_2$ is S and X$_3$ is T.

21. The nucleic acid of Claim 19 further comprising 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).

22. The nucleic acid of Claim 21 wherein the framework sequences are human.

23. The nucleic acid of Claim 22 wherein the framework sequences are VH subgroup III consensus framework.

24. The nucleic acid of Claim 23 wherein one or more of the framework sequences is the following:

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

25. An isolated nucleic acid encoding a light chain or a heavy chain variable region sequence of an anti-PD-L1 antibody or antigen binding fragment, wherein:

(a) the heavy chain or antigen binding fragment thereof further comprises and HVR-H1, HVR-H2 and an HVR-H3 sequence having at least 85% sequence identity to GFTFSDSWIH (SEQ ID NO:15), AWISPYGGSTYYADSVKG (SEQ ID NO:16) and RHWPGGFDY (SEQ ID NO:3), respectively, or

(b) the light chain or antigen binding fragment thereof further comprises an HVR-L1, HVR-L2 and an HVR-L3 sequence having at least 85% sequence identity to RASQDVSTAVA (SEQ ID NO:17), SASFLYS (SEQ ID NO:18) and QQYLYHPAT (SEQ ID NO:19), respectively.

26. The nucleic acid of Claim 25, wherein sequence identity is 90%.

27. The nucleic acid of Claim 26, wherein the sequence identity is 95%.

28. The nucleic acid of Claim 25, wherein the anti-PD-L1 antibody further comprises a VL and a VH framework region derived from a human consensus sequence.

29. The nucleic acid of Claim 28, wherein the VH sequence is derived from a Kabat subgroup I, II, or III sequence.

30. The nucleic acid of Claim 29, wherein the VH sequence is derived from Kabat subgroup III.

31. The nucleic acid of Claim 30, further wherein the heavy chain framework sequences are juxtaposed between the HVRs according to the formula: (HC-FR1)-(HVR-H1)-(HC-FR2)-(HVR-H2)-(HC-FR3)-(HVR-H3)-(HC-FR4).

32. The nucleic acid of Claim 31, wherein one or more of the heavy chain framework sequences is the following:

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

33. The nucleic acid of Claim 28, wherein the VL sequence is derived from a Kabat kappa I, II, III or IV subgroup sequence.

34. The nucleic acid of Claim 33, wherein the VL sequence is derived from Kabat kappa I.

35. The nucleic acid of Claim 33, further wherein the encoded variable light chain framework sequences are juxtaposed between the HVRs according to the formula: (LC-FR1)-(HVR-L1)-(LC-FR2)-(HVR-L2)-(LC-FR3)-(HVR-L3)-(LC-FR4).

36. The nucleic acid of Claim 35, wherein one or more of the light chain framework sequences is the following:

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

37. The nucleic acid of Claim 25, wherein the anti-PD-L1 antibody comprises a constant region derived from a murine antibody.

38. The nucleic acid of Claim 25, wherein the anti-PD-L1 antibody comprises a constant region derived from a human antibody.

39. The nucleic acid of Claim 37, wherein the constant region is IgG2A.

40. The nucleic acid of Claim 38, wherein the constant region is IgG1.

41. The nucleic acid of Claim 40, wherein the encoded antibody has reduced or minimal effector function.

42. The nucleic acid of Claim 41, wherein the minimal effector function results from an effector-less Fc mutation.

43. The nucleic acid of Claim 42, wherein the effector-less Fc mutation is N297A.

44. The nucleic acid of Claim 42, wherein the effector-less Fc mutation is D265A/N297A.

45. An isolated nucleic acid encoding an anti-PD-L1 antibody or antigen binding fragment thereof, wherein the antibody or antibody fragment 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 further:

(i) the HVR-H1 sequence is GFTFSX$_1$SWIH (SEQ ID NO:1);

(ii) the HVR-H2 sequence is AWIX$_2$PYGGSX$_3$YYADSVKG (SEQ ID NO:2);

(iii) the HVR-H3 sequence is RHWPGGFDY, and (SEQ ID NO:3);

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

(iv) the HVR-L1 sequence is RASQX$_4$X$_5$X$_6$TX$_7$X$_8$A (SEQ ID NOs:8);

(v) the HVR-L2 sequence is SASX$_9$LX$_{10}$S (SEQ ID NOs:9);

(vi) the HVR-L3 sequence is QQX$_{11}$X$_{12}$X$_{13}$X$_{14}$PX$_{15}$T (SEQ ID NOs:10);

wherein: X$_1$ is D or G; X$_2$ is S or L; X$_3$ is T or S; X$_4$ may be D or V; X$_5$ may be V or I; X$_6$ may be S or N; X$_7$ may be A or F; X$_8$ may be V or L; X$_9$ may be F or T; X$_{10}$ may be Y or A; X$_{11}$ may be Y, G, F, or S; X$_{12}$ may be L, Y, F or W; X$_{13}$ may be Y, N, A, T, G, F or I; X$_{14}$ may be H, V, P, T or I; X$_{15}$ may be A, W, R, P or T.

