What is claimed is:

1. An isolated antigen-binding protein, which specifically binds to CLDN18.2, comprising HCDR3, HCDR2 and HCDR1, wherein said HCDR3 comprises an amino acid sequence as set forth in SEQ ID NO: 4, wherein said HCDR2 comprises an amino acid sequence as set forth in SEQ ID NO: 3, and wherein said HCDR1 comprises an amino acid sequence as set forth in SEQ ID NO: 2; and comprising LCDR3, LCDR2 and LCDR1, wherein said LCDR3 comprises an amino acid sequence as set forth in SEQ ID NO: 8, wherein said LCDR2 comprises an amino acid sequence as set forth in SEQ ID NO: 7, and wherein said LCDR1 comprises an amino acid sequence as set forth in SEQ ID NO: 6.
2. The isolated antigen-binding protein of claim 1, comprising a VH and a VL, wherein said VH comprises the amino acid sequence as set forth in SEQ ID NO: 1 and said VL comprises the amino acid sequence as set forth in SEQ ID NO: 5.
3. The isolated antigen-binding protein of claim 1, comprising an antibody heavy chain constant region.
4. The isolated antigen-binding protein of claim 3, wherein said antibody heavy chain constant region is derived from a human IgG1 heavy chain constant region.
5. The isolated antigen-binding protein of claim 1, comprising an antibody light chain constant region.
6. The isolated antigen-binding protein of claim 5, wherein said antibody light chain constant region is derived from a human Igκ constant region.
7. A chimeric antigen receptor, comprising a targeting moiety, wherein said targeting moiety comprises the antigen-binding protein of any one of claims 1-6.
8. The chimeric antigen receptor of claim 7, further comprising a costimulatory domain, an intracellular signaling domain, a transmembrane region, a hinge region between the targeting moiety and the transmembrane region, and a signal peptide; wherein said costimulatory domain comprises a costimulatory domain derived from one or more proteins selected from the group consisting of: CD28, 4-1BB, CD27, CD2, CD7, CD8, OX40, CD226, DR3, SLAM, CDS, ICAM-1, NKG2D, NKG2C, B7-H3, 2B4, FcεRIγ, BTLA, GITR, HVEM, DAP10, DAP12, CD30, CD40,

CD40L, TIM1, PD-1, LFA-1, LIGHT, JAML, CD244, CD100, ICOS, a ligand of CD83, CD40, and MyD88, wherein said intracellular signaling domain comprising an intracellular signaling domain derived from one or more proteins selected from the group consisting of: CD3ζ, CD3δ, CD3γ, CD3ε, CD79a, CD79b, FcεRIγ, FcεRIβ, FcγRIIa, bovine leukemia virus gp30, Epstein-Barr virus (EBV) LMP2A, simian immunodeficiency virus PBj14Nef, Kaposi's Sarcoma Associated-Herpesvirus (HSKV), DAP10, DAP-12, and a domain containing at least one ITAM, wherein said transmembrane region comprises a transmembrane domain derived from one or more proteins selected from the group consisting of: CD8, CD28, 4-1BB, CD4, CD27, CD7, PD-1, TRAC, TRBC, CD3ε, CD3ζ, CTLA-4, LAG-3, CD5, ICOS, OX40, NKG2D, 2B4, CD244, FcεRIγ, BTLA, CD30, GITR, HVEM, DAP10, CD2, NKG2C, LIGHT, DAP12, CD40L, TIM1, CD226, DR3, CD45, CD80, CD86, CD9, CD16, CD22, CD33, CD37, CD64, CD134, CD137, CD154, and SLAM, wherein said hinge region comprises a hinge region derived from one or more proteins selected from the group consisting of: CD28, IgG1, IgG4, IgD, 4-1BB, CD4, CD27, CD7, CD8, PD-1, ICOS, OX40, NKG2D, NKG2C, FcεRIγ, BTLA, GITR, DAP10, CD40L, TIM1, CD226, SLAM, CD30, and LIGHT.

9. The chimeric antigen receptor of claim 8, wherein said costimulatory domain is an intracellular costimulatory signaling region derived from 4-1BB comprising an amino acid sequence as set forth in SEQ ID NO: 85, wherein said intracellular signaling domain is a signaling domain derived from CD3ζ comprising an amino acid sequence as set forth in SEQ ID NO: 86, wherein said transmembrane region is a transmembrane region derived from CD8 comprising an amino acid sequence as set forth in SEQ ID NO: 84, wherein said hinge region is a hinge region derived from CD8 comprising an amino acid sequence as set forth in SEQ ID NO: 83, wherein said signal peptide is a signal peptide derived from the CD8 protein comprising an amino acid sequence as set forth in SEQ ID NO: 88.
10. The chimeric antigen receptor of claim 7, further comprising a low-density lipoprotein receptor-related protein or a fragment thereof, wherein said low-density lipoprotein receptor-related protein or the fragment thereof is low-density

lipoprotein receptor-related protein 5 and/or 6 or a fragment thereof, wherein said fragment maintain at least 90% of the biological activity of said low-density lipoprotein receptor-related protein 5 and/or 6.

11. The chimeric antigen receptor of claim 10, wherein said low-density lipoprotein receptor-related protein or the fragment thereof comprises an amino acid sequence as set forth in SEQ ID NO: 91.
12. A polypeptide molecule comprising the isolated antigen-binding protein of any one of claims 1-6 or the chimeric antigen receptor of any one of claims 7-11.
13. An immunoconjugate, comprising the isolated antigen-binding protein of any one of claims 1-6.
14. One or more isolated nucleic acid molecules, encoding the isolated antigen-binding protein of any one of claims 1-6, the chimeric antigen receptor of any one of claims 7-11 or the polypeptide molecule of claim 12.
15. A cell, which is an immune effector cell, comprising the isolated antigen-binding protein of any one of claims 1-6, the chimeric antigen receptor of any one of claims 7-11, the polypeptide molecule of claim 12, or the nucleic acid molecule of claims 14.
16. A pharmaceutical composition, comprising the isolated antigen-binding protein of any one of claims 1-6, the chimeric antigen receptor of any one of claims 7-11, the polypeptide molecule of claim 12, the immunoconjugate of claim 13, the nucleic acid molecule of claim 14, and/or the cell of claim 15, and optionally a pharmaceutically acceptable carrier.
17. Use of the isolated antigen-binding protein of any one of claims 1-6, the chimeric antigen receptor of any one of claims 7-11, the polypeptide molecule of claim 12, the immunoconjugate of claim 13, and/or the pharmaceutical composition of claim 16, in the manufacture of a medicament for the alleviation and/or treatment of a disease and/or a disorder, wherein said disease and/or disorder comprises CLDN18.2-positive tumors.
18. The use of claim 17, wherein said CLDN18.2-positive tumors comprise solid tumors and/or hematomas.

19. The use of claim 17, wherein said CLDN18.2-positive tumors comprise gastric cancer and/or colon cancer.