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Baca et al.

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(54) **ANTI-VEGF ANTIBODIES**
(75) Inventors: **Manuel Baca**, Black Rock (AU);
James A. Wells, Burlingame, CA (US);
Leonard G. Presta, San Francisco, CA
(US); **Henry B. Lowman**, El Granada,
CA (US); **Yvonne Man-Yee Chen**, San
Mateo, CA (US)

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(73) Assignee: **Genentech, Inc.**, South San Francisco,
CA (US)

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(*) Notice: Subject to any disclaimer, the term of this
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(58) **Field of Classification Search** **530/387.1,**
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Primary Examiner—David J. Blanchard
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(57) **ABSTRACT**

Humanized and variant anti-VEGF antibodies and various
uses therefor are disclosed. The anti-VEGF antibodies have
strong binding affinities for VEGF; inhibit VEGF-induced
proliferation of endothelial cells in vitro; and inhibit tumor
growth in vivo.

22 Claims, 16 Drawing Sheets

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1      10      20      30      40
A4.6.1 EIQLVQSGPELKQPGETVRISCASGYTFTNYGMNWVKQA
      * * * * *
F(ab)-12 EVQLVESGGGLVQPGGSLRLSCAASGYTFTNYGMNWVRQA
      * * * * *
humIII  EVQLVESGGGLVQPGGSLRLSCAASGFTTSSYAMSWVRQA

      50 a      60      70      80
A4.6.1 PGKGLKWMGWINTYTGEPTYAADFKRRFTFSLETSASTAYL
      * * * * *
F(ab)-12 PGKGLEWVGWINTYTGEPTYAADFKRRFTFSLDTSKSTAYL
      * * * * *
humIII  PGKGLEWVSVISGDGGSTYADSVKGRFTISRDNSKNTLYL

      abc      90      110
A4.6.1 QISNLKNDTATYFCAKYPHYYGSSHWYFDVWGAGTTVTVSS (SEQ.ID NO:9)
      * * * * *
F(ab)-12 QMNSLRAEDTAVYYCAKYPHYYGSSHWYFDVWGQGTLVTTVSS (SEQ.ID NO:7)
      * * * * *
humIII  QMNSLRAEDTAVYYCARG-----FDYWGQGTLVTTVSS (SEQ.ID NO:11)

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FIG. 1A

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1      10      20      30      40
A4.6.1 DIQMTQTTSSLSASLGDRVIISCSASQDISNYLNWYQQKP
      * * * * *
F(ab)-12 DIQMTQSPSSLSASVGDRVTITCSASQDISNYLNWYQQKP
      * * * * *
humKI   DIQMTQSPSSLSASVGDRVTITCRASQDISNYLAWYQQKP

      50      60      70      80
A4.6.1 DGTVKVLIYFTSSLHSGVPSRFSGSGGTDYSLTISNLEP
      * * * * *
F(ab)-12 GKAPKVLIYFTSSLHSGVPSRFSGSGGTDFTLTISLQF
      * * * * *
humKI   GKAPKLLIYAASSLESGVPSRFSGSGGTDFTLTISLQF

      90      100
A4.6.1 EDIATYYCQOYSTVPWTFGGGKLEIKR (SEQ.ID NO:10)
      * * * * *
F(ab)-12 EDFATYYCQOYSTVPWTFGGGKVEIKR (SEQ.ID NO:8)
      * * * * *
humKI   EDFATYYCQOYNSLPWTFGGGKVEIKR (SEQ.ID NO:12)

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FIG. 1B

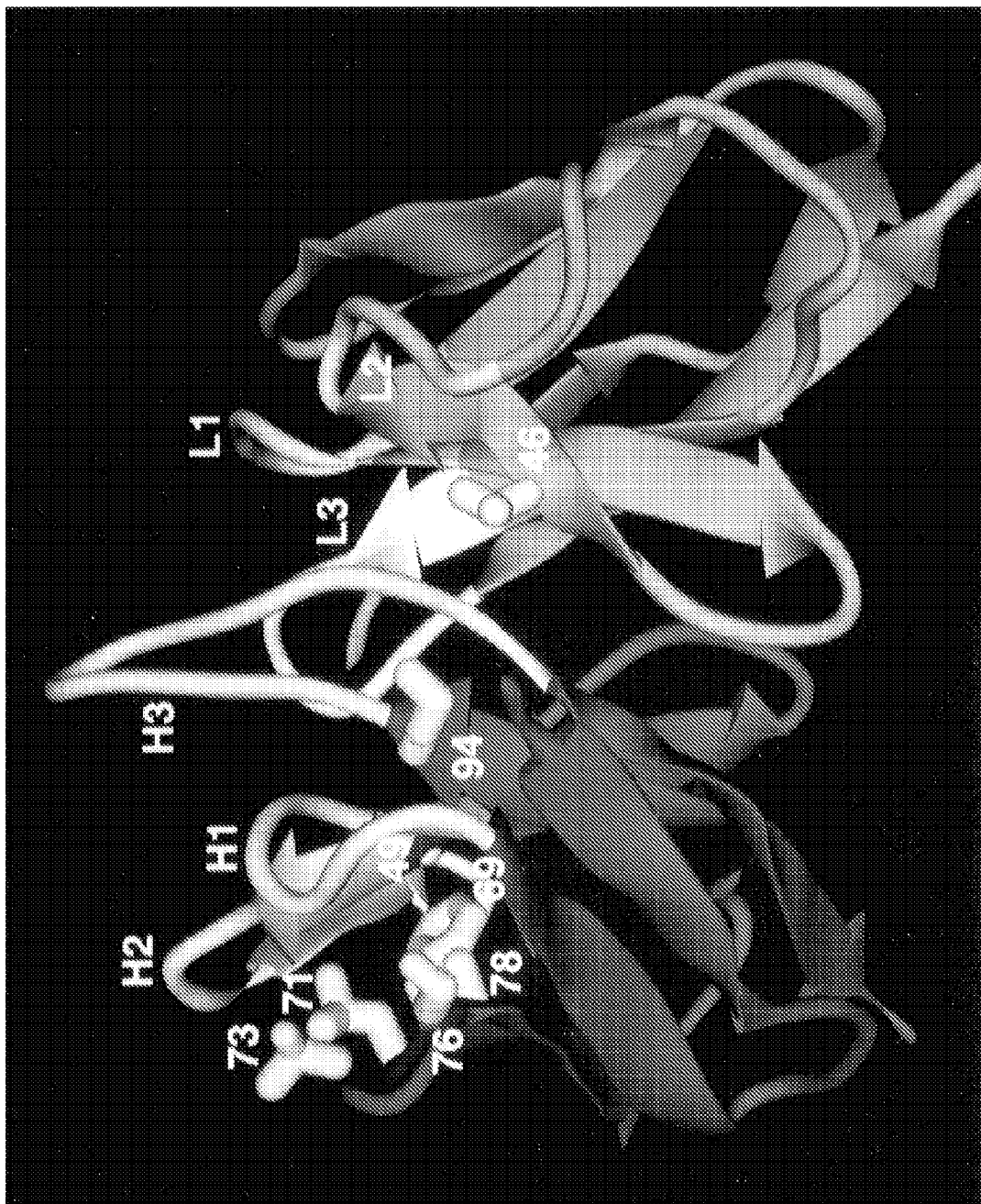


FIG. 2

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