8. The recombinant polypeptide according to any one of claims 1–7, wherein the polypeptide binds TGF-β1.

9. An expression vector comprising a nucleic acid encoding the polypeptide of any one of claims 1–8.

10. The expression vector according to claim 9, further comprising a nucleic acid sequence encoding a chimeric antigen receptor (CAR).

11. The expression vector according to claim 10, wherein the CAR binds to a tumor antigen comprising CD19, CD20, PSMA, PCMA, CLL-1, or GPC3.

12. A T cell transduced with the expression vector of any one of claims 8–9.

13. Use of the T cell of claim 12 in the preparation of a medicament for treating cancer in a subject in need thereof.

14. A recombinant nucleic acid encoding a chimeric antigen receptor (CAR) comprising the nucleotide sequence of SEQ ID NO: 51.

15. The recombinant nucleic acid according to claim 14, further comprising the nucleotide sequence of SEQ ID NO: 48.

16. The recombinant nucleic acid according to claim 15 encoding a polypeptide comprising the amino acid sequence of SEQ ID NO: 47.

17. An expression vector comprising the nucleic acid encoding the polypeptide according to claim 16.

18. The expression vector according to claim 17, wherein the CAR binds to a tumor antigen comprising GPC3.

19. A T cell transduced with the expression vector according to any one of claims 17–18.

20. Use of the T cell of claim 19 in the preparation of a medicament for the treatment of hepatic cancer in a subject in need thereof.