What is claimed is:

1. An isolated chimeric antibody comprising a murine kappa L-chain that lacks heavy chains, wherein the murine immunoglobulin κ light chain constant domain (Cκ) is replaced with the corresponding human Cκ domain or a fragment thereof, wherein the antibody specifically binds HSP90 and is capable of reducing the growth and/or the invasiveness of a neoplastic cell.

2. The chimeric antibody of claim 1, wherein the murine kappa L-chain has at least 85% identity to SEQ ID NO:2.

3. The chimeric antibody of claim 1, wherein murine kappa L-chain comprises SEQ ID NO:2.

4. The chimeric antibody of claim 1, wherein the murine kappa L-chain comprises one or more murine complementarity determining region.

5. The chimeric antibody of claim 4, wherein the murine complementarity determining region has at least 75% identity to SEQ ID NO: 5, 6, or 7.

6. The chimeric antibody of claim 5, wherein the murine light chain comprises one or more complementarity determining regions (CDRs) selected from the group consisting of SEQ ID NO: 5, 6, or 7.

7. The chimeric antibody of claim 5, wherein the murine light chain comprises complementarity determining regions (CDRs) SEQ ID NO: 5, 6, and 7.

8. The chimeric antibody of claim 1, wherein the antibody has at least 75% , 85% or 95% amino acid sequence identity to SEQ ID NO:4.

9. An isolated chimeric antibody comprising or consisting essentially of SEQ ID NO: 4.

10. The chimeric antibody of any of claims 1-9, wherein the antibody is a humanized antibody.

11. The chimeric antibody of any of claims 1-9, wherein the antibody is isolated from a culture of prokaryotic or eukaryotic cells.

12. The chimeric antibody of any of claims 1-11, wherein the chimeric antibody has a reduced capacity to induce an immune response in a human subject, relative to a conventional murine antibody.

13. The chimeric antibody of any of claims 1-11, wherein the ability of the antibody or a fragment thereof to reduce growth and invasiveness is assayed using a cancer cell clonogenic assay and a wound healing assay respectively, by detecting actin re-arrangement, by detecting lamellipodia development, or by detecting another morphological marker of invasivenes.

14. An isolated polypeptide comprising the sequence of SEQ ID NO: 4.

15. An isolated polynucleotide encoding the chimeric antibody of any of claims 1-13.

16. An isolated polynucleotide encoding the chimeric antibody of any of claims 1-13 or the isolated polypeptide of claim 14.

17. The isolated polynucleotide of claim 15, wherein the polynucleotide has the sequence of SEQ ID NO:3.

18. An expression vector comprising the polynucleotide of any of claims 15 – 17 positioned for expression in a cell.

19. A cell comprising the expression vector of claim 18.

20. The cell of claim 19, wherein the cell is a prokaryotic or eukaryotic cell.

21. A method for producing the chimeric antibody of claim 1, the method comprising culturing the cell of claim 18 under conditions suitable for expression of the chimeric antibody, and isolating the chimeric antibody from the cultured cell.

22. A method of reducing the growth and/or invasiveness of a neoplastic cell, the method comprising contacting a neoplastic cell with the chimeric antibody of any of claims 1-13, thereby reducing the growth and/or invasiveness of the neoplastic cell.

23. A method of treating a subject having a neoplasia, the method comprising administering to a subject a therapeutically effective amount of the chimeric antibody of any of claims 1-11, thereby treating the subject.

24. A method of treating or preventing tumor progression or metastasis in a subject having a neoplasia, the method comprising administering to a subject a therapeutically effective amount of the chimeric antibody of any of claims 1-11, thereby treating or preventing tumor progression or metastasis in the subject.

25. The method of claim 24, wherein the neoplastic cell is a cancer cell or is present in a tumor.

26. The method of claim 24 or 25, wherein the cancer is selected from the group consisting of breast cancer, melanoma, glioblastomas, colon cancer, non-small cell lung cancer and lymphomas.

27. The method of claim 24 or 25, wherein the chimeric antibody is administered systemically or locally.

28. The method of claim 27, wherein the chimeric antibody is covalently linked to a functional moiety.

29. The method of claim 28, wherein the functional moiety is radioactive.

30. The method of claim 27, wherein the functional moiety is a chemotherapeutic agent.

31. The method of claim 24 or 25, further comprising administering to a subject a therapeutically effective amount of one or more chemotherapeutics.

32. The method of claim 23 or 24, wherein the one or more chemotherapeutics is selected from the group consisting of abiraterone acetate, altretamine, anhydrovinblastine, auristatin, bexarotene, bicalutamide, BMS184476, 2,3,4,5,6-pentafluoro-N-(3-fluoro-4-methoxyphenyl)benzene sulfonamide, bleomycin, N,N-dimethyl-L-valyl-L-valyl-N-methyl-L-valyl-L-proly- l-Lproline-t-butylamide, cachectin, cemadotin, chlorambucil, cyclophosphamide, 3',4'-didehydro-4'-deoxy-8'-norvin-caleukoblastine, docetaxol, doxetaxel, cyclophosphamide, carboplatin, carmustine (BCNU),cisplatin, cryptophycin, cyclophosphamide, cytarabine, dacarbazine (DTIC), dactinomycin, daunorubicin, decitabine dolastatin, doxorubicin (adriamycin), etoposide, 5-fluorouracil, finasteride, flutamide, hydroxyurea and hydroxyureataxanes, ifosfamide, liarozole, lonidamine, lomustine (CCNU), MDV3100, mechlorethamine (nitrogen mustard), melphalan, mivobulin isethionate, rhizoxin, sertenef, streptozocin, mitomycin, methotrexate, 5-fluorouracil, nilutamide, onapristone, paclitaxel, prednimustine, procarbazine, RPR109881, stramustine phosphate, tamoxifen, tasonermin, taxol, tretinoin, vinblastine, vincristine, vindesine sulfate, and vinflunine.

