WHAT IS CLAIMED:

1. A method of detecting and isolating cells that produce high levels of a bispecific antibody, comprising:

(a) transfecting cells with a nucleic acid that encodes a cell surface capture protein (CSCP), which is a fusion protein comprising an antigen-binding protein and a membrane anchor domain, wherein the cell expresses the bispecific antibody, wherein the bispecific antibody comprises multiple subunits and a first site on the bispecific antibody resides on a first subunit, and a second site on the bispecific antibody resides on a second subunit, and wherein (i) the CSCP binds to the first site on the bispecific antibody to form a CSCP- bispecific antibody complex inside the host cell, (ii) the CSCP-bispecific antibody complex is transported through the host cell, and (iii) then displayed on the surface of the host cell;

(b) selecting a cell of (a) that expresses the CSCP in high yield;

(c) isolating and culturing the cell that expresses the CSCP in high yield;

(d) detecting the bispecific antibody on the surface of the isolated and cultured cell of step (c) with a detection molecule that binds the second site on the bispecific antibody; and

(e) isolating the cell detected in step (d) that bears the detected bispecific antibody on its surface;

wherein the first subunit of the bispecific antibody comprises a heavy chain that has a CH3 domain containing a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system (Fc), and the second subunit of the bispecific antibody comprises a heavy chain that has a CH3 domain containing an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system (Fc*); or the first subunit comprises a heavy chain that has a substituted CH3 domain containing an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system (Fc*), and the second subunit comprises a heavy chain that has a CH3 domain containing a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system (Fc).

2. A method of detecting or isolating a cell that stably expresses a bispecific antibody comprising the steps of:

(a) expressing in a host cell (1) a cell surface capture protein (CSCP) comprising an antigen-binding protein, and a membrane anchor domain; and (2) a bispecific antibody, wherein the bispecific antibody comprises multiple subunits and a first site on the bispecific antibody resides on a first subunit, and a second site on the bispecific antibody resides on a second subunit and, wherein (i) the CSCP binds to the first site on the bispecific antibody to form a CSCP- bispecific antibody complex inside the host cell, (ii) the CSCP- bispecific antibody complex is transported through the host cell, and (iii) then displayed on the surface of the host cell;

(b) contacting the host cell with a detection molecule, wherein the detection molecule binds to the second site on the bispecific antibody; and

(c) selecting the host cell which binds the detection molecule;

wherein the first subunit of the bispecific antibody comprises a heavy chain that has a CH3 domain containing a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system (Fc), and the second subunit of the bispecific antibody comprises a heavy chain that has a CH3 domain containing an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system (Fc*); or the first subunit comprises a heavy chain that has a substituted CH3 domain containing an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system (Fc*), and the second subunit comprises a heavy chain that has a CH3 domain containing a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system (Fc).

3. The method of claim 1, wherein the CSCP comprises a recombinant antigen-binding protein that binds a human IgG1-Fc domain, a human IgG2-Fc domain, or a human IgG4-Fc domain.

~~2.~~ 4. The method of any one of claims 1 or 3, wherein the recombinant antigen-binding of the CSCP comprises:

(a) a heavy chain variable region (HCVR) having an amino acid sequence ~~that is at least 95% identical to~~of SEQ ID NO:15, ~~or of a light chain variable region (LCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:16.~~

~~5. The recombinant antigen-binding protein of any one of claims 1-4, wherein the antigen-binding protein comprises~~comprising a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:27, an HCDR-2 having the amino acid sequence of SEQ ID NO:28, an HCDR-3 having the amino acid sequence of SEQ ID NO:29, and a light chain ~~CDR-1 (LCDR-1~~variable region (LCVR) having ~~the~~an amino acid sequence of SEQ ID NO:~~30, and an LCDR-2 having the amino acid sequence of SEQ ID NO:31.~~16; or

~~6. The recombinant antigen-binding protein of any one of claims 1-5, wherein the antigen-binding protein comprises an HCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:15 and an LCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:16.~~