46. The nucleic acid of Claim 45 wherein X$_1$ is D; X$_2$ is S and X$_3$ is T.

47. The nucleic acid of Claim 45, wherein X$_4$ = D, X$_5$ = V, X$_6$ = S, X$_7$ = A and X$_8$ = V, X$_9$ = F, and X$_{10}$ = Y, X$_{11}$ = Y, X$_{12}$ = L, X$_{13}$ = Y, X$_{14}$ = H and X$_{15}$ = A.

48. The nucleic acid of Claim 45, wherein X$_1$ = D, X$_2$ = S and X$_3$ = T, X$_4$ = D, X$_5$ = V, X$_6$ = S, X$_7$ = A and X$_8$ = V, X$_9$ = F, and X$_{10}$ = Y, X$_{11}$ = Y, X$_{12}$ = L, X$_{13}$ = Y, X$_{14}$ = H and X$_{15}$ = A.

49. The nucleic acid of Claim 46, wherein the encoded variable region heavy chain framework sequences are juxtaposed between the HVRs according to the formula: (HC-FR1)-(HVR-H1)-(HC-FR2)-(HVR-H2)-(HC-FR3)-(HVR-H3)-(HC-FR4).

50. The nucleic acid of claim 49, wherein the framework sequences are human.

51. The nucleic acid of Claim 50 wherein the framework sequences are VH subgroup III consensus framework.

52. The nucleic acid of Claim 51 wherein one or more of the framework sequences is the following:

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

53. The nucleic acid of 47, wherein the encoded 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).

54. The nucleic acid of Claim 53 wherein the variable region light chain framework sequences are VL kappa I consensus framework.

55. The nucleic acid of Claim 54 wherein one or more of the framework sequences is the following:

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

56. The nucleic acid of Claim 48 wherein the antibody or antibody fragment comprises:

(a) 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), and

(b) 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 the variable heavy chain framework sequences are the following:

(i) HC-FR1 is EVQLVESGGGLVQPGGSLRLSCAAS (SEQ ID NO:4);
(ii) HC-FR2 is WVRQAPGKGLEWV (SEQ ID NO:5);
(iii) HC-FR3 is RFTISADTSKNTAYLQMNSLRAEDTAVYYCAR (SEQ ID NO:6);
(iv) HC-FR4 is WGQGTLVTVSA; and (SEQ ID NO:7); and

further wherein the variable light chain framework sequences are the following:

(i) LC-FR1 is DIQMTQSPSSLSASVGDRVTITC (SEQ ID NO:11);
(ii) LC-FR2 is WYQQKPGKAPKLLIY (SEQ ID NO:12);
(iii) LC-FR3 is GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC (SEQ ID NO:13);
(iv) LC-FR4 is FGQGTKVEIKR (SEQ ID NO:14).

57. The nucleic acid of Claim 56 further comprising a human constant region.

58. The nucleic acid of Claim 57, wherein the constant region is selected from the group consisting of IgG1, IgG2, IgG3 and IgG4.

59. The nucleic acid of Claim 58 wherein the constant region is IgG1.

60. The nucleic acid of Claim 59 having reduced or minimal effector function.

61. The nucleic acid of Claim 60, wherein the minimal effector function results from an effector-less Fc mutation.

62. The nucleic acid of Claim 61, wherein the effector-less Fc mutation is N297A.

63. The nucleic acid of Claim 61, wherein the effector-less Fc mutation is D265A/N297A.

64. The nucleic acid of Claim 60, wherein the minimal effector function results from aglycosylation.

65. The nucleic acid of Claim 56, further comprising a murine constant region.

66. The nucleic acid of Claim 65, wherein the constant region is selected from the group consisting of IgG1, IgG2A, IgG2B and IgG3.

