What is claimed is:

1. A targeted integration (TI) host cell comprising an exogenous nucleotide sequence integrated at an integration site within a specific locus of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7.

2. The TI host cell of claim 1, wherein the nucleotide sequence immediately 5' of the integrated exogenous nucleotide sequence is selected from the group consisting of sequences at least about 90% homologous to nucleotides 41190-45269 of NW_006874047.1, nucleotides 63590-207911 of NW_006884592.1, nucleotides 253831-491909 of NW_006881296.1, nucleotides 69303-79768 of NW_003616412.1, nucleotides 293481-315265 of NW_003615063.1, nucleotides 2650443-2662054 of NW_006882936.1, or nucleotides 82214-97705 of NW_003615411.1.

3. The TI host cell of claim 1 wherein the nucleotide sequence immediately 5' of the integrated exogenous nucleotide sequence is selected from the group consisting of sequences at least 15 base pairs, at least 20 base pairs, at least 30 base pairs, at least 40 base pairs, at least 50 base pairs, at least 75 base pairs, at least 100 base pairs, at least 150 base pairs, at least 200 base pairs, at least 300 base pairs, at least 400 base pairs, at least 500 base pairs, at least 1,000 base pairs, at least 1,500 base pairs, at least 2,000 base pairs, at least 3,000 base pairs from nucleotide 45269 of NW_006874047.1, nucleotide 207911 of NW_006884592.1, nucleotide 491909 of NW_006881296.1, nucleotide 79768 of NW_003616412.1, nucleotide 315265 of NW_003615063.1, nucleotide 2662054 of NW_006882936.1, or nucleotide 97705 of NW_003615411.1.

4. The TI host cell of claim 1, wherein the nucleotide sequence immediately 3' of the integrated exogenous nucleotide sequence is selected from the group consisting of sequences at least about 90% homologous to nucleotides 45270-45490 of NW_006874047.1, nucleotides 207912-792374 of NW_006884592.1, nucleotides 491910-667813 of NW_006881296.1, nucleotides 79769-100059 of NW_003616412.1, nucleotides 315266-362442 of NW_003615063.1, nucleotides

2662055-2701768 of NW_006882936.1, or nucleotides 97706-105117 of NW_003615411.1.

5. The TI host cell of claim 1 wherein the nucleotide sequence immediately 3' of the integrated exogenous nucleotide sequence is selected from the group consisting of sequences at least 15 base pairs, at least 20 base pairs, at least 30 base pairs, at least 40 base pairs, at least 50 base pairs, at least 75 base pairs, at least 100 base pairs, at least 150 base pairs, at least 200 base pairs, at least 300 base pairs, at least 400 base pairs, at least 500 base pairs, at least 1,000 base pairs, at least 1,500 base pairs, at least 2,000 base pairs, at least 3,000 base pairs from nucleotide 45270 of NW_006874047.1, nucleotide 207912 of NW_006884592.1, nucleotide 491910 of NW_006881296.1, nucleotide 79769 of NW_003616412.1, nucleotide 315266 of NW_003615063.1, nucleotide 2662055 of NW_006882936.1, or nucleotide 97706 of NW_003615411.1

6. The TI host cell of any one of claims 1-5, wherein the integrated exogenous nucleotide sequence is operably linked to a nucleotide sequence selected from the group consisting of sequences at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7.

7. A targeted integration (TI) host cell comprising an exogenous nucleotide sequence integrated at an integration site within an endogenous gene selected from the group consisting of LOC107977062, LOC100768845, ITPR2, ERE67000.1, UBAP2, MTMR2, XP_003512331.2, and sequences at least about 90% homologous thereto.

8. A TI host cell comprising an exogenous nucleotide sequence integrated at an integration site operably linked to an endogenous gene selected from the group consisting of LOC107977062, LOC100768845, ITPR2, ERE67000.1, UBAP2, MTMR2, XP_003512331.2, and sequences at least about 90% homologous thereto.

