What is claimed is:

1. An isolated anti-Epidermal Growth Factor Receptor (EGFR) antibody ~~capable of binding EGFR on tumors containing amplifications of the EGFR gene, wherein cells of said tumors contain multiple copies of the EGFR gene, and on tumors that express the truncated version of the EGFR receptor de2-7, wherein said antibody does not bind to the de2-7 EGFR junctional peptide consisting of the amino acid sequence of SEQ ID NO: 13, wherein said antibody binds to an epitope within the sequence of SEQ ID NO: 14 of human wild-type EGFR,~~ wherein said antibody comprises a heavy chain ~~and a light chain, wherein the~~ variable region comprising ~~of said heavy chain comprises polypeptide binding domain regions having~~ amino acid sequence~~s~~ set forth in SEQ ID NO. 164 ~~NOS: 44, 45, and 46,~~ and ~~wherein the variable region of said~~ a light chain variable region comprising ~~comprises polypeptide binding domain regions having~~ the amino acid sequence~~s~~ set forth in SEQ ID NO~~S~~: 166.~~49, 50, and 51.~~

~~2. The isolated antibody according to claim 1, wherein said heavy chain comprises the variable region set forth in SEQ ID NO: 164, and wherein said light chain of said antibody comprises the variable region set forth in SEQ ID NO: 166.~~

2. The isolated antibody according to claim 1, wherein the heavy chain variable chain is attached at its C-terminal end to an IgG isotype heavy chain constant region.

3. The isolated antibody according to claim 2, wherein said IgG isotype is an IgG1 isotope.

4. The isolated antibody according to claim 1 or claim 3, wherein the light chain variable region is attached at its C-terminal end to a kappa light chain constant region.

5.~~3~~ The isolated antibody according to claim 1~~ or claim 2~~, wherein said antibody ~~heavy chain~~ comprises a heavy chain ~~the~~ constant region comprising the amino acid sequence set forth in SEQ ID NO: 43.~~, and wherein said light chain comprises the constant region set forth in SEQ ID NO: 48.~~

6. The isolated antibody according to claim 1 or claim 5, wherein said antibody comprises a light chain constant region comprising the amino acid sequence set forth in SEQ ID NO: 48.

~~4~~7. The isolated antibody according to ~~any one of claims 1-3~~claim 1, wherein said isolated antibody is the form of an antibody $F(ab')_2$, scFv fragment, diabody, triabody or tetrabody.

~~5~~8. The isolated antibody according to any one of claims 1-~~3~~7, further comprising a detectable or functional label.

~~6~~9. The isolated antibody according to claim ~~5~~8, wherein said detectable or functional label is a covalently attached drug.

10. The isolated antibody according to claim 8, wherein said functional label is a cytotoxic drug.

~~7~~11. The isolated antibody according to claim ~~5~~8, wherein said detectable label is a radiolabel.

12. The isolated antibody according to claim 11, wherein said radiolabel is selected from the group consisting of ^{3}H, ^{14}C, ^{32}P, ^{35}Cl, ^{51}Cr, ^{58}Co, ^{59}Fe, ^{90}Y, ^{121}I, ^{124}I, ^{125}I, ^{131}I, ^{111}In, ^{211}At, ^{198}Au, ^{67}Cu, ^{225}Ac, ^{213}Bi, ^{99}Tc and ^{186}Re.

13. The isolated antibody according to claim 8, wherein said detectable label is an imaging agent.

14. The isolated antibody according to claim 13, wherein said imaging agent is a magnetic resonance image enhancing agent.

~~8~~15. The isolated antibody according to any one of claims 1-~~3~~14, wherein said isolated antibody is peglyated.

~~9~~16. A kit for the diagnosis of a tumor in which EGFR is aberrantly expressed or EGFR is expressed in the form of a truncated protein, wherein the kit comprises the isolated antibody of any one of claims 1-~~8~~15, and wherein the kit optionally comprises reagents and/or instructions for use.

~~10~~17. A pharmaceutical composition comprising an isolated antibody according to any one of claims 1-~~8~~15.

~~11~~18. The pharmaceutical composition according to claim ~~10~~17, further comprising an anti-cancer agent selected from the group consisting of a chemotherapeutic agent~~s~~, an anti-EGFR ~~antibodies~~antibody, a radioimmunotherapeutic agent~~s~~, and combinations thereof.

~~12~~19. The pharmaceutical composition according to claim ~~11~~18, wherein said chemotherapeutic agent~~s are~~ is selected from the group consisting of a tyrosine kinase inhibitor~~s~~, a phosphorylation cascade inhibitor~~s~~, a post-translational modulator~~s~~, a cell growth or division inhibitor~~s~~, an ~~(e.g.~~ antimitotic~~s)~~, a signal transduction inhibitor~~s~~, and combinations thereof.

~~13~~20. The pharmaceutical composition according to any one of ~~Claims 10-12~~claims 17-19, for use in ~~a method of~~ preventing and/or treating cancer in mammals.

21. The pharmaceutical composition for use according to claim 20, wherein said cancer is a brain-resident cancer that produces aberrantly expressed EGFR in mammals.

~~14~~22. The pharmaceutical composition for use according to ~~Claim 13~~claim 20, wherein said cancer is a brain-resident cancer selected from the group consisting of glioblastomas, medulloblastomas, meningiomas, neoplastic astrocytomas and neoplastic arteriovenous malformations.

23. The pharmaceutical composition for use according to claim 20, wherein said cancer is a primary or a secondary solid tumor.

24. The pharmaceutical composition for use according to claim 20, wherein said cancer is a glioma tumor.

25. The pharmaceutical composition for use according to claim 20, wherein said cancer is a tumor selected from the group consisting of a breast tumor, a lung tumor, a prostate tumor, a bladder tumor, a head tumor, and a neck tumor.

26. The pharmaceutical composition for use according to any one of claims 20-25, to be used in combination with a second agent.

27. The pharmaceutical composition for use according to claim 26, wherein said second agent is selected from the group consisting of a tyrosine kinase inhibitor, doxorubicin, temozolomide, cisplatin, carboplatin, nitrosoureas, procarbazine, vincristine, hydroxyurea, 5-fluoruracil, cytosine arabinoside, cyclophosphamide, and epipodophyllotoxin, carmustine, lomustine.

28. The pharmaceutical composition for use according to claim 20, to be used in combination with temozolomide.

~~15~~29. A unicellular host transformed with a recombinant DNA molecule which encodes an isolated antibody of any one of claims 1-~~3~~15, optionally wherein the unicellular host is selected from the group consisting of E. coli, Pseudomonas, Bacillus, Streptomyces, yeasts, CHO, YB/20, NSO, SP2/0, ~~Rl~~R1.1, B-W, L-M, COS 1, COS 7, ~~BSCl~~BSC1, BSC40, and ~~BMTlO~~ BMT10 cells, plant cells, insect cells, and human cells in tissue culture.

30. An immunoconjugate comprising a cytotoxic agent and an isolated antibody according to any one of claims 1-15.