A. the first polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to CD3 (VL_{CD3}) having the amino acid sequence of SEQ ID NO:5; and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to gpA33 (VH_{gpA33}) having the amino acid sequence of SEQ ID NO:27; wherein the sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of SEQ ID NO:1;

ii. a Domain 2, wherein the Domain 2 is a K-coil Domain having the amino acid sequence of SEQ ID NO:4 or an E-coil Domain having the amino acid sequence of SEQ ID NO:3, wherein the Domain 2 is separated from the Domain 1 by a peptide linker having the amino acid sequence of SEQ ID NO:2;

B. the second polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to gpA33 (VL_{gpA33}) having the amino acid sequence of SEQ ID NO:26 and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to CD3 (VH_{CD3}) having the amino acid sequence of SEQ ID NO:25, wherein the sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of SEQ ID NO:1;

ii. a Domain 2, wherein the Domain 2 is an E-coil Domain having the amino acid sequence of SEQ ID NO:3 or a K-coil Domain having the amino acid sequence of SEQ ID NO:4, wherein the Domain 2 is separated from the Domain 1 by a peptide linker having the amino acid sequence of SEQ ID NO:2; and wherein the Domain 2 of the first polypeptide chain and the Domain 2 of the second polypeptide chain are not both E-coil Domains or both K-coil Domains;

and wherein:

(a) the VL Domain of the first polypeptide chain and the VH Domain of the second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of CD3; and

(b) the VH Domain of the first polypeptide chain and the VL Domain of the second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of gpA33.

[0022] The disclosure additionally concerns the embodiment of the above-described bi-specific monovalent diabody wherein the first polypeptide chain or the second polypeptide chain comprises, an Albumin-Binding Domain (**SEQ ID NO:34**), linked C-terminally to Domain 2 or N-terminally to Domain 1A via a Linker 3 (**SEQ ID NO:32**).

[0023] In one aspect, there is provided a bi-specific monovalent Fc diabody, wherein the bi-specific monovalent Fc diabody is capable of specific binding to an epitope of gpA33 and to an epitope of CD3, and possesses an IgG Fc Domain, wherein the bi-specific monovalent Fc diabody comprises a first polypeptide chain, a second polypeptide chain and a third polypeptide chain, wherein the first and second polypeptide chains are covalently bonded to one another and the first and third polypeptide chains are covalently bonded to one another, and wherein:

A. the first polypeptide chain comprises, in the N-terminal to C-terminal direction:

   i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to gpA33 (VL_{gpA33}) and having the amino acid sequence of SEQ ID NO:26 and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to CD3 (VH_{CD3}) and having the amino acid sequence of SEQ ID NO:25, wherein the sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of SEQ ID NO:1;

   ii. a Domain 2, wherein the Domain 2 is an E-coil Domain having the amino acid sequence of SEQ ID NO:3 or a K-coil Domain having the amino acid sequence of SEQ ID NO:4, wherein the Domain 2 is separated from the Domain 1 by a peptide linker having the amino acid sequence of SEQ ID NO:2; and

   iii. a Domain 3, comprising a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of SEQ ID NO:39 and a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain; wherein the Domains 3 and 2 are separated from one another by a spacer peptide having sequence GGG (Linker 5);

B. the second polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to CD3 (VL_{CD3}) and having the amino acid sequence of SEQ ID NO:5, and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to gpA33 (VH_{gpA33}) and having the amino acid sequence of SEQ ID NO:27; wherein the sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of SEQ ID NO:1;

ii. a Domain 2, wherein the Domain 2 is a K-coil Domain having the amino acid sequence of SEQ ID NO:4 or an E-coil Domain having the amino acid sequence of SEQ ID NO:3, wherein the Domain 2 is separated from the Domain 1 by a peptide linker having the amino acid sequence of SEQ ID NO:2; and wherein the Domain 2 of the first polypeptide chain and the Domain 2 of the second polypeptide chain are not both E-coil Domains or both K-coil Domains; and

C. the third polypeptide chain comprises, in the N-terminal to C-terminal direction, a Domain 3 comprising:

(1) a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of SEQ ID NO:39; and

(2) a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain;

and wherein:

(a) the polypeptide portions of the IgG Fc domains of the first and third polypeptide chain form the IgG Fc Domain;

(b) the VL Domain of the first polypeptide chain and the VH Domain of the second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of gpA33; and

(c) the VH Domain of the first polypeptide chain and the VL Domain of the second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of CD3.

