What is claimed is:

1. A method of producing an immunobinder capable of binding to an antigen of interest, wherein the immunobinder is produced by introducing a nucleic acid sequence into a host cell such that the immunobinder is produced, wherein the nucleic acid sequence encodes the immunobinder, and wherein the immunobinder-encoding nucleic acid sequence is derived from a B-cell clone identified by:

(a) isolating B-cells from an animal;

(b) contacting the B-cells with antigen-expressing cells expressing the antigen of interest or an artificial cell-like body displaying the antigen of interest; and,

(c) isolating one or more complexes in which a B-cell is binding to an antigen-expressing cell or said artificial cell-like body displaying the antigen of interest, wherein the isolating is accomplished using a cell sorter, and wherein the B-cell in an isolated complex is identified as a B-cell clone that binds to the antigen of interest.

2. The method of claim 1, wherein the immunobinder is an antibody.

3. The method of claim 2, wherein the antibody is a mouse, rabbit, chicken, camel, rat, hamster, sheep, goat, human, humanized, or chimeric antibody.

4. The method of claim 3, wherein the antibody is a full-length immunoglobulin, Fab, Dab, scFv, or Nanobody.

5. The method of claim 1, wherein the antigen of interest is an integral membrane protein.

6. The method of claim 5, wherein the integral membrane protein is a GPCR or an ion channel.

7. The method of claim 5, wherein the integral membrane protein is CXCR2, CXCR1, CXCR3, CXCR4, CXCR6, CCR1, CCR2, CCR3, CCR4, CCR5, CCR6, CCR8, CFTR,

CIC-1, CIC-2, CIC-4, CIC-5, CIC-7, CIC-Ka, CIC-Kb, Bestrophins, TMEM16A, GABA receptor, glycin receptor, ABC transporters, NAV1.1, NAV1.2, NAV1.3, NAV1.4, NAV1.5, NAV1.6, NAV1.7, NAV1.8, NAV1.9, sphingosin-1-phosphate receptor (S1P1R) or NMDA channel.

8. The method of claim 1, wherein the antigen of interest is a soluble antigen.

9. The method of claim 1, wherein the antigen of interest is expressed from an exogenous gene.

10. The method of claim 1, wherein the animal was immunized with said antigen of interest.

11. The method of claim 1, wherein the B-cells are labeled with a first sortable label, and the antigen-expressing cells or the artificial cell-like body displaying the antigen of interest are labeled with a second sortable label.

12. The method of claim 11, wherein the first and/or second sortable label is a fluorescent label.

13. The method of claim 12, wherein the fluorescent label is a fluorescent protein or a fluorescent cellular label.

14. The method of claim 1, wherein the animal is a rabbit.

15. The method of claim 1, wherein the artificial cell-like body is a bead coated with the antigen of interest, a liposome or a single-layer membrane body.

16. The method of claim 1, wherein the antigen-expressing cell is a yeast or mammalian cell or yeast spheroblast.