WHAT IS CLAIMED:

1. An isolated T cell receptor (TCR) that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, the TCR comprising an α chain variable region (Vα) comprising complementarity determining region CDR3α, wherein the CDR3α comprises the amino acid sequence set forth in SEQ ID NO: 61, 62, 63, 64, or 65.
2. The isolated TCR of claim 1, wherein the CDR3α comprises the amino acid sequence set forth in SEQ ID NO: 64 or 65.
3. The isolated TCR of claim 1 or 2, wherein the CDR3α comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 7 and 39-60.
4. The isolated TCR of any one of the preceding claims, wherein the CDR3α comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 7, 39, 40, 43, 45, 47, 49, and 54.
5. The isolated TCR of any one of the preceding claims, wherein the Vα comprises CDR1α and CDR2α, comprising the amino acid sequences set forth in SEQ ID NOs: 5 and 6, respectively.
6. The isolated TCR of any one of the preceding claims, wherein the Vα comprises CDR1α, CDR2α, and CDR3α, comprising the amino acid sequences set forth in SEQ ID NOs: 5, 6, and 7; 5, 6, and 39; 5, 6, and 40; 5, 6, and 41; 5, 6, and 42; 5, 6, and 43; 5, 6, and 44; 5, 6, and 45; 5, 6, and 46; 5, 6, and 47; 5, 6, and 48; 5, 6, and 49; 5, 6, and 50; 5, 6, and 51; 5, 6, and 52; 5, 6, and 53; 5, 6, and 54; 5, 6, and 55; 5, 6, and 56; 5, 6, and 57; 5, 6, and 58; 5, 6, and 59; or 5, 6, and 60, respectively.
7. The isolated TCR of any one of the preceding claims, wherein the Vα comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 87-91.
8. The isolated TCR of any one of the preceding claims, wherein the Vα comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 3 and 66-86.
9. The isolated TCR of any one of the preceding claims, wherein the Vα comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 3, 66, 69, 71, 73, 75, and 80.
10. The isolated TCR of any one of the preceding claims, comprising an α chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 93-96, 105-118, 120-123, 125-128, and 408-415.

11. The isolated TCR of any one of the preceding claims, comprising an α chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 105, 110, 115, 120, 125, 408, and 412.
12. The isolated TCR of any one of the preceding claims, wherein the TCR comprises a β chain variable region (Vβ) comprising CDR3β, wherein the CDR3β comprises the amino acid sequence set forth in SEQ ID NO: 10.
13. The isolated TCR of claim 12, wherein the Vβ comprises CDR1β and CDR2β comprising the amino acid sequences set forth in SEQ ID NOs: 8 and 9, respectively.
14. The isolated TCR of claim 12 or 13, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 4.
15. The isolated TCR of any one of claims 12-14, comprising a β chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.
16. An isolated T cell receptor (TCR) that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, the TCR comprising a β chain variable region (Vβ) comprising complementarity determining region CDR3β, wherein the CDR3β comprises the amino acid sequence set forth in SEQ ID NO: 10.
17. The isolated TCR of claim 16, wherein the Vβ comprises CDR1β and CDR2β comprising the amino acid sequences set forth in SEQ ID NOs: 8 and 9, respectively.
18. The isolated TCR of claim 16 or 17, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 4.
19. The isolated TCR of any one of claims 16-18, comprising a β chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.
20. An isolated T cell receptor (TCR) that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, the TCR comprising an α chain variable region (Vα) comprising an amino acid sequence at least 75%, 80%, 85%, 90%, 95%, 99%, or 100% identical to the amino acid sequence set forth in SEQ ID NO: 18.
21. The isolated TCR of claim 20, wherein the Vα comprises the amino acid sequence set forth in SEQ ID NO: 18.
22. The isolated TCR of claim 20 or 21, wherein the TCR comprises a β chain variable region (Vβ) comprising an amino acid sequence at least 75%, 80%, 85%, 90%, 95%, 99%, or 100% identical to the amino acid sequence set forth in SEQ ID NO: 19.
23. The isolated TCR of claim 22, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 19.

~~24. An isolated T cell receptor (TCR) that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, the TCR comprising a β chain variable region (Vβ) comprising an amino acid sequence at least 75%, 80%, 85%, 90%, 95%, 99%, or 100% identical to the amino acid sequence set forth in SEQ ID NO: 19.~~

~~25. The isolated TCR of claim 24, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 19.~~

~~26. The isolated TCR of any one of the preceding claims, wherein the TCR comprises an α chain variable region (Vα) comprising CDR1α, CDR2α, and CDR3α, and a β chain variable region (Vβ) comprising CDR1β, CDR2β, and CDR3β, wherein the CDR1α, CDR2α, CDR3α, CDR1β, CDR2β, and CDR3β comprise the amino acid sequences set forth in SEQ ID NOs: 5, 6, 7, 8, 9, and 10; 5, 6, 39, 8, 9, and 10; 5, 6, 40, 8, 9, and 10; 5, 6, 41, 8, 9, and 10; 5, 6, 42, 8, 9, and 10; 5, 6, 43, 8, 9, and 10; 5, 6, 44, 8, 9, and 10; 5, 6, 45, 8, 9, and 10; 5, 6, 46, 8, 9, and 10; 5, 6, 47, 8, 9, and 10; 5, 6, 48, 8, 9, and 10; 5, 6, 49, 8, 9, and 10; 5, 6, 50, 8, 9, and 10; 5, 6, 51, 8, 9, and 10; 5, 6, 52, 8, 9, and 10; 5, 6, 53, 8, 9, and 10; 5, 6, 54, 8, 9, and 10; 5, 6, 55, 8, 9, and 10; 5, 6, 56, 8, 9, and 10; 5, 6, 57, 8, 9, and 10; 5, 6, 58, 8, 9, and 10; 5, 6, 59, 8, 9, and 10; or 5, 6, 60, 8, 9, and 10, respectively.~~

~~27.~~1. An isolated TCR comprising an α chain variable region (Vα) comprising complementarity determining regions CDR1α, CDR2α, and CDR3α, and a β chain variable region (Vβ) comprising CDR1β, CDR2β, and CDR3β, wherein the CDR1α, CDR2α, CDR3α, CDR1β, CDR2β, and CDR3β comprise the amino acid sequences set forth in SEQ ID NOs: 5, 6, 7, 8, 9, and 10; 5, 6, 39, 8, 9, and 10; 5, 6, 40, 8, 9, and 10; 5, 6, 41, 8, 9, and 10; 5, 6, 42, 8, 9, and 10; 5, 6, 43, 8, 9, and 10; 5, 6, 44, 8, 9, and 10; 5, 6, 45, 8, 9, and 10; 5, 6, 46, 8, 9, and 10; 5, 6, 47, 8, 9, and 10; 5, 6, 48, 8, 9, and 10; 5, 6, 49, 8, 9, and 10; 5, 6, 50, 8, 9, and 10; 5, 6, 51, 8, 9, and 10; 5, 6, 52, 8, 9, and 10; 5, 6, 53, 8, 9, and 10; 5, 6, 54, 8, 9, and 10; 5, 6, 55, 8, 9, and 10; 5, 6, 56, 8, 9, and 10; 5, 6, 57, 8, 9, and 10; 5, 6, 58, 8, 9, and 10; 5, 6, 59, 8, 9, and 10; or 5, 6, 60, 8, 9, and 10, respectively.