9. A TI host cell comprising an exogenous nucleotide sequence integrated at an integration site immediately adjacent to all or a portion of a sequence selected from

the group consisting of sequences at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7.

10. The TI host cell of any one of claims 1-9, wherein the TI host cell is a mammalian host cell.

11. The TI host cell of claim 10, wherein the TI host cell is a hamster host cell, a human host cell, a rat host cell, or a mouse host cell.

12. The TI host cell of claim 10 or 11, wherein the TI host cell is a Chinese hamster ovary (CHO) host cell, a CHO K1 host cell, a CHO K1SV host cell, a DG44 host cell, a DUKXB-11 host cell, a CHOK1S host cell, or a CHO K1M host cell.

13. The TI host cell of any one of claims 1-12, wherein the exogenous nucleotide sequence comprises one or more recombination recognition sequences (RRSs), wherein the RRS can be recognized by a recombinase.

14. The TI host cell of claim 13, wherein the exogenous nucleotide sequence comprises at least two RRSs.

15. The TI host cell of claim 13 or 14, wherein the recombinase is a Cre recombinase or an FLP recombinase.

16. The TI host cell of claim 13 or 14, wherein the recombinase is a Bxb1 integrase or a φC31 integrase.

17. The TI host cell of any one of claims 13-16, wherein the RRS is selected from the group consisting of a LoxP sequence, a LoxP L3 sequence, a LoxP 2L sequence, a LoxFas sequence, a Lox511 sequence, a Lox2272 sequence, a Lox2372 sequence, a Lox5171 sequence, a Loxm2 sequence, a Lox71 sequence, a Lox66 sequence, a FRT sequence, a Bxb1 attP sequence, a Bxb1 attB sequence, a φC31 attP sequence, and a φC31 attB sequence.

18. The TI host cell of any one of claims 14-17, wherein the exogenous nucleotide sequence comprises a first and a second RRS, and at least one selection marker located between the first and the second RRS.

19. The TI host cell of claim 18, comprising a first selection marker, wherein the first selection marker is selected from the group consisting of aminoglycoside phosphotransferase (APH), hygromycin phosphotransferase (HYG), neomycin, G418 APH), dihydrofolate reductase (DHFR), thymidine kinase (TK), glutamine synthetase (GS), asparagine synthetase, tryptophan synthetase (indole), histidinol dehydrogenase (histidinol D), blasticidin, bleomycin, phleomycin, chloramphenicol, Zeocin, and mycophenolic acid.

20. The TI host cell of claim 18 or 19, further comprising a second selection marker, wherein the first and the second selection markers are different.

21. The TI host cell of claim 20, wherein the second selection marker is selected from the group consisting of aminoglycoside phosphotransferase (APH), hygromycin phosphotransferase (HYG), neomycin, G418 APH), dihydrofolate reductase (DHFR), thymidine kinase (TK), glutamine synthetase (GS), asparagine synthetase, tryptophan synthetase (indole), histidinol dehydrogenase (histidinol D), blasticidin, bleomycin, phleomycin, chloramphenicol, Zeocin, and mycophenolic acid.

22. The TI host cell of claim 20 or 21, further comprising a third selection marker and an internal ribosome entry site (IRES), wherein the IRES is operably linked to the third selection marker.

23. The TI host cell of claim 22, wherein the third selection marker is different from the first or the second selection marker.

24. The TI host cell of claim 22 or 23, wherein the third selection marker is selected from the group consisting of a green fluorescent protein (GFP) marker, an enhanced GFP (eGFP) marker, a synthetic GFP marker, a yellow fluorescent protein (YFP) marker, an enhanced YFP (eYFP) marker, a cyan fluorescent protein

(CFP) marker, a mPlum marker, a mCherry marker, a tdTomato marker, a mStrawberry marker, a J-red marker, a DsRed-monomer marker, a mOrange marker, a mKO marker, a mCitrine marker, a Venus marker, a YPet marker, an Emerald6 marker, a CyPet marker, a mCFPm marker, a Cerulean marker, and a T-Sapphire marker.