~~7. The recombinant antigen-binding protein of any one of claims 1-6, wherein the antigen-binding protein comprises an HCVR having the amino acid sequence of SEQ ID NO:15 and an LCVR having the amino acid sequence of SEQ ID NO:16.~~

~~8. The recombinant antigen-binding protein of any one of claims 1-7, wherein the antigen-binding protein is an ScFv fusion protein comprising (a) a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:15, (b) a light chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:16, and (c) a membrane anchor domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:17 or SEQ ID NO:21.~~

~~9. The recombinant antigen-binding protein of any one of claims 1-8, wherein the antigen-binding protein is an ScFv fusion protein comprising a heavy chain variable domain that has an amino acid sequence identical to SEQ ID NO:15 and a light chain variable domain that has an amino acid sequence identical to SEQ ID NO:16.~~

10. The recombinant antigen-binding protein of any one of claims 1-9, wherein the antigen-binding protein is an ScFv fusion protein comprising the amino acid sequence of SEQ ID NO:19.

(b) an ScFv fusion protein comprising an amino acid sequence of SEQ ID NO:19, wherein said SEQ ID NO: 19 comprises a HCDR-1

11. A recombinant antigen-binding protein that binds to the same epitope on the substituted CH3 polypeptide as an antibody which comprises a heavy chain CDR-1 (HCDR1) having the amino acid sequence of SEQ ID NO:27, an HCDR-2 having the amino acid sequence of SEQ ID NO:28, an HCDR-3 having the amino acid sequence of SEQ ID NO:29, and a light chain CDR-1 (LCDR-1variable region (LCVR) having theanamino acid sequence of SEQ ID NO:30, and an LCDR-2 having the amino acid sequence of SEQ ID NO:31. 16.

12. An isolated polynucleotide comprising a nucleic acid sequence that encodes the antigen binding protein of any one5. The method of claims 1-11 or 2.

13. The isolated polynucleotide of claim 12, wherein the nucleic acid encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:19.

14. A nucleic acid vector comprising:

(a) a polynucleotide according to claim 12 or 13;

(b) a promoter, which is operably linked to the polynucleotide; and

(c) a polyadenylation sequence.

15. The nucleic acid vector of claim 14, wherein the promoter is a CMV promoter.

16. The nucleic acid vector of claim 14 or 15 comprising a nucleic acid encoding a selectable marker.

17. The nucleic acid vector of claim 16, wherein the selectable marker provides neomycin resistance.

18. The nucleic acid vector of any one of claims 14-17 comprising a nucleic acid encoding an energy transfer protein.

~~19. The nucleic acid vector of claim 18, wherein the energy transfer protein is a derivative of green fluorescence protein.~~

~~20. The nucleic acid vector of claim 19, wherein the derivative of green fluorescence protein is yellow fluorescence protein ("YFP").~~

~~21. The nucleic acid vector of any one of claims 14-20, wherein the vector is circular.~~

~~22. The nucleic acid vector of any one of claims 14-20, wherein the vector is linear.~~

~~23. The nucleic acid vector of claim 22, wherein the vector is integrated into the genome of a host cell.~~

~~24. The nucleic acid vector of any one of claims 14-23, wherein the host cell is a CHO cell.~~

~~25. A host cell expressing an antigen-binding protein of any one of claims 1-11.~~

~~26. The host cell of claim 25, wherein the cell is a CHO cell.~~

~~27. A~~ recombinant antigen-binding ~~protein that specifically binds a substituted CH3 polypeptide comprising one or more amino acid substitutions selected from the group consisting of (a) 95R, and (b) 95R and 96F according to the IMGT exon numbering system, or (a') 435R, and (b') 435R and 436F according to the EU numbering system.~~

~~28. The recombinant antigen-binding protein of claim 27, wherein the antigen-binding protein binds a polypeptide comprising an amino acid sequence of SEQ ID NO:42.~~

~~29. The recombinant antigen-binding protein of claim 27 or 28, wherein the antigen-binding protein binds the polypeptide with a K_D of less than about 60 nM as measured in a surface plasmon resonance assay.~~