~~28. The isolated TCR of claim 27, wherein the Vα and Vβ comprise the amino acid sequences set forth in SEQ ID NOs: 3 and 4, 66 and 4, 67 and 4, 68 and 4, 69 and 4, 70 and 4, 71 and 4, 72 and 4, 73 and 4, 74 and 4, 75 and 4, 76 and 4, 77 and 4, 78 and 4, 79 and 4, 80 and 4, 81 and 4, 82 and 4, 83 and 4, 84 and 4, 85 and 4, or 86 and 4, respectively.~~

29. The isolated TCR of any one of claims 1-9 and 12-28, wherein the TCR comprises an α chain comprising an α chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 15, 26, or 92.

30. The isolated TCR of any one of claims 1-14, 16-18, and 20-29, wherein the TCR comprises a β chain comprising a β chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 16 or 17.

31.2. An isolated TCR comprising an α chain and a β chain, wherein the α chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 93-96, 105-118, 120-123, 125-128, and 408-415, and the β chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.

32. The isolated TCR of claim 31, wherein the α chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 105, 110, 115, 120, 125, 408, and 412, and the β chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.

33. The isolated TCR of claim 31 or 32, wherein the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 13 and 25; 13 and 97; 13 and 98; 13 and 99; 13 and 100; 13 and 101; 13 and 102; 13 and 103; 13 and 104; 93 and 14; 93 and 25; 93 and 97; 93 and 98; 93 and 99; 93 and 100; 93 and 101; 93 and 102; 93 and 103; 93 and 104; 94 and 14; 94 and 25; 94 and 97; 94 and 98; 94 and 99; 94 and 100; 94 and 101; 94 and 102; 94 and 103; 94 and 104; 95 and 14; 95 and 25; 95 and 97; 95 and 98; 95 and 99; 95 and 100; 95 and 101; 95 and 102; 95 and 103; 95 and 104; 96 and 14; 96 and 25; 96 and 97; 96 and 98; 96 and 99; 96 and 100; 96 and 101; 96 and 102; 96 and 103; 96 and 104; 105 and 14; 105 and 25; 105 and 97; 105 and 98; 105 and 99; 105 and 100; 105 and 101; 105 and 102; 105 and 103; 105 and 104; 106 and 14; 106 and 25; 106 and 97; 106 and 98; 106 and 99; 106 and 100; 106 and 101; 106 and 102; 106 and 103; 106 and 104; 107 and 14; 107 and 25; 107 and 97; 107 and 98; 107 and 99; 107 and 100; 107 and 101; 107 and 102; 107 and 103; 107 and 104; 108 and 14; 108 and 25; 108 and 97; 108 and 98; 108 and 99; 108 and 100; 108 and 101; 108 and 102; 108 and 103; 108 and 104; 109 and 14; 109 and 25; 109 and 97; 109 and 98; 109 and 99; 109 and 100; 109 and 101; 109 and 102; 109 and 103; 109 and 104; 110 and 14; 110 and 25; 110 and 97; 110 and 98; 110 and 99; 110 and 100; 110 and 101; 110 and 102; 110 and 103; 110 and 104; 111 and 14; 111 and 25; 111 and 97; 111 and 98; 111 and 99; 111 and 100; 111 and 101; 111 and 102; 111 and 103; 111 and 104; 112 and 14; 112 and 25; 112 and 97; 112 and 98; 112 and 99; 112 and 100; 112 and 101; 112 and 102; 112 and 103; 112 and 104;

113 and 14; 113 and 25; 113 and 97; 113 and 98; 113 and 99; 113 and 100; 113 and 101; 113 and 102; 113 and 103; 113 and 104; 114 and 14; 114 and 25; 114 and 97; 114 and 98; 114 and 99; 114 and 100; 114 and 101; 114 and 102; 114 and 103; 114 and 104; 115 and 14; 115 and 25; 115 and 97; 115 and 98; 115 and 99; 115 and 100; 115 and 101; 115 and 102; 115 and 103; 115 and 104; 116 and 14; 116 and 25; 116 and 97; 116 and 98; 116 and 99; 116 and 100; 116 and 101; 116 and 102; 116 and 103; 116 and 104; 117 and 14; 117 and 25; 117 and 97; 117 and 98; 117 and 99; 117 and 100; 117 and 101; 117 and 102; 117 and 103; 117 and 104; 118 and 14; 118 and 25; 118 and 97; 118 and 98; 118 and 99; 118 and 100; 118 and 101; 118 and 102; 118 and 103; 118 and 104; 120 and 14; 120 and 25; 120 and 97; 120 and 98; 120 and 99; 120 and 100; 120 and 101; 120 and 102; 120 and 103; 120 and 104; 121 and 14; 121 and 25; 121 and 97; 121 and 98; 121 and 99; 121 and 100; 121 and 101; 121 and 102; 121 and 103; 121 and 104; 122 and 14; 122 and 25; 122 and 97; 122 and 98; 122 and 99; 122 and 100; 122 and 101; 122 and 102; 122 and 103; 122 and 104; 123 and 14; 123 and 25; 123 and 97; 123 and 98; 123 and 99; 123 and 100; 123 and 101; 123 and 102; 123 and 103; 123 and 104; 125 and 14; 125 and 25; 125 and 97; 125 and 98; 125 and 99; 125 and 100; 125 and 101; 125 and 102; 125 and 103; 125 and 104; 126 and 14; 126 and 25; 126 and 97; 126 and 98; 126 and 99; 126 and 100; 126 and 101; 126 and 102; 126 and 103; 126 and 104; 127 and 14; 127 and 25; 127 and 97; 127 and 98; 127 and 99; 127 and 100; 127 and 101; 127 and 102; 127 and 103; 127 and 104; 128 and 14; 128 and 25; 128 and 97; 128 and 98; 128 and 99; 128 and 100; 128 and 101; 128 and 102; 128 and 103; 128 and 104; 408 and 14; 408 and 25; 408 and 97; 408 and 98; 408 and 99; 408 and 100; 408 and 101; 408 and 102; 408 and 103; 408 and 104; 409 and 14; 409 and 25; 409 and 97; 409 and 98; 409 and 99; 409 and 100; 409 and 101; 409 and 102; 409 and 103; 409 and 104; 410 and 14; 410 and 25; 410 and 97; 410 and 98; 410 and 99; 410 and 100; 410 and 101; 410 and 102; 410 and 103; 410 and 104; 411 and 14; 411 and 25; 411 and 97; 411 and 98; 411 and 99; 411 and 100; 411 and 101; 411 and 102; 411 and 103; 411 and 104; 412 and 14; 412 and 25; 412 and 97; 412 and 98; 412 and 99; 412 and 100; 412 and 101; 412 and 102; 412 and 103; 412 and 104; 413 and 14; 413 and 25; 413 and 97; 413 and 98; 413 and 99; 413 and 100; 413 and 101; 413 and 102; 413 and 103; 413 and 104; 414 and 14; 414 and 25; 414 and 97; 414 and 98; 414 and 99; 414 and 100; 414 and 101; 414 and 102; 414 and 103; 414 and 104; 415 and 14; 415 and 25; 415 and 97; 415 and 98; 415 and 99; 415 and 100; 415 and 101; 415 and 102; 415 and 103; or 415 and 104, respectively.