67. The nucleic acid of Claim 66, wherein the constant region is IgG2A.

68. The nucleic acid of Claim 67, which has reduced or minimal effector function.

69. The nucleic acid of Claim 68, wherein the minimal effector function results from an effector-less Fc mutation.

70. The nucleic acid of Claim 69, wherein the effector-less Fc mutation is N297A.

71. The nucleic acid of Claim 69, wherein the effector-less Fc mutation is D265A/N297A.

72. The nucleic acid of Claim 68, wherein the minimal effector function results from aglycosylation.

73. An isolated nucleic acid encoding anti-PD-L1 antibody or antigen binding fragment thereof, wherein the antibody or antibody fragment comprises a heavy chain and light chain variable region sequence, wherein:

(a) the heavy chain comprises the sequence: EVQLVESGGGLVQPGGSLRLS CAASGFTFSDSWIHWVRQAPGKGLEWVAWISPYGGSTYYADSVKGRFTISADTS KNTAYLQMNSLRAEDTAVYYCARRHWPGGFDYWGQGTLVTVSA (SEQ ID NO:20), and

(b) the light chain comprises the sequence: DIQMTQSPSSLSASVGDRVTITC RASQDVSTAVAWYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGSGTDFTLTISSLQ PEDFATYYCQQYLYH PATFGQGTKVEIKR (SEQ ID NO:21).

74. The nucleic acid of Claim 73 further comprising a human constant region.

75. The nucleic acid of Claim 74, wherein the constant region is selected from the group consisting of IgG1, IgG2, IgG3 and IgG4.

76. The nucleic acid of Claim 75, wherein the constant region is IgG1.

77. The nucleic acid of Claim 76 having reduced or minimal effector function.

78. The nucleic acid of Claim 77, wherein the minimal effector function results from an effector-less Fc mutation.

79. The nucleic acid of Claim 78, wherein the effector-less Fc mutation is N297A.

80. The nucleic acid of Claim 78, wherein the effector-less Fc mutation is D265A/N297A.

81. The nucleic acid of Claim 77, wherein the minimal effector function results from aglycosylation.

82. A vector comprising the nucleic acid of any of Claims 1-12

83. A vector comprising the nucleic acid of any of Claims 13-24.

84. A vector comprising the nucleic acid of any of Claims 25-44.

85. A vector comprising the nucleic acid of any of Claims 45-72.

86. A vector comprising the nucleic acid of any of Claims 73-81.

87. A host cell comprising the vector of Claim 82.

88. A host cell comprising the vector of Claim 84.

89. A host cell comprising the vector of Claim 85.

90. A host cell comprising the vector of Claim 86.

91. The host cell of Claim 84, which is eukaryotic.

92. The host cell of Claim 91, which is mammalian.

93. The host cell of Claim 92, which is a Chinese Hamster Ovary (CHO) cells.

94. The host cell of Claim 84, which is prokaryotic.

95. The host cell of Claim 94, which is *E. coli*.

96. A process for making an anti-PD-L1 antibody comprising culturing the host cell of Claim 93 under conditions suitable for the expression of the vector encoding the anti-PD-L1 antibody or antigen binding fragment, and recovering the antibody or fragment.

WHAT IS CLAIMED IS:

1. An isolated nucleic acid encoding a light chain or a heavy chain variable region sequence of an anti-PD-L 1 antibody or antigen binding fragment, wherein:

(a) the heavy chain or antigen binding fragment thereof further comprises an HVR-H1, HVR-H2 and an HVR-H3 sequence having the sequences of GFTFSDSWIH (SEQ ID NO:15), AWISPYGGSTYYADSVKG (SEQ ID NO:16) and RHWPGGFDY (SEQ ID NO:3), respectively, or

(b) the light chain or antigen binding fragment thereof further comprises an HVR-L1, HVR-L2 and an HVR-L3 sequence having the sequences of RASQDVSTAVA (SEQ ID NO:17), SASFLYS (SEQ ID NO:18) and QQYLYHPAT (SEQ ID NO:19), respectively.

2. The nucleic acid of Claim 1, wherein the anti-PD-L1 antibody further comprises a VL and a VH framework region derived from a human consensus sequence.

3. The nucleic acid of Claim 2, wherein the VH sequence is derived from a Kabat subgroup I, II, or III sequence.

4. The nucleic acid of Claim 3, wherein the VH sequence is derived from Kabat subgroup III.

5. The nucleic acid of Claim 4, further wherein the heavy chain framework sequences are juxtaposed between the HVRs according to the formula: (HC-FR1)-(HVR-H1)-(HC-FR2)-(HVR-H2)-(HC-FR3)-(HVR-H3)-(HC-FR4).