~~30. The recombinant antigen-binding protein of any one of claims 27-29, wherein the antigen-binding protein~~of the CSCP comprises ~~one or more complementarity determining regions (CDRs) of~~ :

(a) a heavy chain variable region (HCVR) having an amino acid sequence ~~that is at least 95% identical to~~of SEQ ID NO:38, ~~or of a light chain variable region (LCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:39.~~

~~31. The recombinant antigen-binding protein of any one of claims 27- 30, wherein the antigen-binding protein comprises a~~ comprising a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:32, ~~an~~a HCDR-2 having the amino acid sequence of SEQ ID NO:33, ~~an~~a HCDR-3 having the amino acid sequence of SEQ ID NO:34, and a light chain variable region (LCVR) having an amino acid sequence of SEQ ID NO:39, comprising a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:35, ~~an~~a LCDR-2 having the amino acid sequence of SEQ ID NO:36, and ~~an~~a LCDR-3 having the amino acid sequence of SEQ ID NO:37~~.~~;

~~32. The recombinant antigen-binding protein of any one of claims 27- 31, wherein the antigen-binding protein comprises an HCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:38 and an LCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:39.~~

~~33. The recombinant antigen-binding protein of any one of claims 27- 32, wherein the antigen-binding protein comprises an HCVR having an amino acid sequence of SEQ ID NO:38 and an LCVR having an amino acid sequence of SEQ ID NO:39.~~

~~34. The recombinant antigen-binding protein of any one of claims 27-33, wherein the antigen-binding protein is an antibody comprising a heavy chain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:40 and a light chain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:41.~~

~~35. The recombinant antigen-binding protein of any one of claims 27- 34, wherein the antibody comprises a heavy chain that has an amino acid sequence identical to SEQ ID NO:40 and a light chain that has an amino acid sequence identical to SEQ ID NO:41.~~

~~36. The recombinant antigen-binding protein of any one of claims 27-33, wherein the antigen-binding protein is an ScFv fusion protein comprising (a) a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID~~

~~NO:38, (b) a light chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:39, and (c) a membrane anchor domain.~~

~~37. The recombinant antigen-binding protein of any one of claims 27-33 and 36, wherein the antigen-binding protein is an ScFv fusion protein comprising a heavy chain variable domain that has an amino acid sequence identical to SEQ ID NO:38 and a light chain variable domain that has an amino acid sequence identical to SEQ ID NO:39.~~

~~38. The recombinant antigen-binding protein of any one of claims 27-33, 36 and 37, wherein the antigen-binding protein is an ScFv fusion protein comprising the amino acid sequence of SEQ ID NO:43.~~

~~39. A recombinant antigen-binding protein that binds to the same epitope on the substituted CH3 polypeptide as an antibody which comprises a heavy chain CDR-1 (HCDR1~~(b) a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:32, an HCDR-2 having the amino acid sequence of SEQ ID NO:33, an HCDR-3 having the amino acid sequence of SEQ ID NO:34, a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:35, an LCDR-2 having the amino acid sequence of SEQ ID NO:36, and an LCDR-3 having the amino acid sequence of SEQ ID NO:37~~.~~;

~~40. An isolated polynucleotide comprising a nucleic acid sequence that encodes the antigen binding protein of any one of claims 27-39.~~

~~41. The isolated polynucleotide of claim 40, wherein the nucleic acid encodes a polypeptide comprising an amino acid sequence of SEQ ID NO:40.~~

~~42. The isolated polynucleotide of claim 40, wherein the nucleic acid encodes a polypeptide comprising an amino acid sequence of SEQ ID NO:41.~~

~~43. The isolated polynucleotide of claim 40, wherein the nucleic acid encodes a polypeptide comprising an amino acid sequence of SEQ ID NO:43.~~

~~44. A nucleic acid vector comprising:~~

~~(a) a polynucleotide according to any one of claims 40-43;~~

(b) a promoter, which is operably linked to the polynucleotide; and

(c) a polyadenylation sequence.