34. The isolated TCR of claim 33, wherein the α chain and the β chain comprise the amino acid

sequences set forth in SEQ ID NOs: 13 and 14; 13 and 25; 105 and 14; 105 and 25; 110 and 14; 110 and 25; 115 and 14; 115 and 25; 120 and 14; 120 and 25; 125 and 14; 125 and 25; 408 and 14; 408 and 25; 412 and 14; or 412 and 25, respectively.

35. The isolated TCR of claim 33, wherein the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 105 and 14; 110 and 14; 115 and 14; 120 and 14; 125 and 14; 408 and 14; or 412 and 14, respectively.

36. The isolated TCR of any one of claims 31-35, wherein the TCR binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2.

37. A polypeptide comprising an α chain variable region (Vα) and a β chain variable region (Vβ) of a T cell receptor (TCR) that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, wherein the Vα comprises complementarity determining region CDR3α, wherein the CDR3α comprises the amino acid sequence set forth in SEQ ID NO: 61, 62, 63, 64, or 65.

38. The polypeptide of claim 37, wherein the CDR3α comprises the amino acid sequence set forth in SEQ ID NO: 64 or 65.

39. The polypeptide of claim 37 or 38, wherein the CDR3α comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 7 and 39-60.

40. The polypeptide of any one of claims 37-39, wherein the CDR3α comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 7, 39, 40, 43, 45, 47, 49, and 54.

41. The polypeptide of any one of claims 37-40, wherein the Vα comprises CDR1α and CDR2α, comprising the amino acid sequences set forth in SEQ ID NOs: 5 and 6, respectively.

42. The polypeptide of any one of claims 37-41, wherein the Vα comprises CDR1α, CDR2α, and CDR3α, comprising the amino acid sequences set forth in SEQ ID NOs: 5, 6, and 7; 5, 6, and 39; 5, 6, and 40; 5, 6, and 41; 5, 6, and 42; 5, 6, and 43; 5, 6, and 44; 5, 6, and 45; 5, 6, and 46; 5, 6, and 47; 5, 6, and 48; 5, 6, and 49; 5, 6, and 50; 5, 6, and 51; 5, 6, and 52; 5, 6, and 53; 5, 6, and 54; 5, 6, and 55; 5, 6, and 56; 5, 6, and 57; 5, 6, and 58; 5, 6, and 59; or 5, 6, and 60, respectively.

43. The polypeptide of any one of claims 37-42, wherein the Vα comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 87-91.

44. The polypeptide of any one of claims 37-43, wherein the Vα comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 3 and 66-86.

45. The polypeptide of claim 44, wherein the Vα comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 3, 66, 69, 71, 73, 75, and 80.

46. The polypeptide of any one of claims 37-45, comprising an α chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 93-96, 105-118, 120-123, 125-128, and 408-415.

47. The polypeptide of claim 46, comprising an α chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 105, 110, 115, 120, 125, 408, and 412.

48. The polypeptide of any one of claims 37-47, wherein the Vβ comprises CDR3β, wherein the CDR3β comprises the amino acid sequence set forth in SEQ ID NO: 10.

49. The polypeptide of claim 48, wherein the Vβ comprises CDR1β and CDR2β comprising the amino acid sequences set forth in SEQ ID NOs: 8 and 9, respectively.

50. The polypeptide of claim 48 or 49, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 4.

51. The polypeptide of any one of claims 48-50, comprising a β chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.

52. A polypeptide comprising a Vα and a Vβ of a TCR that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, wherein the Vβ comprises complementarity determining region CDR3β, and wherein the CDR3β comprises the amino acid sequence set forth in SEQ ID NO: 10.

53. The polypeptide of claim 52, wherein the Vβ comprises CDR1β and CDR2β, comprising the amino acid sequences set forth in SEQ ID NOs: 8 and 9, respectively.

54. The polypeptide of claim 52 or 53, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 4.

55. The polypeptide of any one of claims 52-54, comprising a β chain comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.

56. A polypeptide comprising a Vα and a Vβ of a TCR that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, wherein the Vα comprises an amino acid sequence at least 75%, 80%, 85%, 90%, 95%, 99%, or 100% identical to the amino acid sequence set forth in SEQ ID NO: 18.

57. The polypeptide of claim 56, wherein the Vα comprises the amino acid sequence set forth in SEQ ID NO: 18.

58. The polypeptide of claim 56 or 57, wherein the Vβ comprises an amino acid sequence at least 75%, 80%, 85%, 90%, 95%, 99%, or 100% identical to the amino acid sequence set forth in SEQ ID NO: 19.

59. The polypeptide of claim 58, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 19.

60. A polypeptide comprising a Vα and a Vβ of a TCR that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, wherein the Vβ comprises an amino acid sequence at least 75%, 80%, 85%, 90%, 95%, 99%, or 100% identical to the amino acid sequence set forth in SEQ ID NO: 19.

