CLAIMS

WHAT IS CLAIMED IS:

1. A single domain antibody that binds to a serum albumin, wherein said single domain antibody comprises complementarity determining regions CDR1, CDR2, and CDR3, and wherein

(a) the amino acid sequence of CDR1 is GFTFSRFGMS (SEQ ID NO. 14);

(b) the amino acid sequence of CDR2 is SISGSGSDTLYADSVK (SEQ ID NO. 12); and

(c) the amino acid sequence of CDR3 is GGSLSR (SEQ ID NO. 13).

2. The single domain antibody according to claim 1, that comprises the following formula:

f1-r1-f2-r2-f3-r3-f4

wherein, r1 is SEQ ID NO. 14; r2 is SEQ ID NO. 12; and r3 is SEQ ID NO. 13; and wherein f_1, f_2, f_3 and f_4 are framework residues selected so that said single domain antibody is at least eighty percent identical to the amino acid sequence set forth in SEQ ID NO. 10.

3. The single domain antibody according to claim 1, that has an amino acid sequence set forth as SEQ ID NO. 4.

4. The single domain antibody according to any one of claims 1-3, that binds to a serum albumin selected from the group consisting of human serum albumin, cynomolgus serum albumin, and mouse serum albumin.

5. The single domain antibody according to any one of claims 1-4, that binds to human serum albumin and cynomolgus serum albumin with comparable binding affinity (Kd).

6. The single domain antibody according to any one of claims 1-5, that binds to mouse serum albumin with a binding affinity (Kd) of from 1.5 fold to 20 fold weaker than the binding affinity (Kd) of said single domain antibody towards human serum albumin and cynomolgus serum albumin.

7. The single domain antibody according to any one of claims 1-6, that binds to human serum albumin with a human Kd (hKd) between 1 nM and 100 nM and to cynomolgus serum albumin with a cynomolgus Kd (cKd) between 1 nM and 100 nM.

8. The single domain antibody according to claim 7, wherein the hKd and cKd are between 1 nM and 5 nM, or 5 nM and 10 nM.

9. The single domain antibody according to claim 7, wherein the hKd and the cKd are between 1 nM and 2 nM, 2 nM and 3 nM, 3 nM and 4 nM, 4 nM and 5 nM, 5 nM and 6 nM, 6 nM and 7 nM, 7 nM and 8 nM, 8 nM and 9 nM, or 9 nM and 10 nM.

10. The single domain antibody according to any one of claims 4 and 6-9, wherein a ratio between the hKd and the cKd (hKd:cKd) ranges from 20:1 to 1:2.

11. The single domain antibody according to any one of claims 1-10, that comprises the amino acid sequence set forth as SEQ ID NO. 4, wherein the hKd and the cKd are between 1 nM and 5 nM.

12. The single domain antibody according to any one of claims 1-11, that has an elimination half-time of at least 12 hours, at least 20 hours, at least 25 hours, at least 30 hours, at least 35 hours, at least 40 hours, at least 45 hours, at least 50 hours, or at least 100 hours.

13. The single domain antibody according to any one of claims 1-12, that is derived from a heavy chain variable region of IgG.

14. A multispecific binding protein that comprises (i) the single domain antibody according to claim 13, and (ii) a CD3-binding domain.

15. A polynucleotide encoding the antibody according to any one of claims 1-13 or the multispecific binding protein of claim 14.

16. A vector that comprises the polynucleotide according to claim 15.

17. A host cell transformed with the vector according to claim 16.

18. A pharmaceutical composition that comprises (i) a single domain antibody according to any one of claims 1-13, the multispecific binding protein according to claim 14, the polynucleotide according to claim 15, the vector according to claim 16, or the host cell according to claim 17, and (ii) a pharmaceutically acceptable carrier.

19. A process for the production of the single domain antibody according to any one of claims 1-13 or the multispecific binding protein according to claim 14, said process comprising culturing a host transformed or transfected with a vector comprising a polynucleotide according to claim 15 under conditions allowing the expression of the single domain antibody or the multispecific binding protein, and recovering and purifying the produced single domain antibody or the produced multispecific binding protein from the culture.

20. The multispecific binding protein according to claim 14 for use in therapy.

21. Use of the multispecific binding protein according to claim 14 in the manufacture of a medicament for the treatment or amelioration of a proliferative disease, a

tumorous disease, an inflammatory disease, an immunological disorder, an autoimmune disease, an infectious disease, a viral disease, an allergic reaction, a parasitic reaction, a graft-versus-host disease or a host-versus-graft disease, wherein the medicament is to be administered to a subject in need thereof.

22. The use of claim 21, wherein the subject is human.

23. The use of claim 21 or 22, wherein an agent is to be administered in combination with the multispecific binding protein.