45. The nucleic acid vector of claim 44, wherein the promoter is a CMV promoter.

46. The nucleic acid vector of claim 44 or 45comprising a nucleic acid encoding a selectable marker.

47. The nucleic acid vector of claim 46, wherein the selectable marker provides neomycin resistance.

48. The nucleic acid vector of any one of claims 44-47 comprising a nucleic acid encoding an energy transfer protein.

49. The nucleic acid vector of claim 48, wherein the energy transfer protein is a derivative of green fluorescence protein.

50. The nucleic acid vector of claim 49, wherein the derivative of green fluorescence protein is yellow fluorescence protein ("YFP").

51. The nucleic acid vector of any one of claims 44-50, wherein the vector is circular.

52. The nucleic acid vector of any one of claims 44-50, wherein the vector is linear.

53. The nucleic acid vector of claim 52, wherein the vector is integrated into the genome of a host cell.

54. The nucleic acid vector of claim 53any one of claims 44-53, wherein the host cell is a CHO cell.

55. A host cell expressing an antigen-binding protein of any one of claims 27-39.

56. The host cell of claim 55, wherein the cell is a CHO cell.

57. A method of detecting or isolating a cell that stably expresses a heterodimeric protein comprising the steps of:
(a) expressing in a host cell a cell surface capture protein (CSCP) and a heterodimeric protein, wherein (i) the CSCP binds to a first site on the heterodimeric protein to form a CSCP- heterodimeric protein complex inside the host cell, (ii) the CSCP- heterodimeric protein complex is transported through the host cell, and (iii) then displayed on the surface of the host cell;
(b) contacting the host cell with a detection molecule, wherein the detection molecule binds to a second site on the heterodimeric protein; and
(c) selecting the host cell which binds the detection molecule.

58. The method of claim 57, comprising the step of contacting the cell with a blocking molecule prior to selecting the host cell at step (c), wherein the blocking molecule binds to CSCP that is not bound to the heterodimeric protein, but does not bind to the CSCP-heterodimeric protein complex.

59. The method of claims 57 or 58, wherein the selecting step (c) is performed by fluorescence activated cell sorting.

60. The method of any one of claims 57-59, wherein the heterodimeric protein comprises multiple subunits and the first site on the heterodimeric protein resides on a first subunit, and the second site on the heterodimeric protein resides on a second subunit.

61. The method of claim 60, wherein the heterodimeric protein comprises an antibody.

62. The method of claim 61, wherein the first site on the antibody resides on a heavy chain comprising a wild type CH3 domain.

63. The method of any one of claims 57-62, wherein the first site on the antibody resides on a heavy chain comprising a CH3 domain that comprises a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system.

64. The method of any one of claims 57-63, wherein the CSCP comprises a recombinant antigen-binding protein that binds a human IgG1-Fc domain, a human IgG2-Fc domain, or a human IgG4-Fc domain.

65. The method of any one of claims 57-64, wherein the antigen-binding protein binds a polypeptide comprising an amino acid sequence of SEQ ID NO:26.

66. The method of claim any one of claims 57-65, wherein the antigen-binding protein comprises Protein A or a functional fragment of Protein A.

67. The method of claim 66, wherein the antigen-binding protein is a chimeric protein comprising the Fc binding domain of Protein A.

68. The method of claim 67, wherein the chimeric protein comprises the Fc binding domain of Protein A and a membrane anchor.

69. The method of claim 68, wherein the chimeric protein comprises the Fc binding domain of Protein A and a transmembrane domain of an Fc receptor.

70. The method of any one of claims 57-64, wherein the antigen-binding protein binds the polypeptide with a K_D of less than about 40 nM as measured in a surface plasmon resonance assay.

71. The method of any one of claims 57-70, wherein the CSCP comprises an ScFv fusion protein comprising (a) a heavy chain variable domain comprising an the amino acid sequence that is at least 95% identical to of SEQ ID NO:15, (b) a light chain variable domain comprising an amino acid sequence that is at least 95% identical to43, wherein said SEQ ID NO:16, and (c) a membrane anchor domain.