25. The TI host cell of any one of claims 18-24, further comprising a third RRS, wherein the third RRS is located between the first and the second RRS, and the third RRS is heterospecific relative the first or the second RRS.

26. The TI host cell of any one of claims 13-25, wherein the exogenous nucleotide sequence comprises at least one selection marker and at least one exogenous sequence of interest (SOI).

27. The TI host cell any one of claims 13-26, wherein the exogenous nucleotide sequence further comprises at least one exogenous SOI.

28. The TI host cell of claim 27, wherein the exogenous SOI is located between the first and the second RRS.

29. The TI host cell of claim 27 or 28, wherein the SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

30. The TI host cell of any one of claims 25-29, wherein the exogenous nucleotide sequence further comprises at least one exogenous SOI located between the first and the third RRS, and at least one exogenous SOI located between the third and the second RRS.

31. The TI host cell of claim 30, wherein the SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

32. A method of preparing a TI host cell expressing a polypeptide of interest comprising:

a) providing a TI host cell comprising an exogenous nucleotide sequence integrated at a site within a locus of the genome of the TI host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID No. 1-7, wherein the exogenous nucleotide sequence comprises two RRSs, flanking at least one first selection marker;

b) introducing into the cell provided in a) a vector comprising two RRSs matching the two RRSs on the integrated exogenous nucleotide sequence and flanking at least one exogenous SOI and at least one second selection marker;

c) introducing a recombinase or a nucleic acid encoding a recombinase, wherein the recombinase recognizes the RRSs; and

d) selecting for TI cells expressing the second selection marker to thereby isolate a TI host cell expressing the polypeptide.

33. The method of claim 32, wherein the recombinase is Cre recombinase or an FLP recombinase.

34. The method of claim 32, wherein the recombinase is a Bxb1 integrase or a φC31 integrase.

35. The method of any one of claims 32-34, wherein the SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

36. The method of any one of claims 32-35, wherein the TI host cell is a mammalian host cell.

37. The method of claim 36, wherein the TI host cell is a hamster host cell, a human host cell, a rat host cell, or a mouse host cell.

38. The method of claim 36 or 37, wherein the TI host cell is a CHO host cell, a CHO K1 host cell, a CHO K1SV host cell, a DG44 host cell, a DUKXB-11 host cell, a CHOK1S host cell, or a CHO K1M host cell.

39. A method for expressing a polypeptide of interest comprising:

a) providing a TI host cell comprising at least one exogenous SOI and at least one selection marker where the at least one exogenous SOI and at least one selection marker are flanked by two RRSs integrated within a locus of the genome of the TI host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7; and

b) culturing the cell in a) under conditions suitable for expressing the polypeptide of interest and recovering a polypeptide of interest therefrom.

40. A method for preparing a TI host cell expressing at least a first and second polypeptide of interest comprising:

a) providing a TI host cell comprising an exogenous nucleotide sequence integrated at a site within a locus of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7, wherein the exogenous nucleotide sequence comprises a first and a second RRS flanking at least one first selection marker, and a third RRS located between the first and the second RRS, and all the RRSs are heterospecific;

b) introducing into the cell provided in a) a first vector comprising two RRSs matching the first and the third RRS on the integrated exogenous nucleotide sequence and flanking at least one first exogenous SOI and at least one second selection marker;

c) introducing into the cell provided in a) a second vector comprising two RRSs matching the second and the third RRS on the integrated exogenous nucleotide sequence and flanking at least one second exogenous SOI;

d) introducing one or more recombinases, or one or more nucleic acids encoding one or more recombinases, wherein the one or more recombinases recognize the RRSs; and

e) selecting for TI cells expressing the second selection marker to thereby isolate a TI host cell expressing the first and second polypeptides of interest.

