Claims

1. A polypeptide comprising a binding domain, which is an antibody capable of binding to an epitope of human and Callithrix jacchus, Saguinus oedipus or Saimiri sciureus CD3ε chain, wherein the epitope is part of an amino acid sequence comprised in the group consisting of SEQ ID NOs:2, 4, 6, or 8 and comprises at least the amino acid sequence Gln-Asp-Gly-Asn-Glu, wherein the first binding domain comprises a VL region comprising CDR-L1 GSSTGAVTSGNYPN (SEQ ID NO:153), CDR-L2 GTKFLAP (SEQ ID NO:154) and CDR-L3 VLWYSNRWV (SEQ ID NO:155) and a VH region comprising CDR-H 1 KYAMN (SEQ ID NO:174), CDR-H2 RIRSKYNNYATYYADSVKD (SEQ ID NO:175) and CDR-H3 HGNFGNSYISYWAY (SEQ ID NO:176), and
wherein the polypeptide further comprises a second binding domain capable of binding to a cell surface antigen which is CD33.

2. The polypeptide as defined in claim 1, wherein the epitope is part of an amino acid sequence comprised in the group consisting of SEQ ID NOs:2, 4, 6, and 8 and comprises at least the amino acid sequence Gln-Asp-Gly-Asn-Glu.

3. The polypeptide of claim 1 or 2, wherein the first binding domain comprises a VL region selected from the group consisting of a VL region as depicted in SEQ ID NO: 179 or 183.

4. The polypeptide of claim 1 or 2, wherein the first binding domain comprises a VH region selected from the group consisting of a VH region as depicted in SEQ ID NO: 177 or 181.

5. The polypeptide of any one of claims 1 to 4, wherein the first binding comprises
a VL region as depicted in SEQ ID NO:179 or 183 and a VH region as depicted in SEQ ID NO:177 or 181.

6. The polypeptide according to claim 5, wherein the first binding domain comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 185 or 187.

7. The polypeptide of any one of claims 1 to 6, wherein said polypeptide is a bispecific single chain antibody molecule.

8. The polypeptide of claim 7, wherein the bispecific single chain molecule comprises a group of the following sequences as CDR H1, CDR H2, CDR H3, CDR L1, CDR L2 and CDR L3 in the second binding domain selected from the group consisting of SEQ ID Nos: SEQ ID NOs:382-384 and 387-389, SEQ ID NOs:400-402 and 405-407, SEQ ID NOs:418-420 and 423-425, SEQ ID NOs:436-438 and 441-443, SEQ ID NOs:454-456 and 459-461, SEQ ID NOs:472-474 and 477-479, SEQ ID NOs:490-492 and 495-497, SEQ ID NOs:508-510 and 513-515.

9. The polypeptide of claim 8, wherein the bispecific single chain antibody molecule comprises a sequence selected from:
(a) an amino acid sequence as depicted in any of SEQ ID NOs: 393, 395, 397, 411, 413, 415, 429, 431, 433, 447, 449, 451, 465, 467, 469, 483, 485, 487, 501, 503, 505, 519, 521, 523; and
(b) an amino acid sequence encoded by a nucleic acid sequence as depicted in any of SEQ ID NOs: 394, 396, 398, 412, 414, 416, 430, 432, 434, 448, 450, 452, 466, 468, 470, 484, 486, 488, 502, 504, 506, 520, 522, 524.

10. A nucleic acid sequence encoding a polypeptide as defined in any of claims 1 to 9.

11. A vector, which comprises a nucleic acid sequence as defined in claim 10.

12. A pharmaceutical composition comprising a polypeptide according to any one of claims 1 to 9.

13. The pharmaceutical composition of claim 12 for use in a method for the prevention, treatment or amelioration of a proliferative disease.

14. The pharmaceutical composition for the use of claim 13, wherein said pharmaceutical composition is suitable to be administered in combination with an additional drug.

15. The pharmaceutical composition for the use of claim 14, wherein said drug is a non-proteinaceous compound or a proteinaceous compound.