33. The method of claim 23 or 24, wherein the chimeric antibody has a reduced capacity to induce an immune response in a human subject, relative to a conventional murine antibody.

34. A pharmaceutical composition for the treatment of neoplasia comprising a therapeutically effective amount of the chimeric antibody of any of claims 1-11.

35. A pharmaceutical composition for the treatment of neoplasia comprising a therapeutically effective amount of an isolated polypeptide comprising SEQ ID NO: 4.

36. A pharmaceutical composition for the treatment of neoplasia comprising a therapeutically effective amount of an isolated polypeptide comprising one or more complementarity determining regions selected from the group consisting of SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

37. A kit for the treatment of a neoplasia, the kit comprising a therapeutically effective amount of the chimeric antibody of any of claims 1-11 or an isolated polypeptide comprising a sequence selected from the group consisting of SEQ ID SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7; and directions for using the kit in a method of any one of claims 22 – 33.

CLAIMS

1. An isolated chimeric antibody comprising the sequence of SEQ ID NO: 4, wherein the chimeric antibody has a murine kappa L-chain that lacks heavy chains, wherein the murine immunoglobulin κ light chain constant domain (C_K) is replaced with the corresponding human C_K domain or a fragment thereof, and wherein the antibody specifically binds HSP90 and is capable of reducing the growth and/or the invasiveness of a neoplastic cell.

2. The chimeric antibody of claim 1, wherein the antibody is a humanized antibody or is isolated from a culture of prokaryotic or eukaryotic cells.

3. The chimeric antibody of claim 1, wherein the antibody is a monomer, a dimer or a multimer.

4. The chimeric antibody of claim 1, wherein the chimeric antibody has a reduced capacity to induce an immune response in a human subject, relative to a conventional murine antibody.

5. The chimeric antibody of claim 1, wherein the ability of the antibody or a fragment thereof to reduce growth and invasiveness is assayed using a cancer cell clonogenic assay, a wound healing assay, a lung metastatic deposit formation assay, a lung metastasis inhibition assay, a breast cancer primary tumor growth inhibition assay, by detecting actin rearrangement, by detecting lamellipodia development, or by detecting another morphological marker of invasiveness, by detecting inhibition of metastatic lung deposits, by detecting inhibition of lung metastasis, by detecting delay of primary growth tumors implanted orthotopically in mouse fat pads, or by detecting another marker of efficacy, respectively.

6. An isolated polypeptide comprising the sequence of SEQ ID NO: 4.

7. An isolated polynucleotide encoding the chimeric antibody of claim 1.

8. An isolated polynucleotide encoding the isolated polypeptide of claim 6.

9. An expression vector comprising the polynucleotide of claim 7 positioned for expression in a cell.

10. A cell comprising the expression vector of claim 9.

11. The cell of claim 10, wherein the cell is a prokaryotic or eukaryotic cell.

12. A method for producing a chimeric antibody of claim 1, the method comprising culturing the cell of claim 10 under conditions suitable for expression of the chimeric antibody, and isolating the chimeric antibody from the cultured cell.

13. A pharmaceutical composition for the treatment of neoplasia comprising a therapeutically effective amount of the chimeric antibody of claim 1.

14. A pharmaceutical composition for the treatment of neoplasia comprising a therapeutically effective amount of the isolated polypeptide of claim 6.

15. A kit for the treatment of a neoplasia, the kit comprising a therapeutically effective amount of the chimeric antibody of claim 1.

16. An isolated chimeric antibody comprising an amino acid sequence having at least 90% or 95% identity to SEQ ID NO: 4, wherein the chimeric antibody has a murine kappa L-chain, wherein the murine immunoglobulin κ light chain constant domain (C_K) is replaced with the corresponding human C_K domain or a fragment thereof, wherein the antibody specifically binds HSP90 and is capable of reducing the growth and/or the invasiveness of a neoplastic cell, and wherein the antibody comprises the complimentarity determining regions of SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

17. The isolated chimeric antibody of claim 16, wherein the amino acid sequence has at least 95% identity to the sequence of SEQ ID NO: 4.

18. The isolated chimeric antibody of claim 16, wherein the antibody is a monomer, a dimer or a multimer.

19. An isolated polynucleotide encoding the chimeric antibody of claim 16.

20. An expression vector comprising the polynucleotide of claim 19 positioned for expression in a cell.

21. A cell comprising the expression vector of claim 20.

22. The cell of claim 21, wherein the cell is a prokaryotic or eukaryotic cell.

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