41. The method of claim 40, wherein the recombinase is Cre recombinase or an FLP recombinase.

42. The method of claim 40, wherein the recombinase is a Bxb1 integrase or a φC31 integrase.

43. The method of claim 40, wherein the first vector further comprises a promoter sequence operably linked to the codon ATG positioned flanked upstream by the first SOI and downstream by an RRS; and the second vector further comprises a selection marker lacking an ATG transcription start codon flanked upstream by an RRS and downstream by the second SOI.

44. The method of claim 39, wherein the at least one SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

45. The method of any one of claims 40-43, wherein the first SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

46. The method of any one of claims 40-43, wherein the second SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

47. The method of any one of claims 39-46, wherein the TI host cell is a mammalian host cell.

48. The method of claim 47, wherein the TI host cell is a hamster host cell, a human host cell, a rat host cell, or a mouse host cell.

49. The method of claim 48, wherein the TI host cell is a CHO host cell, a CHO K1 host cell, a CHO K1SV host cell, a DG44 host cell, a DUKXB-11 host cell, a CHOK1S host cell, or a CHO K1M host cell.

50. A method for expressing a polypeptide of interest comprising:

a) providing a host cell comprising at least two exogenous SOIs and at least one selection marker integrated within a locus of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos 1-7, wherein at least one exogenous SOI and one selection marker is flanked by a first and a third RRS and at least one exogenous SOI is flanked by a second and the third RRS; and

b) culturing the cell in a) under conditions suitable for expressing the polypeptide of interest and recovering a polypeptide of interest therefrom.

51. A vector comprising two nucleotide sequences at least 50% homologous to

a. two reference sequences selected from any portion of SEQ ID No. 1;
b. two reference sequences selected from any portion of SEQ ID No. 2;
c. two reference sequences selected from any portion of SEQ ID No. 3;
d. two reference sequences selected from any portion of SEQ ID No. 4;
e. two reference sequences selected from any portion of SEQ ID No 5;
f. two reference sequences selected from any portion of SEQ ID No. 6; or
g. two reference sequences selected from any portion of SEQ ID No. 7,

, wherein said sequences flank a DNA cassette, and wherein the DNA cassette comprises at least one selection marker and at least one exogenous SOI flanked by two RRSs.

52. The vector of claim 51, wherein the vector is selected from the group consisting of an adenovirus vector, an adeno-associated virus vector, a lentivirus vector, a

retrovirus vector, an integrating phage vector, a non-viral vector, a transposon and/or transposase vector, an integrase substrate, and a plasmid.

53. The vector of claim 51 or 52, wherein the SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

54. A method for preparing a TI host cell expressing a polypeptide of interest comprising:

a) providing a host cell comprising a locus of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7;

b) introducing a vector into the host cell, wherein the vector comprises nucleotide sequences at least 50% homologous to a sequence selected from SEQ ID Nos. 1-7 flanking a DNA cassette, wherein the DNA cassette comprises at least one selection marker and at least one exogenous SOI flanked by two RRSs; and

c) selecting for the selection marker to isolate a TI host cell with the SOI integrated in the locus of the genome and expressing the polypeptide of interest.

55. The method of claim 54, wherein the vector is selected from the group consisting of an adenovirus vector, an adeno-associated virus vector, a lentivirus vector, a retrovirus vector, an integrating phage vector, a non-viral vector, a transposon and/or transposase vector, an integrase substrate, and a plasmid.

56. The method of claim 54 or 55, wherein the at least one SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

57. The method of any one of claims 53-56, wherein the TI host cell is a mammalian host cell.

58. The method of claim 57, wherein the TI host cell is a hamster host cell, a human host cell, a rat host cell, or a mouse host cell.