61. The polypeptide of claim 60, wherein the Vβ comprises the amino acid sequence set forth in SEQ ID NO: 19.

62. The polypeptide of any one of claims 37-61, wherein the Vα comprises CDR1α, CDR2α, and CDR3α, and the Vβ comprises CDR1β, CDR2β, and CDR3β, wherein the CDR1α, CDR2α, CDR3α, CDR1β, CDR2β, and CDR3β comprise the amino acid sequences set forth in SEQ ID NOs: 5, 6, 7, 8, 9, and 10; 5, 6, 39, 8, 9, and 10; 5, 6, 40, 8, 9, and 10; 5, 6, 41, 8, 9, and 10; 5, 6, 42, 8, 9, and 10; 5, 6, 43, 8, 9, and 10; 5, 6, 44, 8, 9, and 10; 5, 6, 45, 8, 9, and 10; 5, 6, 46, 8, 9, and 10; 5, 6, 47, 8, 9, and 10; 5, 6, 48, 8, 9, and 10; 5, 6, 49, 8, 9, and 10; 5, 6, 50, 8, 9, and 10; 5, 6, 51, 8, 9, and 10; 5, 6, 52, 8, 9, and 10; 5, 6, 53, 8, 9, and 10; 5, 6, 54, 8, 9, and 10; 5, 6, 55, 8, 9, and 10; 5, 6, 56, 8, 9, and 10; 5, 6, 57, 8, 9, and 10; 5, 6, 58, 8, 9, and 10; 5, 6, 59, 8, 9, and 10; or 5, 6, 60, 8, 9, and 10, respectively.

63. A polypeptide comprising a Vα and a Vβ of a TCR, wherein the Vα comprises complementarity determining regions CDR1α, CDR2α, and CDR3α, and the Vβ comprises CDR1β, CDR2β, and CDR3β, wherein the CDR1α, CDR2α, CDR3α, CDR1β, CDR2β, and CDR3β comprise the amino acid sequences set forth in SEQ ID NOs: 5, 6, 7, 8, 9, and 10; 5, 6, 39, 8, 9, and 10; 5, 6, 40, 8, 9, and 10; 5, 6, 41, 8, 9, and 10; 5, 6, 42, 8, 9, and 10; 5, 6, 43, 8, 9, and 10; 5, 6, 44, 8, 9, and 10; 5, 6, 45, 8, 9, and 10; 5, 6, 46, 8, 9, and 10; 5, 6, 47, 8, 9, and 10; 5, 6, 48, 8, 9, and 10; 5, 6, 49, 8, 9, and 10; 5, 6, 50, 8, 9, and 10; 5, 6, 51, 8, 9, and 10; 5, 6, 52, 8, 9, and 10; 5, 6, 53, 8, 9, and 10; 5, 6, 54, 8, 9, and 10; 5, 6, 55, 8, 9, and 10; 5, 6, 56, 8, 9, and 10; 5, 6, 57, 8, 9, and 10; 5, 6, 58, 8, 9, and 10; 5, 6, 59, 8, 9, and 10; or 5, 6, 60, 8, 9, and 10, respectively.

64. The polypeptide of claim 63, wherein the Vα and Vβ comprise the amino acid sequences set forth in SEQ ID NOs: 3 and 4, 66 and 4, 67 and 4, 68 and 4, 69 and 4, 70 and 4, 71

and 4, 72 and 4, 73 and 4, 74 and 4, 75 and 4, 76 and 4, 77 and 4, 78 and 4, 79 and 4, 80 and 4, 81 and 4, 82 and 4, 83 and 4, 84 and 4, 85 and 4, or 86 and 4, respectively.

65. The polypeptide of any one of claims 37-45 and 48-62, comprising an α chain comprising an α chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 15, 26, or 92.

66. The polypeptide of any one of claims 37-50, 52-54, and 56-64, comprising a β chain comprising a β chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 16 or 17.

67. A polypeptide comprising an α chain and an β chain of a TCR, wherein the α chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 93-96, 105-118, 120-123, 125-128, and 408-415, and the β chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.

68. The polypeptide of claim 67, wherein the α chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 105, 110, 115, 120, 125, 408, and 412, and the β chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104.

69. The polypeptide of claim 67 or 68, wherein the α chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 105, 110, 115, 120, 125, 408, and 412, and the β chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 97, 99, 101, and 103.

70. The polypeptide of any one of claims 37-69, wherein the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 13 and 25; 13 and 97; 13 and 98; 13 and 99; 13 and 100; 13 and 101; 13 and 102; 13 and 103; 13 and 104; 93 and 14; 93 and 25; 93 and 97; 93 and 98; 93 and 99; 93 and 100; 93 and 101; 93 and 102; 93 and 103; 93 and 104; 94 and 14; 94 and 25; 94 and 97; 94 and 98; 94 and 99; 94 and 100; 94 and 101; 94 and 102; 94 and 103; 94 and 104; 95 and 14; 95 and 25; 95 and 97; 95 and 98; 95 and 99; 95 and 100; 95 and 101; 95 and 102; 95 and 103; 95 and 104; 96 and 14; 96 and 25; 96 and 97; 96 and 98; 96 and 99; 96 and 100; 96 and 101; 96 and 102; 96 and 103; 96 and 104; 105 and 14; 105 and 25; 105 and 97; 105 and 98; 105 and 99; 105 and 100; 105 and 101; 105 and 102; 105 and 103; 105 and 104; 106 and 14; 106 and 25; 106 and 97; 106 and 98; 106 and 99; 106 and 100; 106 and 101; 106 and 102; 106 and 103; 106 and 104; 107 and 14; 107 and 25; 107 and 97; 107 and 98; 107 and 99; 107 and 100; 107 and 101; 107 and 102; 107 and 103; 107 and 104; 108 and 14; 108 and 25; 108 and 97; 108 and 98; 108 and 99; 108 and 100; 108 and 101; 108 and 102; 108 and