72. The method of claim 71, wherein the detection molecule (DM) comprises an antigen-binding protein protein comprising a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:38, and a light chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:39.

~~73. The method of claim any one of claims 57-59, wherein the CSCP comprises an antigen-binding protein comprises an ScFv fusion protein comprising (a) a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:38, (b) a light chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:39, and (c) a membrane anchor domain..~~

~~74. The method of claim 73, wherein the detection molecule (DM) comprises an antigen-binding protein comprising a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:15, and a light chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:16.~~

~~75. The method of claim any one of claims 57-74, wherein the blocking molecule is a non-human IgG or a human Fc molecule.~~

~~76. A method of detecting and isolating cells that produce high levels of a heterodimeric protein, comprising:~~

~~(a) transfecting cells with a nucleic acid that encodes a cell surface capture protein (CSCP), which is a fusion protein comprising a membrane anchor domain and is capable of binding a first subunit of the heterodimeric protein, wherein the cell expresses the heterodimeric protein;~~

~~(b) detecting a cell of (a) that expresses the CSCP in high yield;~~

~~(c) isolating and culturing the cell that expresses the CSCP in high yield;~~

~~(d) detecting the heterodimeric protein on the surface of the isolated and cultured cell of step (c) with a detection molecule that binds a second subunit of the heterodimeric protein; and~~

~~(e) isolating the cell detected in step (d) that bears the detected heterodimeric protein on its surface.~~

~~77. The method of claim 76, wherein the heterodimeric protein comprises an antibody.~~

~~78. The method of claim 76 or 77, wherein the first subunit of the heterodimeric protein comprises a heavy chain domain comprising a wild type CH3 domain.~~

79. The method of any one of claims 76-78, wherein the first subunit of the heterodimeric protein comprises a heavy chain comprising a CH3 domain having a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system.

80. The method of any one of claims 76-79, wherein the CSCP comprises a recombinant antigen-binding protein that binds a human IgG1-Fc domain, a human IgG2-Fc domain, or a human IgG4-Fc domain.

81. The method of any one of claims 76-80, wherein the recombinant antigen-binding protein binds a polypeptide comprising an amino acid sequence of SEQ ID NO:26.

82. The method of any one of claims 76-81, wherein the recombinant antigen-binding protein comprises Protein A or a functional fragment of Protein A.

83. The method of claim 82, wherein the recombinant antigen-binding protein is a fusion protein comprising the Fc binding domain of Protein A.

84. The method of claim 82 or 83, wherein the fusion protein comprises the Fc binding domain of Protein A and a membrane anchor.

85. The method of any one of claims 82-84, wherein the fusion protein comprises the Fc binding domain of Protein A and a transmembrane domain of an Fc receptor.

86. The method of any one of claims 76-81, wherein the recombinant antigen-binding protein binds the polypeptide with a K_D of less than about 40 nM as measured in a surface plasmon resonance assay.

87. The method of any one of claims 76-81, wherein the recombinant antigen-binding protein comprises one or more complementarity determining regions (CDRs) of a heavy chain variable region (HCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:15, or of a light chain variable region (LCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:16.

88. The method of any one of claims 76-81 or 87, wherein the recombinant antigen-binding protein43 comprises a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:27, an32, a HCDR-2 having the amino acid sequence of SEQ ID NO:28, an33, a HCDR-3 having the amino acid sequence of SEQ ID NO:29, 34, and a light chain variable region (LCVR) having an amino acid sequence of SEQ ID NO:39, comprising a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:30, and an35, a LCDR-2 having the amino acid sequence of SEQ ID NO:31.36, and a LCDR-3 having the amino acid sequence of SEQ ID NO:37;