59. The method of claim 57 or 58, wherein the TI host cell is a CHO host cell, a CHO K1 host cell, a CHO K1SV host cell, a DG44 host cell, a DUKXB-11 host cell, a CHOK1S host cell, or a CHO K1M host cell.

60. The method of any one of claims 54-57, wherein the integration of the nucleic acid comprising the at least one SOI and selection marker is promoted by an exogenous nuclease.

61. The method of claim 57, wherein the exogenous nuclease is selected from the group consisting of a zinc finger nuclease (ZFN), a ZFN dimer, a transcription activator-like effector nuclease (TALEN), a TAL effector domain fusion protein, an RNA-guided DNA endonuclease, an engineered meganuclease, and a clustered regularly interspaced short palindromic repeats (CRISPR)-associated (Cas) endonuclease.

62. A TI host cell comprising at least one exogenous nucleotide sequence integrated at an integration site within one or more specific loci of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7.

63. A TI host cell comprising at least one exogenous nucleotide sequence integrated at one or more integration sites within an endogenous gene selected from the group consisting of LOC107977062, LOC100768845, ITPR2, ERE67000.1, UBAP2, MTMR2, XP_003512331.2, and sequences at least about 90% homologous thereto.

64. The TI host cell of any one of claims 62-63, wherein the at least one exogenous nucleotide sequence comprises one or more recombination recognition sequences (RRSs), wherein the RRS can be recognized by a recombinase.

65. The TI host cell of claim 64, wherein the at least one exogenous nucleotide sequence further comprises at least one exogenous SOI.

66. A method of preparing a TI host cell expressing at least one polypeptide of interest comprising:

e) providing a TI host cell comprising at least one exogenous nucleotide sequence integrated at a site within one or more loci of the genome of the TI host cell, wherein the one or more loci are at least about 90% homologous to a sequence selected from SEQ ID No. 1-7, wherein the at least one exogenous nucleotide sequence comprises two RRSs, flanking at least one first selection marker;

f) introducing into the cell provided in a) a vector comprising two RRSs matching the two RRSs on the integrated exogenous nucleotide sequence and flanking at least one exogenous SOI and at least one second selection marker;

g) introducing a recombinase or a nucleic acid encoding a recombinase, wherein the recombinase recognizes the RRSs; and

selecting for TI cells expressing the second selection marker to thereby isolate a TI host cell expressing the at least one polypeptide of interest.

67. A method for preparing a TI host cell expressing at least one first and second polypeptide of interest comprising:

a) providing a TI host cell comprising at least one exogenous nucleotide sequence integrated at a site within one or more loci of the genome of the host cell, wherein one or more loci are at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7, wherein the exogenous nucleotide sequence comprises a first and a second RRS flanking at least one first selection marker, and a third RRS located between the first and the second RRS, and all the RRSs are heterospecific;

b) introducing into the cell provided in a) a first vector comprising two RRSs matching the first and the third RRS on the at least one integrated

exogenous nucleotide sequence and flanking at least one first exogenous SOI and at least one second selection marker;

c) introducing into the cell provided in a) a second vector comprising two RRSs matching the second and the third RRS on the at least one integrated exogenous nucleotide sequence and flanking at least one second exogenous SOI;

d) introducing one or more recombinases, or one or more nucleic acids encoding one or more recombinases, wherein the one or more recombinases recognize the RRSs; and

e) selecting for TI cells expressing the second selection marker to thereby isolate a TI host cell expressing the at least one first and second polypeptides of interest.

68. A method of preparing a TI host cell expressing a polypeptide of interest comprising:

a) providing a TI host cell comprising at least one exogenous nucleotide sequence integrated at a site within one or more loci of the genome of the TI host cell, wherein the one or more loci are at least about 90% homologous to a sequence selected from SEQ ID No. 1-7, wherein the exogenous nucleotide sequence comprises one or more RRSs;

b) introducing into the cell provided in a) a vector comprising one or more RRSs matching the one or more RRSs on the integrated exogenous nucleotide sequence and flanking at least one exogenous SOI and operably linked to at least one regulatable promoter;

c) introducing a recombinase or a nucleic acid encoding a recombinase, wherein the recombinase recognizes the RRSs; and

d) selecting for TI cells expressing the exogenous polypeptide of interest in the presence of an inducer to thereby isolate a TI host cell expressing the polypeptide of interest.