[0024] In one aspect, there is provided a bi-specific monovalent Fc diabody, wherein the bi-specific monovalent Fc diabody is capable of specific binding to an epitope of gpA33 and to an epitope of CD3, and possesses an IgG Fc Domain, wherein the bi-specific monovalent Fc diabody comprises a first polypeptide chain, a

second polypeptide chain and a third polypeptide chain, wherein the first and second polypeptide chains are covalently bonded to one another and the first and third polypeptide chains are covalently bonded to one another, and wherein:

A. the first polypeptide chain comprises, in the N-terminal to C-terminal direction:

   i. a Domain 3, comprising a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of SEQ ID NO:39 and a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain;

   ii. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to gpA33 (VL_{gpA33}) and having the amino acid sequence of SEQ ID NO:26 and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to CD3 (VH_{CD3}) and having the amino acid sequence of SEQ ID NO:25, wherein the sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of SEQ ID NO:1;
   wherein the Domains 1 and 3 are separated from one another by a spacer peptide (Linker 4) having the amino acid sequence of SEQ ID NO:38;

   iii. a Domain 2, wherein the Domain 2 is an E-coil Domain having the amino acid sequence of SEQ ID NO:3 or a K-coil Domain having the amino acid sequence of SEQ ID NO:4, wherein the Domain 2 is separated from the Domain 1 by a peptide linker having the amino acid sequence of SEQ ID NO:2; and

B. the second polypeptide chain comprises, in the N-terminal to C-terminal direction:

   i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to CD3 (VL_{CD3}) and having the amino acid sequence of SEQ ID NO:5; and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to gpA33 (VH_{gpA33}) and having the amino acid sequence of SEQ ID NO:27; wherein the sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of SEQ ID NO:1;

   ii. a Domain 2, wherein the Domain 2 is a K-coil Domain having the amino acid sequence of SEQ ID NO:4 or an E-coil Domain having the amino acid sequence of SEQ ID NO:3, wherein the Domain 2 is separated from the Domain 1 by a peptide linker having the amino acid sequence of SEQ ID NO:2; and

wherein the Domain 2 of the first polypeptide chain and the Domain 2 of the second polypeptide chain are not both E-coil Domains or both K-coil Domains; and

C. the third polypeptide chain comprises, in the N-terminal to C-terminal direction, a Domain 3 comprising:

(1) a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of SEQ ID NO:39; and

(2) a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain;

and wherein:

(a) the polypeptide portions of the IgG Fc domains of the first and third polypeptide chain form the IgG Fc Domain;

(b) the VL Domain of the first polypeptide chain and the VH Domain of the second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of gpA33; and

(c) the VH Domain of the first polypeptide chain and the VL Domain of the second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of CD3.

[0025] The disclosure further concerns the embodiments of any of the above-described bi-specific monovalent Fc diabodies wherein the sub-Domain (3B) of the first polypeptide chain comprises a sequence different from that of the sub-Domain (3B) of the third polypeptide chain.

[0026] The disclosure further concerns the embodiments of such above-described bi-specific monovalent Fc diabodies wherein the sub-Domain (3B) of the first polypeptide chain has the amino acid sequence of **SEQ ID NO:40**, and the sub-Domain (3B) of the third polypeptide chain has the amino acid sequence of **SEQ ID NO:41**.

[0027] The disclosure further concerns the embodiments of such above-described bi-specific monovalent Fc diabodies wherein the sub-Domain (3B) of the first

[0032] In another aspect, there is provided a bi-specific monovalent Fc diabody, wherein the bi-specific monovalent Fc diabody is capable of specific binding to an epitope of CD3 and to an epitope of gpA33, and possesses an IgG Fc Domain, wherein the bi-specific monovalent Fc diabody comprises:

(1) a first polypeptide chain having the amino acid sequence of **SEQ ID NO:42**, a second polypeptide chain having the amino acid sequence of **SEQ ID NO:44**, and a third polypeptide chain having the amino acid sequence of **SEQ ID NO:46**; or

(2) a first polypeptide chain having the amino acid sequence of **SEQ ID NO:48**, a second polypeptide chain having the amino acid sequence of **SEQ ID NO:28**, and a third polypeptide chain having the amino acid sequence of **SEQ ID NO:46**;

wherein the first and the second polypeptide chains are covalently bonded to one another by a first disulfide bond and the first and third polypeptide chains are covalently bonded to one another by a second disulfide bond.

[0033] In one aspect, there is provided a pharmaceutical composition comprising any one of the above-described bi-specific monovalent diabodies or any one of the above-described bi-specific monovalent Fc diabodies; and a physiologically acceptable carrier.