89. The method of any one of claims 76-81, 87 or 88, wherein the recombinant antigen-binding protein binds to the same epitope on the CH3 domain as (d) an antibody whichcomprising a heavy chain comprising an amino acid sequence SEQ ID NO:40, wherein said SEQ ID NO: 40 comprises a heavy chain CDR-1 (HCDR1)HCDR-1 having the amino acid sequence of SEQ ID NO:27, an32, a HCDR-2 having the amino acid sequence of SEQ ID NO:28, an33, a HCDR-3 having the amino acid sequence of SEQ ID NO:29,34, and a light chain comprising an amino acid sequence SEQ ID NO:41, wherein said SEQ ID NO: 41 comprises a LCVR having an amino acid sequence of SEQ ID NO:39, comprising a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:30, and an35, a LCDR-2 having the amino acid sequence of SEQ ID NO:3136, and a LCDR-3 having the amino acid sequence of SEQ ID NO:37.

90. 6. The method of any one of claims 76-81 or 87-891 to 5, wherein the antigen-binding proteinmethod further comprises an HCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:15 and an LCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:16.

91. The method of any one of claims 76-81 or 87-90contacting the cell with a blocking molecule, wherein the antigen-binding protein comprises an HCVR having the amino acid sequence of SEQ ID NO:15 and an LCVR having blocking molecule binds to CSCP that is not bound to the amino acid sequence of SEQ ID NO:16.

92. The method of any one of claims 76-81, wherein bispecific antibody, but does not bind to the CSCP is an ScFv fusion protein comprising (a) a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:15, (b) a light chain variable domain comprising an amino acid sequence that is at

~~least 95% identical to SEQ ID NO:16, and (c) a membrane anchor domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:17 or SEQ ID NO:21~~ bispecific antibody complex.

~~93. The method of any one of claims 76-81 or 92, wherein the CSCP is an ScFv fusion protein comprising a heavy chain variable domain that has an amino acid sequence identical to SEQ ID NO:15 and a light chain variable domain that has an amino acid sequence identical to SEQ ID NO:16.~~

~~94.~~ 7. The method of claim 6, wherein the blocking molecule is a non-human IgG or a human Fc molecule.

8. The method of any one of claims 1 to 7, wherein the cell is detected, isolated or selected by fluorescence activated cell sorting.

9. The method of any one of claims ~~76-81, 92, or 93, wherein the CSCP is an ScFv fusion protein~~1 to 8 further comprising pooling the ~~amino acid sequence of SEQ ID NO:19~~detected and selected cells producing the bispecific antibody.

10. The method of claim 9 further comprising culturing and expanding the pooled cells.

11. ~~95. The method of any one of claims 76-94, wherein the second subunit of the heterodimeric protein comprises a heavy chain comprising a CH3 domain that comprises an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system.~~

~~96.~~ The method of claim 10, wherein the pooled cells are enriched by further selection and detection by contacting the pooled cells with the detection molecule.

12. The method of claim 11, wherein the further detection and selection of the cell is by fluorescence activated cell sorting.

13. The method of claim 11, wherein the cells producing the bispecific antibody are detected, selected, and pooled multiple times to enrich for cells producing high titers of the bispecific antibody.

14. ~~95~~ The method of any one of claims 1 to 13, wherein the detection molecule (DM) comprises~~:~~

a labeled recombinant antigen-binding protein that binds a human IgG1-Fc domain, a human IgG2-Fc domain, a human IgG3-Fc domain, or a human IgG4-Fc domain wherein the Fc domain comprises an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system.

~~97. The method of claim 95 or 96, wherein the detection molecule comprises a labeled anti-human IgG F(ab')2.~~

~~98. The method of claim 96 or 97, wherein the labeled recombinant antigen-binding protein binds a polypeptide comprising an amino acid sequence of SEQ ID NO:43.~~

~~99. The method any one of claims 96-98, wherein labeled recombinant antigen-binding protein binds the polypeptide with a K_D of less than about 60 nM as measured in a surface plasmon resonance assay.~~

~~100. The method of any one of claims 96-99, wherein the labeled recombinant antigen-binding protein comprises one or more complementarity determining regions (CDRs) of a heavy chain variable region (HCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:38, or of a light chain variable region (LCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:39.~~