~~103; 108 and 104; 109 and 14; 109 and 25; 109 and 97; 109 and 98; 109 and 99; 109 and 100; 109 and 101; 109 and 102; 109 and 103; 109 and 104; 110 and 14; 110 and 25; 110 and 97; 110 and 98; 110 and 99; 110 and 100; 110 and 101; 110 and 102; 110 and 103; 110 and 104; 111 and 14; 111 and 25; 111 and 97; 111 and 98; 111 and 99; 111 and 100; 111 and 101; 111 and 102; 111 and 103; 111 and 104; 112 and 14; 112 and 25; 112 and 97; 112 and 98; 112 and 99; 112 and 100; 112 and 101; 112 and 102; 112 and 103; 112 and 104; 113 and 14; 113 and 25; 113 and 97; 113 and 98; 113 and 99; 113 and 100; 113 and 101; 113 and 102; 113 and 103; 113 and 104; 114 and 14; 114 and 25; 114 and 97; 114 and 98; 114 and 99; 114 and 100; 114 and 101; 114 and 102; 114 and 103; 114 and 104; 115 and 14; 115 and 25; 115 and 97; 115 and 98; 115 and 99; 115 and 100; 115 and 101; 115 and 102; 115 and 103; 115 and 104; 116 and 14; 116 and 25; 116 and 97; 116 and 98; 116 and 99; 116 and 100; 116 and 101; 116 and 102; 116 and 103; 116 and 104; 117 and 14; 117 and 25; 117 and 97; 117 and 98; 117 and 99; 117 and 100; 117 and 101; 117 and 102; 117 and 103; 117 and 104; 118 and 14; 118 and 25; 118 and 97; 118 and 98; 118 and 99; 118 and 100; 118 and 101; 118 and 102; 118 and 103; 118 and 104; 120 and 14; 120 and 25; 120 and 97; 120 and 98; 120 and 99; 120 and 100; 120 and 101; 120 and 102; 120 and 103; 120 and 104; 121 and 14; 121 and 25; 121 and 97; 121 and 98; 121 and 99; 121 and 100; 121 and 101; 121 and 102; 121 and 103; 121 and 104; 122 and 14; 122 and 25; 122 and 97; 122 and 98; 122 and 99; 122 and 100; 122 and 101; 122 and 102; 122 and 103; 122 and 104; 123 and 14; 123 and 25; 123 and 97; 123 and 98; 123 and 99; 123 and 100; 123 and 101; 123 and 102; 123 and 103; 123 and 104; 125 and 14; 125 and 25; 125 and 97; 125 and 98; 125 and 99; 125 and 100; 125 and 101; 125 and 102; 125 and 103; 125 and 104; 126 and 14; 126 and 25; 126 and 97; 126 and 98; 126 and 99; 126 and 100; 126 and 101; 126 and 102; 126 and 103; 126 and 104; 127 and 14; 127 and 25; 127 and 97; 127 and 98; 127 and 99; 127 and 100; 127 and 101; 127 and 102; 127 and 103; 127 and 104; 128 and 14; 128 and 25; 128 and 97; 128 and 98; 128 and 99; 128 and 100; 128 and 101; 128 and 102; 128 and 103; 128 and 104; 408 and 14; 408 and 25; 408 and 97; 408 and 98; 408 and 99; 408 and 100; 408 and 101; 408 and 102; 408 and 103; 408 and 104; 409 and 14; 409 and 25; 409 and 97; 409 and 98; 409 and 99; 409 and 100; 409 and 101; 409 and 102; 409 and 103; 409 and 104; 410 and 14; 410 and 25; 410 and 97; 410 and 98; 410 and 99; 410 and 100; 410 and 101; 410 and 102; 410 and 103; 410 and 104; 411 and 14; 411 and 25; 411 and 97; 411 and 98; 411 and 99; 411 and 100; 411 and 101; 411 and 102; 411 and 103; 411 and 104; 412 and 14; 412 and 25; 412 and 97; 412 and 98; 412 and 99; 412 and 100; 412 and 101; 412 and 102; 412 and 103; 412 and 104;~~

413 and 14; 413 and 25; 413 and 97; 413 and 98; 413 and 99; 413 and 100; 413 and 101; 413 and 102; 413 and 103; 413 and 104; 414 and 14; 414 and 25; 414 and 97; 414 and 98; 414 and 99; 414 and 100; 414 and 101; 414 and 102; 414 and 103; 414 and 104; 415 and 14; 415 and 25; 415 and 97; 415 and 98; 415 and 99; 415 and 100; 415 and 101; 415 and 102; 415 and 103; or 415 and 104, respectively.

71. The polypeptide of claim 70, wherein the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 13 and 25; 105 and 14; 105 and 25; 110 and 14; 110 and 25; 115 and 14; 115 and 25; 120 and 14; 120 and 25; 125 and 14; 125 and 25; 408 and 14; 408 and 25; 412 and 14; or 412 and 25, respectively.

72. The polypeptide of any one of claims 37-71, wherein the α chain and the β chain comprise the amino acid sequence set forth in SEQ ID NOs: 13 and 14; 105 and 14; 110 and 14; 115 and 14; 120 and 14; 125 and 14; 408 and 14; or 412 and 14, respectively.

73. The polypeptide of claim 61-72, wherein the TCR binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2.

74. The polypeptide of any one of claims 37-73, comprising only one α chain and one β chain.

75. The polypeptide of claim 74, wherein the α chain is N-terminal to the β chain.

76. The polypeptide of claim 74, wherein the α chain is C-terminal to the β chain.

77. The polypeptide of any one of claims 37-76, further comprising a peptide linker between the α chain and the β chain.

78. The polypeptide of claim 77, wherein the linker comprises a proteolytic cleavage site.

79. The polypeptide of claim 78, wherein the proteolytic cleavage site comprises a Furin cleavage site and/or a 2A cleavage site.

80. The polypeptide of claim 79, wherein the Furin cleavage site comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 29-31 and 131-133.

81. The polypeptide of claim 80, wherein the Furin cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 132.

82. The polypeptide of claim 79, wherein the 2A cleavage site comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 32-38, 130, and 134-140.

83. The polypeptide of claim 79, wherein the 2A cleavage site comprises a porcine teschovirus-1 2A (P2A) cleavage site.

84. The polypeptide of claim 83, wherein the P2A cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 33 or 134.

~~85. The polypeptide of any one of claims 78-84, wherein the proteolytic cleavage site comprises a Furin cleavage site and a 2A cleavage site.~~

~~86. The polypeptide of claim 85, wherein the Furin cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 132, and the 2A cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 33 or 134.~~

~~87. The polypeptide of any one of claims 37-86, further comprising Gly-Ser at the C-terminus of the polypeptide.~~

~~88. The polypeptide of any one of claims 37-75 and 77-87, comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 28, 141-143, 158-161, 176-179, 194, 196, 212, 214, 230, 232, 248, 250, 416, and 417.~~

~~89. The polypeptide of claim 88, comprising an amino acid sequence selected from the group consisting of:~~

~~i) SEQ ID NOs: 28, 158, 176, 194, 212, 230, 248, and 416;~~

~~ii) SEQ ID NOs: 141, 159, and 177; or~~

~~iii) SEQ ID NOs: 142, 160, 178, 196, 214, 232, 250, and 417.~~

~~90. The polypeptide of any one of claims 37-76 and 78-87, comprising an amino acid sequence selected from the group consisting of SEQ ID NOs: 146-149, 152-155, 164-167, 170-173, 182-185, 188-191, 200, 202, 206, 208, 218, 220, 224, 226, 236, 238, 242, 244, 254, 256, 260, 262, and 418-421.~~