[033a] In one aspect, there is provided use of the above-described pharmaceutical composition in the manufacture of a medicament for treatment of a cancer characterized by the expression of gpA33, wherein said cancer is colorectal cancer, colon cancer, gastric cancer or pancreatic cancer.

[0034] The disclosure further concerns the use of the above-described pharmaceutical composition in the treatment of a cancer characterized by the expression of gpA33, and especially such use wherein the cancer is colorectal cancer, colon cancer, gastric cancer or pancreatic cancer.

[0035] The disclosure further concerns a cell that expresses a polypeptide chain of any of the above-described bi-specific monovalent diabodies or any of the above-described bi-specific monovalent Fc diabodies, as well as a polynucleotide that encodes such expressed polypeptide.

[0035a] In one aspect, there is provided a cell that expresses said first polypeptide chain and/or said second polypeptide chain of any of the above-described bi-specific monovalent diabodies or of any of the above-described bi-specific monovalent Fc diabodies.

[0035b] In one aspect, there is provided a polynucleotide that encodes the above-described polypeptide.

[0036] Disclosed is a cell that expresses an antibody or a polypeptide portion or fragment thereof, wherein the antibody binds to gpA33, and wherein the antibody or polypeptide portion or fragment thereof comprises:

What is claimed is:

Claim 1. A bi-specific monovalent diabody, wherein said bi-specific monovalent diabody is capable of specific binding to an epitope of gpA33 and to an epitope of CD3, wherein the bi-specific monovalent diabody comprises a first polypeptide chain and a second polypeptide chain, wherein said first and second polypeptide chains are covalently bonded to one another, and wherein:

A. the first polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to CD3 (VL_{CD3}) having the amino acid sequence of **SEQ ID NO:5**; and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to gpA33 (VH_{gpA33}) having the amino acid sequence of **SEQ ID NO:27**; wherein said sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of **SEQ ID NO:1**;

ii. a Domain 2, wherein said Domain 2 is a K-coil Domain having the amino acid sequence of **SEQ ID NO:4** or an E-coil Domain having the amino acid sequence of **SEQ ID NO:3**, wherein said Domain 2 is separated from said Domain 1 by a peptide linker having the amino acid sequence of **SEQ ID NO:2**;

B. the second polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to gpA33 (VL_{gpA33}) having the amino acid sequence of **SEQ ID NO:26** and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to CD3 (VH_{CD3}) having the amino acid sequence of **SEQ ID NO:25**, wherein said sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of **SEQ ID NO:1**;

ii. a Domain 2, wherein said Domain 2 is an E-coil Domain having the amino acid sequence of **SEQ ID NO:3** or a K-coil Domain having the amino acid sequence of **SEQ ID NO:4**, wherein said Domain 2 is separated from said Domain 1 by a peptide linker having the amino acid sequence of **SEQ ID NO:2**; and wherein said Domain 2 of said first polypeptide chain and said Domain 2 of said second polypeptide chain are not both E-coil Domains or both K-coil Domains;

and wherein:

(a) said VL Domain of said first polypeptide chain and said VH Domain of said second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of CD3; and

(b) said VH Domain of said first polypeptide chain and said VL Domain of said second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of gpA33.

Claim 2. The bi-specific monovalent diabody of claim 1, wherein said first polypeptide chain comprises, an Albumin-Binding Domain having the amino acid sequence of **SEQ ID NO:34**, said Albumin-Binding Domain being positioned C-terminally to said Domain 2, and separated from said Domain 2 by a Linker 3 having the amino acid sequence of **SEQ ID NO:32**.

Claim 3. A bi-specific monovalent Fc diabody, wherein said bi-specific monovalent Fc diabody is capable of specific binding to an epitope of gpA33 and to an epitope of CD3, and possesses an IgG Fc Domain, wherein the bi-specific monovalent Fc diabody comprises a first polypeptide chain, a second polypeptide chain and a third polypeptide chain, wherein said first and second polypeptide chains are covalently bonded to one another and said first and third polypeptide chains are covalently bonded to one another, and wherein:

A. the first polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to gpA33 (VL_{gpA33}) and having the amino acid sequence of **SEQ ID NO:26** and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to CD3 (VH_{CD3}) and having the amino acid sequence of **SEQ ID NO:25**, wherein said sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of **SEQ ID NO:1**;

ii. a Domain 2, wherein said Domain 2 is an E-coil Domain having the amino acid sequence of **SEQ ID NO:3** or a K-coil Domain having the amino acid sequence of **SEQ ID NO:4**, wherein said Domain 2 is separated from said Domain 1 by a peptide linker having the amino acid sequence of **SEQ ID NO:2**; and

iii. a Domain 3, comprising a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of **SEQ ID NO:39** and a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain; wherein said Domains 3 and 2 are separated from one another by a spacer peptide having sequence GGG (Linker 5);

