Claims:

1. An antibody selected from the group consisting of:

(i) an antibody produced by or obtainable from a clone deposited under the accession no. DSM ACC2895 (22-1A-1), DSM ACC2893 (22-2A-1), DSM ACC2896 (22-9B-1), DSM ACC2897 (23-33A-1), DSM ACC2891 (23-19A-1), DSM ACC2894 (F11#33F7D12), DSM ACC2892 (4A12 2D4 1A10), DSM ACC2898 (4E9 1D12 2D4), DSM ACC2961 (42H11 1C11 2B2), DSM ACC2962 (51G6 2H3 2B4), DSM ACC2943 (16-5B-1), DSM ACC2956 (20-11A-1), DSM ACC2947 (29-1A-2), DSM ACC2964 (29-8B-1), DSM ACC2959 (35-48B-1), DSM ACC2963 (35-50A-2a), DSM ACC2957 (38-10B-1), DSM ACC2958 (38-1A-1), DSM ACC2948 (44-3A-2), DSM ACC2949 (45-2A-1), DSM ACC2950 (45-8A-2), DSM ACC2951 (48-3B-1), DSM ACC2952 (48-4A-1), DSM ACC2946 (49-3A-1), DSM ACC2945 (49-8A-1), DSM ACC2944 (51-1A-1), DSM ACC2953 (53-13A-2), DSM ACC2955 (53-29A-1), DSM ACC2960 (54-4B-2) or DSM ACC2954 (56-4A-2),

(ii) an antibody which is a chimerized or humanized form of the antibody under (i),

(iii) an antibody which has the specificity of the antibody under (i), and

(iv) an antibody comprising the antigen binding portion or antigen binding site of the antibody under (i).

2. The antibody of claim 1, wherein the antigen binding portion or antigen binding site of the antibody under (i) comprises the variable region of the antibody under (i).

3. A hybridoma producing the antibody of claim 1 or 2.

4. A hybridoma deposited under the accession no. DSM ACC2895 (22-1A-1), DSM ACC2893 (22-2A-1), DSM ACC2896 (22-9B-1), DSM ACC2897 (23-33A-1), DSM ACC2891 (23-19A-1), DSM ACC2894 (F11#33F7D12), DSM ACC2892 (4A12 2D4 1A10), DSM ACC2898 (4E9 1D12 2D4), DSM ACC2961 (42H11 1C11 2B2), DSM ACC2962 (51G6 2H3 2B4), DSM ACC2943 (16-5B-1), DSM ACC2956 (20-11A-1), DSM ACC2947 (29-1A-2), DSM ACC2964 (29-8B-1), DSM ACC2959 (35-48B-1), DSM ACC2963 (35-50A-2a), DSM ACC2957 (38-10B-1), DSM ACC2958 (38-1A-1), DSM ACC2948 (44-3A-2), DSM ACC2949 (45-2A-1), DSM ACC2950 (45-8A-2), DSM ACC2951 (48-3B-1), DSM ACC2952 (48-4A-1), DSM ACC2946 (49-3A-1), DSM ACC2945 (49-8A-1), DSM

ACC2944 (51-1A-1), DSM ACC2953 (53-13A-2), DSM ACC2955 (53-29A-1), DSM ACC2960 (54-4B-2), DSM ACC2954 (56-4A-2), or DSM ACC3001 (62-9B-1).

5. A conjugate comprising an antibody of claim 1 or 2 coupled to a therapeutic agent.

6. The conjugate of claim 5 wherein the therapeutic agent is a toxin, a radioisotope, a drug or a cytotoxic agent.

7. A pharmaceutical composition comprising an antibody of claim 1 or 2 and/or a conjugate of claim 5 or 6, and a pharmaceutically acceptable carrier.

8. Use of the antibody of claim 1 or 2 and/or the conjugate of claim 5 or 6 in the manufacture of a pharmaceutical composition for use in a method of preventing or treating a cancer disease by inhibiting growth of a cell expressing GT468 and/or being characterized by association of GT468 with its cell surface.

9. Use of the antibody of claim 1 or 2 and/or the conjugate of claim 5 or 6 in the manufacture of a pharmaceutical composition for use in a method of preventing or treating a cancer disease by killing a cell expressing GT468 and/or being characterized by association of GT468 with its cell surface.

10. Use of the antibody of claim 1 or 2 and/or the conjugate of claim 5 or 6 in the manufacture of a pharmaceutical composition for use in a method of preventing or treating a cancer disease by inhibiting metastatic spread of a tumor cell expressing GT468 and/or being characterized by association of GT468 with its cell surface.

11. Use of the antibody of claim 1 or 2 and/or the conjugate of claim 5 or 6 in the manufacture of a pharmaceutical composition for use in a method of treating or preventing a cancer disease or disorder, said disease or disorder involving cells expressing GT468 and/or being characterized by association of GT468 with their cell surface in a subject.

12. The use of claim 11 wherein the cancer is selected from the group consisting of breast cancer, lung cancer, gastric cancer, ovarian cancer, hepatocellular cancer, colon cancer,

pancreatic cancer, esophageal cancer, head & neck cancer, kidney cancer, in particular renal cell carcinoma, prostate cancer, liver cancer, melanoma, sarcoma, myeloma, neuroblastoma, placental choriocarcinoma, cervical cancer, and thyroid cancer, and the metastatic forms thereof, and metastatic cancer in the lung.