~~91. The polypeptide of claim 90, comprising an amino acid sequence selected from the group consisting of:~~

~~i) SEQ ID NOs: 146, 164, 182, 200, 218, 236, 254, and 418;~~

~~ii) SEQ ID NOs: 147, 165, and 183;~~

~~iii) SEQ ID NOs: 148, 166, 184, 202, 220, 238, 256, and 419;~~

~~iv) SEQ ID NOs: 149, 167, and 185;~~

~~v) SEQ ID NOs: 152, 170, 188, 206, 224, 242, 260, and 420;~~

~~vi) SEQ ID NOs: 153, 171, and 189;~~

~~vii) SEQ ID NOs: 154, 172, 190, 208, 226, 244, 262, and 421; or~~

~~viii) SEQ ID NOs: 155, 173, and 191.~~

~~92.~~3. The isolated TCR~~-~~ of claim 1~~or the polypeptide of any one of the preceding claims~~, wherein:

(a) the TCR is a human TCR;

(b) the TCR is a full-length TCR, a soluble TCR, or a single-chain TCR; and/or

(c) the TCR is conjugated to an effector moiety, wherein the effector moiety is a cytotoxic

agent, cytostatic agent, toxin, radionuclide, detectable label, or binding moiety, an antibody or an antibody Fc region.

93. The isolated TCR or the polypeptide of any one of the preceding claims, wherein the TCR is a full-length TCR, a soluble TCR, or a single-chain TCR.

94. The isolated TCR or the polypeptide of any one of the preceding claims, wherein the peptide is presented in the context of HLA-A*0201.

95. The isolated TCR or the polypeptide of any one of the preceding claims, wherein when the TCR is expressed on the surface of a T cell, the T cell is activated when co-cultured with a second cell displaying the peptide presented in the context of HLA-A*0201.

96. The isolated TCR or the polypeptide of claim 95, wherein the T cell exhibits (a) increased CD69 surface expression, (b) increased CD25 surface expression, (c) increased CD107a surface expression, (d) increased IFNγ secretion, or (e) increased nuclear factor of activated T-cells (NFAT) activation when co-cultured with the second cell displaying the peptide presented in the context of HLA-A*0201.

97. The isolated TCR or the polypeptide of claim 95 or 96, wherein the T cell induces apoptosis or death of the second cell displaying the peptide presented in the context of HLA-A*0201.

98. The isolated TCR or the polypeptide of any one of the preceding claims, wherein the TCR or the polypeptide is conjugated to an effector moiety.

99. The isolated TCR or the polypeptide of claim 98, wherein the effector moiety is a cytotoxic agent, cytostatic agent, toxin, radionuclide, detectable label, or binding moiety.

100. The isolated TCR or the polypeptide of claim 99, wherein the binding moiety is an antibody.

101. The isolated TCR or the polypeptide of claim 99, wherein the binding moiety is an antibody Fc region.

102. An isolated polynucleotide comprising:

(a) a first nucleic acid sequence encoding a Vα and/or a second nucleic acid sequence encoding a Vβ; or

(b) a first nucleic acid sequence encoding an α chain and/or a second nucleic acid sequence encoding a β chain

of the TCR of any one of claims 1-36 and 92-101, optionally wherein the first and second nucleic acid sequences are in frame.

103. The polynucleotide of claim 102, wherein the first nucleic acid sequence is 5' to the second nucleic acid sequence.

104. The polynucleotide of claim 102, wherein the first nucleic acid sequence is 3' to the

second nucleic acid sequence.

105. The polynucleotide of any one of claims 102-104, further comprising a third nucleic acid sequence encoding a peptide linker between the first and second nucleic acid sequences, wherein the first, second, and third nucleic acid sequences are in frame.

106. The polynucleotide of claim 105, wherein the linker comprises a proteolytic cleavage site.

107. The polynucleotide of claim 106, wherein the proteolytic cleavage site comprises a Furin cleavage site and/or a 2A cleavage site.

108. The polynucleotide of claim 107, wherein the Furin cleavage site comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 29-31 and 131-133.

109. The polynucleotide of claim 108, wherein the Furin cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 132.

110. The polynucleotide of claim 107, wherein the 2A cleavage site comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 32-38, 130, and 134-140.

111. The polynucleotide of claim 110, wherein the 2A cleavage site comprises a porcine teschovirus-1 2A (P2A) cleavage site.

112. The polynucleotide of claim 111, wherein the P2A cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 33 or 134.

113. The polynucleotide of any one of claims 107-112, wherein the proteolytic cleavage site comprises a Furin cleavage site and a 2A cleavage site.

114. The polynucleotide of claim 113 wherein the Furin cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 132, and the 2A cleavage site comprises the amino acid sequence set forth in SEQ ID NO: 33 or 134.

115. The polynucleotide of any one of claims 102-114, further comprising a nucleic acid sequence encoding Gly-Ser 3' to the first and second nucleic acid sequence.

116. The polynucleotide of any one of claims 102, 103, and 105-115, encoding an amino acid sequence selected from the group consisting of SEQ ID NOs: 28, 141-143, 158-161, 176-179, 194, 196, 212, 214, 230, 232, 248, 250, 416, and 417.

117. The polynucleotide of claim 116, encoding an amino acid sequence selected from the group consisting of:

i) SEQ ID NOs: 28, 158, 176, 194, 212, 230, 248, and 416;

ii) SEQ ID NOs: 141, 159, and 177; or

iii) SEQ ID NOs: 142, 160, 178, 196, 214, 232, 250, and 417.

118. The polynucleotide of any one of claims 102 and 104-115, encoding an amino acid

sequence selected from the group consisting of SEQ ID NOs: 146-149, 152-155, 164-167, 170-173, 182-185, 188-191, 200, 202, 206, 208, 218, 220, 224, 226, 236, 238, 242, 244, 254, 256, 260, 262, and 418-421.

119. The polynucleotide of claim 118, encoding an amino acid sequence selected from the group consisting of:

i) SEQ ID NOs: 146, 164, 182, 200, 218, 236, 254, and 418;

ii) SEQ ID NOs: 147, 165, and 183

iii) SEQ ID NOs: 148, 166, 184, 202, 220, 238, 256, and 419;

iv) SEQ ID NOs: 149, 167, and 185;

v) SEQ ID NOs: 152, 170, 188, 206, 224, 242, 260, and 420;

vi) SEQ ID NOs: 153, 171, and 189;

vii) SEQ ID NOs: 154, 172, 190, 208, 226, 244, 262, and 421; or

viii) SEQ ID NOs: 155, 173, and 191.