B. the second polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to CD3 (VL_{CD3}) and having the amino acid sequence of **SEQ ID NO:5**, and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to gpA33 (VH_{gpA33}) and having the amino acid sequence of **SEQ ID NO:27**; wherein said sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of **SEQ ID NO:1**;

ii. a Domain 2, wherein said Domain 2 is a K-coil Domain having the amino acid sequence of **SEQ ID NO:4** or an E-coil Domain having the amino acid sequence of **SEQ ID NO:3**, wherein said Domain 2 is separated from said Domain 1 by a peptide linker having the amino acid sequence of **SEQ ID NO:2**; and wherein said Domain 2 of said first polypeptide chain and said Domain 2 of said second polypeptide chain are not both E-coil Domains or both K-coil Domains; and

C. the third polypeptide chain comprises, in the N-terminal to C-terminal direction, a Domain 3 comprising:

(1) a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of **SEQ ID NO:39**; and

(2) a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain;

and wherein:

(a) said polypeptide portions of the IgG Fc domains of said first and third polypeptide chain form said IgG Fc Domain;

(b) said VL Domain of said first polypeptide chain and said VH Domain of said second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of gpA33; and

(c) said VH Domain of said first polypeptide chain and said VL Domain of said second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of CD3.

Claim 4. A bi-specific monovalent Fc diabody, wherein said bi-specific monovalent Fc diabody is capable of specific binding to an epitope of gpA33 and to an epitope of CD3, and possesses an IgG Fc Domain, wherein the bi-specific monovalent Fc diabody comprises a first polypeptide chain, a second polypeptide chain and a third polypeptide

chain, wherein said first and second polypeptide chains are covalently bonded to one another and said first and third polypeptide chains are covalently bonded to one another, and wherein:

A. the first polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 3, comprising a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of **SEQ ID NO:39** and a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain;

ii. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to gpA33 (VL_{gpA33}) and having the amino acid sequence of **SEQ ID NO:26** and a sub-Domain (1B), which comprises a VH Domain of a monoclonal antibody capable of binding to CD3 (VH_{CD3}) and having the amino acid sequence of **SEQ ID NO:25**, wherein said sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of **SEQ ID NO:1**; wherein said Domains 1 and 3 are separated from one another by a spacer peptide (Linker 4) having the amino acid sequence of **SEQ ID NO:38**;

iii. a Domain 2, wherein said Domain 2 is an E-coil Domain having the amino acid sequence of **SEQ ID NO:3** or a K-coil Domain having the amino acid sequence of **SEQ ID NO:4**, wherein said Domain 2 is separated from said Domain 1 by a peptide linker having the amino acid sequence of **SEQ ID NO:2**; and

B. the second polypeptide chain comprises, in the N-terminal to C-terminal direction:

i. a Domain 1, comprising a sub-Domain (1A), which comprises a VL Domain of a monoclonal antibody capable of binding to CD3 (VL_{CD3}) and having the amino acid sequence of **SEQ ID NO:5**; and a sub-Domain (1B), which comprises a VH Domain

of a monoclonal antibody capable of binding to gpA33 (VH_{gpA33}) and having the amino acid sequence of **SEQ ID NO:27**; wherein said sub-Domains (1A) and (1B) are separated from one another by a peptide linker having the amino acid sequence of **SEQ ID NO:1**;

ii. a Domain 2, wherein said Domain 2 is a K-coil Domain having the amino acid sequence of **SEQ ID NO:4** or an E-coil Domain having the amino acid sequence of **SEQ ID NO:3**, wherein said Domain 2 is separated from said Domain 1 by a peptide linker having the amino acid sequence of **SEQ ID NO:2**; and wherein said Domain 2 of said first polypeptide chain and said Domain 2 of said second polypeptide chain are not both E-coil Domains or both K-coil Domains; and

C. the third polypeptide chain comprises, in the N-terminal to C-terminal direction, a Domain 3 comprising:

(1) a sub-Domain (3A), which comprises a cysteine-containing peptide (Peptide 1) having the amino acid sequence of **SEQ ID NO:39**; and

(2) a sub-Domain (3B), which comprises a polypeptide portion of an IgG Fc Domain having CH2 and CH3 domains of an IgG immunoglobulin Fc Domain;

and wherein:

(a) said polypeptide portions of the IgG Fc domains of said first and third polypeptide chain form said IgG Fc Domain;

(b) said VL Domain of said first polypeptide chain and said VH Domain of said second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of gpA33; and

(c) said VH Domain of said first polypeptide chain and said VL Domain of said second polypeptide chain form an Antigen Binding Domain capable of specific binding to an epitope of CD3.