~~101. The method of any one of claims 96-100, wherein the labeled recombinant antigen-binding protein comprises a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:32, an HCDR-2 having the amino acid sequence of SEQ ID NO:33, an HCDR-3 having the amino acid sequence of SEQ ID NO:34, a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:35, an LCDR-2 having the amino acid sequence of SEQ ID NO:36, and an LCDR-3 having the amino acid sequence of SEQ ID NO:37.~~

~~102. The method of any one of claims 96-101, wherein the labeled recombinant antigen-binding protein comprises an HCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:38 and an LCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:39.~~

~~103. The method of any one of claims 96-102, wherein the labeled recombinant antigen-binding protein comprises an HCVR having an amino acid sequence of SEQ ID NO:38 and an LCVR having an amino acid sequence of SEQ ID NO:39.~~

~~104. The method of any one of claims 96-103, wherein the labeled recombinant antigen-binding protein is a labeled antibody comprising a heavy chain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:40 and a light chain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:41.~~

~~105. The method of claim 104, wherein the labeled antibody comprises a heavy chain that has an amino acid sequence identical to SEQ ID NO:40 and a light chain that has an amino acid sequence identical to SEQ ID NO:41.~~

~~106. The method of any one of claims 76-78, wherein the first subunit of the heterodimeric protein comprises a heavy chain domain comprising a CH3 domain having an arginine residue at position 95 according to the IMGT exon numbering system and a phenylalanine residue at position 96 according to the IMGT exon numbering system, and the second subunit of the heterodimeric protein comprises a heavy chain domain comprising a CH3 domain having a histidine residue at position 95 according to the IMGT exon numbering system and a tyrosine residue at position 96 according to the IMGT exon numbering system.~~

~~107. The method of claim 106, wherein the CSCP comprises an ScFv fusion protein comprising (a) a heavy chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:38, (b) a light chain variable domain comprising an amino acid sequence that is at least 95% identical to SEQ ID NO:39, and (c) a membrane anchor domain.~~

~~108. The method of claim 107, wherein the ScFv fusion protein comprises a heavy chain variable domain that has an amino acid sequence identical to SEQ ID NO:38 and a light chain variable domain that has an amino acid sequence identical to SEQ ID NO:39.~~

~~109. The method of claim 107 or 108, wherein the ScFv fusion protein comprises the amino acid sequence of SEQ ID NO:43.~~

~~110. The method of any one of claims 106-109, wherein the detection molecule (DM) comprises a labeled recombinant antigen-binding protein comprising one or more complementarity determining regions (CDRs) of a heavy chain variable region (HCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:15, or of a light chain variable region (LCVR) having an amino acid sequence that is at least 95% identical to SEQ ID NO:16.~~

~~111. The method of claim 110, wherein the labeled recombinant antigen-binding protein comprises a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:27, an HCDR-2 having the amino acid sequence of SEQ ID NO:28, an HCDR-3 having the amino acid sequence of SEQ ID NO:29, a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:30, and an LCDR-2 having the amino acid sequence of SEQ ID NO:31.~~

~~112. The method of claim 106, wherein the detection molecule (DM) comprises a labeled recombinant antigen-binding protein that binds to the same epitope on the CH3 domain as an antibody which comprises a heavy chain CDR-1 (HCDR1) having the amino acid sequence of SEQ ID NO:27, an HCDR-2 having the amino acid sequence of SEQ ID NO:28, an HCDR-3 having the amino acid sequence of SEQ ID NO:29, a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:30, and an LCDR-2 having the amino acid sequence of SEQ ID NO:31.~~

~~113. The method of claim 112, wherein the labeled antigen-binding protein comprises an HCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:15 and an LCVR having an amino acid sequence that is at least 95% identical to SEQ ID NO:16.~~

~~114. The method of claim 112 or 113, wherein the labeled antigen-binding protein comprises an HCVR having the amino acid sequence of SEQ ID NO:15 and an LCVR having the amino acid sequence of SEQ ID NO:16.~~

~~115. The method of any one of claims 76-114, wherein the blocking molecule is a non-human IgG or a human Fc molecule.~~