120. An isolated polynucleotide encoding the polypeptide of any one of claims 37-101.

121. An isolated vector comprising the polynucleotide of any one of claims 102-120.

122. The isolated vector of claim 121, wherein the vector is a viral vector selected from the group consisting of a lentiviral vector, a retroviral vector, an adenoviral vector, an adeno-associated viral vector, and a baculoviral vector.

123. An engineered cell comprising the polynucleotide of any one of claims 102-120 or the vector of claim 121 or 122.

124.4. An engineered cell presenting the TCR of claim 1any one of claims 1-36 and 92-101 on the cell surface, wherein the cell expresses the TCR and the cell is a human lymphocyte, selected from the group consisting of a T cell, a CD8+ T cell, a CD4+ T cell, a natural killer T (NKT) cell, an invariant natural killer T (iNKT) cell, a mucosal-associated invariant T (MAiT) cell, and a natural killer (NK) cell..

125. The engineered cell of claim 124 wherein the cell expresses the TCR.

126. The engineered cell of any one of claims 123-125, wherein the cell is a human lymphocyte.

127. The engineered cell of any one of claims 123-126, wherein the cell is selected from the group consisting of a T cell, a $CD8^+$ T cell, a $CD4^+$ T cell, a natural killer T (NKT) cell, an invariant natural killer T (iNKT) cell, a mucosal-associated invariant T (MAiT) cell, and a natural killer (NK) cell.

128.5. A pharmaceutical composition comprising the isolated TCR of claim 1any one of claims 1-36 and 92-101, the polypeptide of any one of claims 37-101, the polynucleotide

~~of any one of claims 102-120, the vector of claim 121 or 122, or the engineered cell of any one of claims 123-127~~, and a pharmaceutically acceptable carrier.

~~129. A method of producing a TCR that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, the method comprising culturing the engineered cell of any one of claims 123-127 so that the polynucleotide is expressed and the TCR is produced.~~

~~130. An isolated TCR produced by the method of claim 129.~~

~~131. A method of producing an engineered cell expressing a TCR that binds to a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2, the method comprising contacting a cell with the vector of claim 121 or 122 under conditions that allow introduction of the vector into the cell.~~

~~132. The method of claim 131, wherein the cell is a human lymphocyte.~~

~~133. The method of claim 131 or 132, wherein the cell is selected from the group consisting of a T cell, a $CD8^+$ T cell, a $CD4^+$ T cell, a natural killer T (NKT) cell, an invariant natural killer T (iNKT) cell, a mucosal-associated invariant T (MAiT) cell, and a natural killer (NK) cell.~~

~~134. A method of inducing an immune response to a cell displaying a peptide consisting of the amino acid sequence set forth in SEQ ID NO: 1 or 2 in a subject, the method comprising administering to the subject an effective amount of the isolated TCR of any one of claims 1-36 and 92-101, the polypeptide of any one of claims 37-101, the polynucleotide of any one of claims 102-120, the vector of claim 121 or 122, the engineered cell of any one of claims 123-127, or the pharmaceutical composition of claim 128.~~

~~135. A method of treating cancer in a subject, the method comprising administering to the subject an effective amount of the isolated TCR of any one of claims 1-36 and 92-101, the polypeptide of any one of claims 37-101, the polynucleotide of any one of claims 102-120, the vector of claim 121 or 122, the engineered cell of any one of claims 123-127, or the pharmaceutical composition of claim 128.~~

~~136. The method of claim 134 or 135, wherein the TCR, polynucleotide, vector, engineered cell, or pharmaceutical composition is administered intravenously.~~

~~137. The method of any one of claims 134-136, further comprising administering an additional therapeutic agent to the subject.~~

~~138. The method of claim 137, wherein the additional therapeutic agent is a chemotherapeutic, a radiotherapeutic, or a checkpoint targeting agent.~~

~~139. The method of claim 138, wherein the checkpoint targeting agent is selected from the~~

~~group consisting of an antagonist anti-PD-1 antibody, an antagonist anti-PD-L1 antibody, an antagonist anti-PD-L2 antibody, an antagonist anti-CTLA-4 antibody, an antagonist anti-TIM-3 antibody, an antagonist anti-LAG-3 antibody, an antagonist anti-CEACAM1 antibody, an antagonist anti-TIGIT antibody, an agonist anti-CD137 antibody, an agonist anti-GITR antibody, and an agonist anti-OX40 antibody.~~

~~140. The method of claim 137, wherein the additional therapeutic agent is an anti-PD-1 antibody, optionally wherein the anti-PD-1 antibody is pembrolizumab or nivolumab.~~

~~141. The method of claim 137, wherein the additional therapeutic agent is an inhibitor of indoleamine-2,3-dioxygenase (IDO).~~

~~142. The method of claim 141, wherein the inhibitor is selected from the group consisting of epacadostat, F001287, indoximod, and NLG919.~~

~~143. The method of claim 142, wherein the inhibitor is epacadostat.~~

~~144. The method of claim 137, wherein the additional therapeutic agent is a vaccine.~~

~~145. The method of claim 144, wherein the vaccine comprises a heat shock protein peptide complex (HSPPC) comprising a heat shock protein complexed with an antigenic peptide.~~

~~146. The method of claim 145, wherein the heat shock protein is hsc70 and is complexed with a tumor-associated antigenic peptide.~~

~~147. The method of claim 146, wherein the heat shock protein is gp96 and is complexed with a tumor-associated antigenic peptide, wherein the HSPPC is derived from a tumor obtained from a subject.~~

6. The isolated TCR of claim 1, wherein

(a) the Vα and Vβ comprise the amino acid sequences set forth in SEQ ID NOs: 3 and 4, 66 and 4, 67 and 4, 68 and 4, 69 and 4, 70 and 4, 71 and 4, 72 and 4, 73 and 4, 74 and 4, 75 and 4, 76 and 4, 77 and 4, 78 and 4, 79 and 4, 80 and 4, 81 and 4, 82 and 4, 83 and 4, 84 and 4, 85 and 4, or 86 and 4, respectively;

(b) the TCR comprises a n α chain comprising an α chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 15, 26, or 92; and/or

(c) the TCR comprises a β chain comprising a β chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 16 or 17.