6. The nucleic acid of Claim 5, wherein one or more of the heavy chain framework sequences is the following:

HC-FR1 is EVQLVESGGGLVQPGGSLRLSCAAS (SEQ ID NO:4);
HC-FR2 is WVRQAPGKGLEWV (SEQ ID NO:5);
HC-FR3 is RFTISADTSKNTAYLQMNSLRAEDTAVYYCAR (SEQ ID NO:6);
HC-FR4 is WGQGTLVTVSA (SEQ ID N0:7).

7. The nucleic acid of Claim 2, wherein the VL sequence is derived from a Kabat kappa I, II, III or IV subgroup sequence.

8. The nucleic acid of Claim 7, wherein the VL sequence is derived from Kabat kappa I.

9. The nucleic acid of Claim 7, wherein the encoded variable light chain framework sequences are juxtaposed between the HVRs according to the formula: (LC-FR1)-(HVR-L1)-(LC-FR2)-(HVR-L2)-(LC-FR3)-(HVR-L3)-(LC-FR4).

10. The nucleic acid of Claim 9, wherein one or more of the light chain framework sequences is the following:

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

11. The nucleic acid of Claim 1, wherein the anti-PD-LI antibody comprises a constant region derived from a murine antibody.

12. The nucleic acid of Claim 1, wherein the anti-PD-LI antibody comprises a constant region derived from a human antibody.

13. The nucleic acid of Claim 11, wherein the constant region is IgG2A.

14. The nucleic acid of Claim 12, wherein the constant region is IgG1.

15. The nucleic acid of Claim 14, wherein the encoded antibody has reduced or minimal effector function.

16. The nucleic acid of Claim 15, wherein the minimal effector function results from an effector-less Fc mutation.

17. The nucleic acid of Claim 16, wherein the effector-less Fc mutation is N297A.

18. The nucleic acid of Claim 16, wherein the effector-less Fc mutation is D265A/N297A.

19. An isolated nucleic acid encoding an anti-PD-LI antibody or antigen binding fragment thereof, wherein the antibody or antigen binding fragment 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 further:
    (i) the HVR-H1 sequence is GFTFSDSWIH (SEQ ID NO: 15);
    (ii) the HVR-H2 sequence is AWISPYGGSTYYADSVKG (SEQ ID NO: 16);
    (iii) the HVR-H3 sequence is RHWPGGFDY (SEQ ID NO:3); and

(b) the light chain comprises an HVR-L1, HVR-L2 and HVR-L3, wherein further:
    (iv) the HVR-L1 sequence is RASQDVSTAVA (SEQ ID NO: 17);
    (v) the HVR-L2 sequence is SASFLYS (SEQ ID NO: 18);
    (vi) the HVR-L3 sequence is QQYLYHPAT (SEQ ID NO: 19).

20. The nucleic acid of Claim 19, wherein the encoded variable region heavy chain framework sequences are juxtaposed between the HVRs according to the formula: (HC-FR1)-(HVR-H1)-(HC-FR2)-(HVR-H2)-(HC-FR3)-(HVR-H3)-(HC-FR4).

21. The nucleic acid of claim 20, wherein the framework sequences are human.

22. The nucleic acid of Claim 21, wherein the framework sequences are VH subgroup III consensus framework.

23. The nucleic acid of Claim 21 wherein one or more of the framework sequences is the following:

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

24. The nucleic acid of 19, wherein the encoded 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).

25. The nucleic acid of Claim 24 wherein the variable region light chain framework sequences are VL kappa I consensus framework.

26. The nucleic acid of Claim 25 wherein one or more of the framework sequences is the following:

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

27. The nucleic acid of Claim 19 wherein the antibody or antigen binding fragment comprises:

(a) 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), and

(b) 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 the variable heavy chain framework sequences are the following:
(i) HC-FR1 is EVQLVESGGGLVQPGGSLRLSCAAS (SEQ ID NO:4);
(ii) HC-FR2 is WVRQAPGKGLEWV (SEQ ID NO:5);
(iii) HC-FR3 is RFTISADTSKNTAYLQMNSLRAEDTAVYYCAR (SEQ ID NO:6);
(iv) HC-FR4 is WGQGTLVTVSA (SEQ ID NO:7); and
further wherein the variable light chain framework sequences are the following:
(i) LC-FR1 is DIQMTQSPSSLSASVGDRVTITC (SEQ ID NO: 11);
(ii) LC-FR2 is WYQQKPGKAPKLLIY (SEQ ID NO:12);
(iii) LC-FR3 is GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC (SEQ ID NO:13);
(iv) LC-FR4 is FGQGTKVEIKR (SEQ ID N0:14).