Claim 5. The bi-specific monovalent Fc diabody of any one of claims 3-4, wherein said sub-Domain (3B) of said first polypeptide chain comprises a sequence different from that of said sub-Domain (3B) of said third polypeptide chain.

Claim 6. The bi-specific monovalent Fc diabody of claim 5, wherein said sub-Domain (3B) of said first polypeptide chain has the amino acid sequence of **SEQ ID NO:40**, and said sub-Domain (3B) of said third polypeptide chain has the amino acid sequence of **SEQ ID NO:41**.

Claim 7. The bi-specific monovalent Fc diabody of claim 5, wherein said sub-Domain (3B) of said first polypeptide chain has the amino acid sequence of **SEQ ID NO:41**, and said sub-Domain (3B) of said third polypeptide chain has the amino acid sequence of **SEQ ID NO:40**.

Claim 8. The bi-specific monovalent Fc diabody of any one of claims 3-4, wherein said Domain 3 of said first polypeptide chain and/or said Domain 3 of said third polypeptide chain comprises a variant CH2-CH3 sequence that exhibits altered binding to an Fcγ receptor.

Claim 9. The bi-specific monovalent diabody of any one of claims 1-2 or the bi-specific monovalent Fc diabody of any of claims 3-8, wherein said Domain 2 of said first polypeptide chain comprises an E-coil having the amino acid sequence of **SEQ ID NO:3**, and said Domain 2 of said second polypeptide chain comprises a K-coil having the amino acid sequence of **SEQ ID NO:4**.

Claim 10. The bi-specific monovalent diabody of any one of claims 1-2 or the bi-specific monovalent Fc diabody of any of claims 3-8, wherein said Domain 2 of said first polypeptide chain comprises a K-coil having the amino acid sequence of **SEQ ID NO:4**, and said Domain 2 of said second polypeptide chain comprises an E-coil having the amino acid sequence of **SEQ ID NO:3**.

Claim 11. A bi-specific monovalent diabody, wherein said bi-specific monovalent diabody is capable of specific binding to an epitope of

CD3 and to an epitope of gpA33, wherein said bi-specific monovalent diabody comprises:

(1) a first polypeptide chain having the amino acid sequence of **SEQ ID NO:28**, and a second polypeptide chain having the amino acid sequence of **SEQ ID NO:30**; or

(2) a first polypeptide chain having the amino acid sequence of **SEQ ID NO:35**, and a second polypeptide chain having the amino acid sequence of **SEQ ID NO:30**;

wherein said first and said second polypeptide chains are covalently bonded to one another by a disulfide bond.

Claim 12. A bi-specific monovalent Fc diabody, wherein said bi-specific monovalent Fc diabody is capable of specific binding to an epitope of CD3 and to an epitope of gpA33, and possesses an IgG Fc Domain, wherein said bi-specific monovalent Fc diabody comprises:

(1) a first polypeptide chain having the amino acid sequence of **SEQ ID NO:42**, a second polypeptide chain having the amino acid sequence of **SEQ ID NO:44**, and a third polypeptide chain having the amino acid sequence of **SEQ ID NO:46**; or

(2) a first polypeptide chain having the amino acid sequence of **SEQ ID NO:48**, a second polypeptide chain having the amino acid sequence of **SEQ ID NO:28**, and a third polypeptide chain having the amino acid sequence of **SEQ ID NO:46**;

wherein said first and said second polypeptide chains are covalently bonded to one another by a first disulfide bond and said first and third polypeptide chains are covalently bonded to one another by a second disulfide bond.

Claim 13. A pharmaceutical composition comprising the bi-specific monovalent diabody of any one of claims 1-2 or 9-11 or the bi-specific monovalent Fc diabody of any one of claims 3-10 or 12; and a physiologically acceptable carrier.

Claim 14. Use of the pharmaceutical composition of claim 13 in the manufacture of a medicament for treatment of a cancer characterized by the expression of gpA33, wherein said cancer is colorectal cancer, colon cancer, gastric cancer or pancreatic cancer.

Claim 15. A cell that expresses said first polypeptide chain and/or said second polypeptide chain of any of the bi-specific monovalent diabodies of any one of claims 1-2 or 9-11 or of any of the bi-specific monovalent Fc diabodies of any one of claims 3-10 or 12.

Claim 16. A polynucleotide that encodes the polypeptide of claim 15.