7. The isolated TCR of claim 2, wherein:

(a) the α chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 13, 105, 110, t115, 120, 125, 408, and 412, and the β chain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 14, 25, and 97-104;

and/or

(b) the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 13 and 25; 13 and 97; 13 and 98; 13 and 99; 13 and 100; 13 and 101; 13 and 102; 13 and 103; 13 and 104; 93 and 14; 93 and 25; 93 and 97; 93 and 98; 93 and 99; 93 and 100; 93 and 101; 93 and 102; 93 and 103; 93 and 104; 94 and 14; 94 and 25; 94 and 97; 94 and 98; 94 and 99; 94 and 100; 94 and 101; 94 and 102; 94 and 103; 94 and 104; 95 and 14; 95 and 25; 95 and 97; 95 and 98; 95 and 99; 95 and 100; 95 and 101; 95 and 102; 95 and 103; 95 and 104; 96 and 14; 96 and 25; 96 and 97; 96 and 98; 96 and 99; 96 and 100; 96 and 101; 96 and 102; 96 and 103; 96 and 104; 105 and 14; 105 and 25; 105 and 97; 105 and 98; 105 and 99; 105 and 100; 105 and 101; 105 and 102; 105 and 103; 105 and 104; 106 and 14; 106 and 25; 106 and 97; 106 and 98; 106 and 99; 106 and 100; 106 and 101; 106 and 102; 106 and 103; 106 and 104; 107 and 14; 107 and 25; 107 and 97; 107 and 98; 107 and 99; 107 and 100; 107 and 101; 107 and 102; 107 and 103; 107 and 104; 108 and 14; 108 and 25; 108 and 97; 108 and 98; 108 and 99; 108 and 100; 108 and 101; 108 and 102; 108 and 103; 108 and 104; 109 and 14; 109 and 25; 109 and 97; 109 and 98; 109 and 99; 109 and 100; 109 and 101; 109 and 102; 109 and 103; 109 and 104; 110 and 14; 110 and 25; 110 and 97; 110 and 98; 110 and 99; 110 and 100; 110 and 101; 110 and 102; 110 and 103; 110 and 104; 111 and 14; 111 and 25; 111 and 97; 111 and 98; 111 and 99; 111 and 100; 111 and 101; 111 and 102; 111 and 103; 111 and 104; 112 and 14; 112 and 25; 112 and 97; 112 and 98; 112 and 99; 112 and 100; 112 and 101; 112 and 102; 112 and 103; 112 and 104; 113 and 14; 113 and 25; 113 and 97; 113 and 98; 113 and 99; 113 and 100; 113 and 101; 113 and 102; 113 and 103; 113 and 104; 114 and 14; 114 and 25; 114 and 97; 114 and 98; 114 and 99; 114 and 100; 114 and 101; 114 and 102; 114 and 103; 114 and 104; 115 and 14; 115 and 25; 115 and 97; 115 and 98; 115 and 99; 115 and 100; 115 and 101; 115 and 102; 115 and 103; 115 and 104; 116 and 14; 116 and 25; 116 and 97; 116 and 98; 116 and 99; 116 and 100; 116 and 101; 116 and 102; 116 and 103; 116 and 104; 117 and 14; 117 and 25; 117 and 97; 117 and 98; 117 and 99; 117 and 100; 117 and 101; 117 and 102; 117 and 103; 117 and 104; 118 and 14; 118 and 25; 118 and 97; 118 and 98; 118 and 99; 118 and 100; 118 and 101; 118 and 102; 118 and 103; 118 and 104; 120 and 14; 120 and 25; 120 and 97; 120 and 98; 120 and 99; 120 and 100; 120 and 101; 120 and 102; 120 and 103; 120 and 104; 121 and 14; 121 and 25; 121 and 97; 121 and 98; 121 and 99; 121 and 100; 121 and 101; 121 and 102; 121 and 103; 121 and 104; 122 and 14; 122 and 25; 122 and 97; 122 and 98; 122 and 99; 122 and 100; 122 and 101; 122 and 102; 122 and 103; 122 and 104; 123 and 14; 123 and 25; 123 and 97; 123 and 98; 123 and 99; 123 and 100; 123 and 101; 123 and 102;

123 and 103; 123 and 104; 125 and 14; 125 and 25; 125 and 97; 125 and 98; 125 and 99; 125 and 100; 125 and 101; 125 and 102; 125 and 103; 125 and 104; 126 and 14; 126 and 25; 126 and 97; 126 and 98; 126 and 99; 126 and 100; 126 and 101; 126 and 102; 126 and 103; 126 and 104; 127 and 14; 127 and 25; 127 and 97; 127 and 98; 127 and 99; 127 and 100; 127 and 101; 127 and 102; 127 and 103; 127 and 104; 128 and 14; 128 and 25; 128 and 97; 128 and 98; 128 and 99; 128 and 100; 128 and 101; 128 and 102; 128 and 103; 128 and 104; 408 and 14; 408 and 25; 408 and 97; 408 and 98; 408 and 99; 408 and 100; 408 and 101; 408 and 102; 408 and 103; 408 and 104; 409 and 14; 409 and 25; 409 and 97; 409 and 98; 409 and 99; 409 and 100; 409 and 101; 409 and 102; 409 and 103; 409 and 104; 410 and 14; 410 and 25; 410 and 97; 410 and 98; 410 and 99; 410 and 100; 410 and 101; 410 and 102; 410 and 103; 410 and 104; 411 and 14; 411 and 25; 411 and 97; 411 and 98; 411 and 99; 411 and 100; 411 and 101; 411 and 102; 411 and 103; 411 and 104; 412 and 14; 412 and 25; 412 and 97; 412 and 98; 412 and 99; 412 and 100; 412 and 101; 412 and 102; 412 and 103; 412 and 104; 413 and 14; 413 and 25; 413 and 97; 413 and 98; 413 and 99; 413 and 100; 413 and 101; 413 and 102; 413 and 103; 413 and 104; 414 and 14; 414 and 25; 414 and 97; 414 and 98; 414 and 99; 414 and 100; 414 and 101; 414 and 102; 414 and 103; 414 and 104; 415 and 14; 415 and 25; 415 and 97; 415 and 98; 415 and 99; 415 and 100; 415 and 101; 415 and 102; 415 and 103; or 415 and 104, respectively.

8. The isolated TCR of claim 7, wherein:

(i) the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 13 and 25; 105 and 14; 105 and 25; 110 and 14; 110 and 25; 115 and 14; 115 and 25; 120 and 14; 120 and 25; 125 and 14; 125 and 25; 408 and 14; 408 and 25; 412 and 14; or 412 and 25, respectively, and/or

(ii) the α chain and the β chain comprise the amino acid sequences set forth in SEQ ID NOs: 13 and 14; 105 and 14; 110 and 14; 115 and 14; 120 and 14; 125 and 14; 408 and 14; or 412 and 14, respectively.