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.

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 of SEQ ID NO:15, 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 variable region (LCVR) having an amino acid sequence of SEQ ID NO:16; or

(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 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 variable region (LCVR) having an amino acid sequence of SEQ ID NO:16.

5. The method of claims 1 or 2, wherein the recombinant antigen-binding of the CSCP comprises:

(a) a heavy chain variable region (HCVR) having an amino acid sequence of SEQ ID NO:38, comprising a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:32, a HCDR-2 having the amino acid sequence of SEQ ID NO:33, 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, a LCDR-2 having the amino acid sequence of SEQ ID NO:36, and a LCDR-3 having the amino acid sequence of SEQ ID NO:37;

(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;

(c) an ScFv fusion protein comprising the amino acid sequence of SEQ ID NO:43, wherein said SEQ ID NO:43 comprises a heavy chain CDR-1 (HCDR-1) having the amino acid sequence of SEQ ID NO:32, a HCDR-2 having the amino acid sequence of SEQ ID NO:33, 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, a LCDR-2 having the amino acid sequence of SEQ ID NO:36, and a LCDR-3 having the amino acid sequence of SEQ ID NO:37;

(d) an antibody comprising a heavy chain comprising an amino acid sequence SEQ ID NO:40, wherein said SEQ ID NO: 40 comprises a HCDR-1 having the amino acid sequence of SEQ ID NO:32, a HCDR-2 having the amino acid sequence of SEQ ID NO:33, a HCDR-3 having the amino acid sequence of SEQ ID NO: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:35, a LCDR-2 having the amino acid sequence of SEQ ID NO:36, and a LCDR-3 having the amino acid sequence of SEQ ID NO:37.

6. The method of any one of claims 1 to 5, wherein the method further comprises contacting the cell with a blocking molecule, wherein the blocking molecule binds to CSCP that is not bound to the bispecific antibody, but does not bind to the CSCP-bispecific antibody complex.

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 1 to 8 further comprising pooling the detected and selected cells producing the bispecific antibody.

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

11. 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. 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.