28. The nucleic acid of Claim 27 further comprising a human constant region.

29. The nucleic acid of Claim 28, wherein the constant region is selected from the group consisting of IgG1, IgG2, IgG3 and IgG4.

30. The nucleic acid of Claim 29, wherein the constant region is IgG1.

31. The nucleic acid of Claim 30 having reduced or minimal effector function.

32. The nucleic acid of Claim 31, wherein the minimal effector function results from an effector-less Fc mutation.

33. The nucleic acid of Claim 32, wherein the effector-less Fc mutation is N297A.

34. The nucleic acid of Claim 32, wherein the effector-less Fc mutation is D265A/N297A.

35. The nucleic acid of Claim 31, wherein the minimal effector function results from aglycosylation.

36. The nucleic acid of Claim 27, further comprising a murine constant region.

37. The nucleic acid of Claim 36, wherein the constant region is selected from the group consisting of IgG1, IgG2A, IgG2B and IgG3.

38. The nucleic acid of Claim 37, wherein the constant region is IgG2A.

39. The nucleic acid of Claim 38, which has reduced or minimal effector function.

40. The nucleic acid of Claim 39, wherein the minimal effector function results from an effector-less Fc mutation.

41. The nucleic acid of Claim 40, wherein the effector-less Fc mutation is N297A.

42. The nucleic acid of Claim 40, wherein the effector-less Fc mutation is D265A/N297A.

43. The nucleic acid of Claim 39, wherein .the minimal effector function results from aglycosylation.

44. An isolated nucleic acid encoding an anti-PD-L1 antibody or antigen binding fragment thereof, wherein the antibody or antigen binding fragment comprises a heavy chain and light chain variable region sequence, wherein:

(a) the heavy chain comprises the sequence:
EVQLVESGGGLVQPGGSLRLSCAASGFTFSDSWIHWVRQAPGKGLEWVAWI
SPYGGSTYYADSVKGRFTISADTSKNTAYLQMNSLRAEDTAVYYCARRHWP
GGFDYWGQGTLVTVSA (SEQ ID NO:20), and

(b) the light chain comprises the sequence:
DIQMTQSPSSLSASVGDRVTITCRASQDVSTAVA
WYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYC
QQYLYH PATFGQGTKVEIKR (SEQ ID NO:21).

45. The nucleic acid of Claim 44 further comprising a human constant region.

46. The nucleic acid of Claim 45, wherein the constant region is selected from the group consisting of IgG1, IgG2, IgG3 and IgG4.

47. The nucleic acid of Claim 46, wherein the constant region is IgG1.

48. The nucleic acid of Claim 47 having reduced or minimal effector function.

49. The nucleic acid of Claim 48, wherein the minimal effector function results from an effector-less Fc mutation.

50. The nucleic acid of Claim 49, wherein the effector-less Fc mutation is N297A.

51. The nucleic acid of Claim 49, wherein the effector-less Fc mutation is D265A/N297A.

52. The nucleic acid of Claim 48, wherein the minimal effector function results from aglycosylation.

53. A vector comprising the nucleic acid of any of Claims 1-18.

54. A vector comprising the nucleic acid of any of Claims 19-43.

55. A vector comprising the nucleic acid of any of Claims 44-52.

56. A host cell comprising the vector of Claim 53.

57. A host cell comprising the vector of Claim 54.

58. A host cell comprising the vector of Claim 55.

59. The host cell of Claim 56, which is eukaryotic.

60. The host cell of Claim 59, which is mammalian.

61. The host cell of Claim 60, which is a Chinese Hamster Ovary (CHO) cells.

62. The host cell of Claim 56, which is prokaryotic.

63. The host cell of Claim 62, which is *E. coli*.

64. A process for making an anti-PD-L1 antibody comprising culturing the host cell of Claim 61 under conditions suitable for the expression of the vector encoding the anti-PD-L1 antibody or antigen binding fragment, and recovering the antibody or fragment.