69. A method for expressing a polypeptide of interest comprising:

a) providing a host cell comprising at least one exogenous SOI flanked by two RRSs and a regulatable promoter integrated within a locus of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7; and

b) culturing the cell under conditions suitable for expressing the SOI and recovering a polypeptide of interest therefrom.

70. A method for preparing a TI host cell expressing a first and second polypeptide of interest comprising:

a) providing a TI host cell comprising an exogenous nucleotide sequence integrated at a site within a locus of the genome of the host cell, wherein the locus is at least about 90% homologous to a sequence selected from SEQ ID Nos. 1-7, wherein the exogenous nucleotide sequence comprises a first, second RRS and a third RRS located between the first and the second RRS, and all the RRSs are heterospecific;

b) introducing into the cell provided in a) a first vector comprising two RRSs matching the first and the third RRS on the integrated exogenous nucleotide sequence and flanking at least one first exogenous SOI operably linked to a regulatable promoter;

c) introducing into the cell provided in a) a second vector comprising two RRSs matching the second and the third RRS on the integrated exogenous nucleotide sequence and flanking at least one second exogenous SOI operably linked to a regulatable promoter;

d) introducing one or more recombinases, or one or more nucleic acids encoding one or more recombinases, wherein the one or more recombinases recognize the RRSs; and

e) selecting for TI cells expressing the first and second exogenous polypeptides of interest in the presence of an inducer to thereby isolate a TI host cell expressing the first and second polypeptides of interest.

71. The method of any of claims 66, 68, and 69, wherein the integration of a nucleic acid comprising at least one SOI is promoted by an exogenous nuclease.

72. The method of claims 67 or 70, wherein the first SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein; and the second SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.

73. The method of claim 71, wherein the exogenous nuclease is selected from the group consisting of a zinc finger nuclease (ZFN), a ZFN dimer, a transcription activator-like effector nuclease (TALEN), a TAL effector domain fusion protein, an RNA-guided DNA endonuclease, an engineered meganuclease, and a clustered regularly interspaced short palindromic repeats (CRISPR)-associated (Cas) endonuclease.

74. The method of any of claims 66-70, wherein the regulatable promoter is selected from the group consisting of SV40 and CMV promoters.

75. The method of any of claims67 and 70, wherein:

a. the first vector further comprises a promoter sequence operably linked to the codon ATG positioned flanked upstream by the first SOI and downstream by an RRS; and

b. the second vector further comprises a selection marker lacking an ATG transcription start codon flanked upstream by an RRS and downstream by the second SOI.

76. A vector comprising two nucleotide sequences at least 50% homologous to two sequence selected from any portion of SEQ ID Nos. 1-7,
    a. two reference sequences selected from any portion of SEQ ID No. 1;
    b. two reference sequences selected from any portion of SEQ ID No. 2;
    c. two reference sequences selected from any portion of SEQ ID No. 3;
    d. two reference sequences selected from any portion of SEQ ID No. 4;
    e. two reference sequences selected from any portion of SEQ ID No 5;
    f. two reference sequences selected from any portion of SEQ ID No. 6; or
    g. two reference sequences selected from any portion of SEQ ID No. 7,

    wherein said sequences flank a DNA cassette, and wherein the DNA cassette comprises at least one exogenous SOI operably linked to a regulatable promoter and flanked by two RRSs.

77. The vector of claim 76, wherein the SOI encodes a single chain antibody, an antibody light chain, an antibody heavy chain, a single-chain Fv fragment (scFv), or an Fc fusion protein.