Claims:

1. An antibody which has the ability of binding to GT468 and has one or more of the following activities:

(i) killing of tumor cells expressing GT468,
(ii) inhibition of proliferation of tumor cells expressing GT468,
(iii) inhibition of colony formation of tumor cells expressing GT468, and
(iv) inhibition of metastasis of tumor cells expressing GT468,

wherein the antibody is selected from the group consisting of:

(i) an antibody produced by or obtainable from a clone deposited under the accession no. DSM ACC2961 (42H11 1C11 2B2), DSM ACC2962 (51G6 2H3 2B4), DSM ACC2943 (16-5B-1), DSM ACC2956 (20-11A-1), DSM ACC2947 (29-1A-2), DSM ACC2964 (29-8B-1), DSM ACC2959 (35-48B-1), DSM ACC2963 (35-50A-2a), DSM ACC2957 (38-10B-1), DSM ACC2958 (38-1A-1), DSM ACC2948 (44-3A-2), DSM ACC2949 (45-2A-1), DSM ACC2950 (45-8A-2), DSM ACC2951 (48-3B-1), DSM ACC2952 (48-4A-1), DSM ACC2946 (49-3A-1), DSM ACC2945 (49-8A-1), DSM ACC2944 (51-1A-1), DSM ACC2953 (53-13A-2), DSM ACC2955 (53-29A-1), DSM ACC2960 (54-4B-2), DSM ACC2954 (56-4A-2), or DSM ACC3001 (62-9B-1),

(ii) an antibody which is a chimerized or humanized form of the antibody under (i), and
(iii) an antibody comprising the antigen binding portion of the antibody under (i).

2. The antibody of claim 1 wherein said one or more activities are induced by binding of said antibody to the extracellular domain of GT468 expressed by said cells.

3. The antibody of claim 1 wherein said tumor cells expressing GT468 are cancer cells.

4. The antibody of claim 3 wherein the cancer cells are from a cancer selected from the group consisting of breast cancer, lung cancer, gastric cancer, ovarian cancer, hepatocellular cancer, colon cancer, pancreatic cancer, esophageal cancer, head & neck cancer, kidney cancer, renal cell carcinoma, prostate cancer, liver cancer, melanoma, sarcoma, myeloma, neuroblastoma, placental choriocarcinoma, cervical cancer, and thyroid cancer, and the metastatic forms thereof, and metastatic cancer in the lung.

5. The antibody of claim 1 wherein GT468 has the amino acid sequence according to SEQ ID NO: 2.

6. The antibody of claim 1 wherein the antibody binds specifically to GT468.

7. The antibody of claim 1 which binds to native epitopes of GT468.

8. An antibody selected from the group consisting of:

(i) an antibody produced by or obtainable from a clone deposited under the accession no. DSM ACC2961 (42H11 1C112B2), DSM ACC2962 (51G6 2H3 2B4), DSM ACC2943 (16-5B-1), DSM ACC2956 (20-11A-1), DSM ACC2947 (29-1A-2), DSM ACC2964 (29-8B-1), DSM ACC2959 (35-48B-1), DSM ACC2963 (35-50A-2a), DSM ACC2957 (38-10B-1), DSM ACC2958 (38-1A-1), DSM ACC2948 (44-3A-2), DSM ACC2949 (45-2A-1), DSM ACC2950 (45-8A-2), DSM ACC2951 (48-3B-1), DSM ACC2952 (48-4A-1), DSM ACC2946 (49-3A-1), DSM ACC2945 (49-8A-1), DSM ACC2944 (51-1A-1), DSM ACC2953 (53-13A-2), DSM ACC2955 (53-29A-1), DSM ACC2960 (54-4B-2), DSM ACC2954 (56-4A-2), or DSM ACC3001 (62-9B-1),

(ii) an antibody which is a chimerized or humanized form of the antibody under (i), and
(iii) an antibody comprising the antigen binding portion of the antibody under (i).

9. The antibody of claim 8, wherein the antigen binding portion of the antibody under (iii) comprises the variable region of the antibody under (i).

10. A hybridoma capable of producing the antibody of claim 1.

11. A hybridoma deposited under the accession no. DSM ACC2961 (42H11 1C11 2B2), DSM ACC2962 (51G6 2H3 2B4), DSM ACC2943 (16-5B-1), DSM ACC2956 (20-11A-1), DSM ACC2947 (29-1A-2), DSM ACC2964 (29-8B-1), DSM ACC2959 (35-48B-1), DSM ACC2963 (35-50A-2a), DSM ACC2957 (38-10B-1), DSM ACC2958 (38-1A-1), DSM ACC2948 (44-3A-2), DSM ACC2949 (45-2A-1), DSM ACC2950 (45-8A-2), DSM ACC2951 (48-3B-1), DSM ACC2952 (48-4A-1), DSM ACC2946 (49-3A-1), DSM ACC2945 (49-8A-1), DSM ACC2944 (51-1A-1), DSM ACC2953 (53-13A-2), DSM ACC2955 (53-29A-1), DSM ACC2960 (54-4B-2), DSM ACC2954 (56-4A-2), or DSM ACC3001 (62-9B-1).

12. A conjugate comprising the antibody of claim 1 coupled to a therapeutic agent.

13. The conjugate of claim 12 wherein the therapeutic agent is a toxin, a radioisotope, a drug or a cytotoxic agent.

14. A pharmaceutical composition comprising the antibody of claim 1 and a pharmaceutically acceptable carrier.

15. A pharmaceutical composition comprising the conjugate of claim 12 and a pharmaceutically acceptable carrier.

16. The antibody of claim 1, wherein the antigen binding portion of the antibody under (iii) comprises the variable region of the antibody under (i).