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[Continued on next page]

(54) Title: ANTIBODIES AND MOLECULES DERIVED THEREFROM THAT BIND TO STEAP-1 PROTEINS

2A. The cDNA (SEQ ID NO: 2) and amino acid sequence (SEQ ID NO: 3) of STEAP-1 v.1. The start methionine is underlined. The open reading frame extends from nucleic acid 86-1085 including the stop codon.

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   1 ccgagactcacggtcaagctaaggcgaagagtgggtggctgaagccatactattttatag
   1     M  E  S  R  K  D  I  T  N  Q  E  E  L  W  K  M  K  P  R
  61 aattaATGGAAAGCACAAAAGACATCACAAACCAAGAAGAACTTTGGAAAATGAAGCCTA
  20  R  N  L  E  E  D  D  Y  L  H  K  D  T  G  E  T  S  M  L  K
 121 GGAGAAATTTAGAAGAAGACGATTATTTGCATAAGGACACGGGAGAGACCAGCATGCTAA
  40  R  P  V  L  L  H  L  H  Q  T  A  H  A  D  E  F  D  C  P  S
 181 AAAGACCTGTGCTTTTGCATTTGCACCAAACAGCCCATGCTGATGAATTTGACTGCCCTT
  60  E  L  Q  H  T  Q  E  L  P  P  Q  W  H  L  P  I  K  I  A  A
 241 CAGAACTTCAGCACACACAGGAACTCTTTCCACAGTGGCACTTGCCAATTAAAATAGCTG
  80  I  I  A  S  L  T  F  L  Y  T  L  L  R  E  V  I  H  P  L  A
 301 CTATTATAGCATCTCTGACTTTTCTTTACACTCTTCTGAGGGAAGTAATTCACCCTTTAG
 100  T  S  H  Q  Q  Y  F  Y  K  I  P  I  L  V  I  N  K  V  L  P
 361 CAACTTCCCATCAACAATATTTTTATAAAATTCCAATCCTGGTCATCAACAAAGTCTTGC
 120  M  V  S  I  T  L  L  A  L  V  Y  L  P  G  V  I  A  A  I  V
 421 CAATGGTTTCCATCACTCTCTTGGCATTGGTTTACCTGCCAGGTGTGATAGCAGCAATTG
 140  Q  L  H  N  G  T  K  Y  K  K  F  P  H  W  L  D  K  W  M  L
 481 TCCAACTTCATAATGGAACCAAGTATAAGAAGTTTCCACATTGGTTGGATAAGTGGATGT
 160  T  R  K  Q  F  G  L  L  S  F  F  F  A  V  L  H  A  I  Y  S
 541 TAACAAGAAAGCAGTTTGGGCTTCTCAGTTTCTTTTTTGCTGTACTGCATGCAATTTATA
 180  L  S  Y  P  M  R  R  S  Y  R  Y  K  L  L  N  W  A  Y  Q  Q
 601 GTCTGTCTTACCCAATGAGGCGATCCTACAGATACAAGTTGCTAAACTGGGCATATCAAC
 200  V  Q  Q  N  K  E  D  A  W  I  E  H  D  V  W  R  M  E  I  Y
 661 AGGTCCAACAAAATAAAGAAGATGCCTGGATTGAGCATGATGTTTGGAGAATGGAGATTT
 220  V  S  L  G  I  V  G  L  A  I  L  A  L  L  A  V  T  S  I  P
 721 ATGTGTCTCTGGGAATTGTGGGATTGGCAATACTGGCTCTGTTGGCTGTGACATCTATTC
 240  S  V  S  D  S  L  T  W  R  E  F  H  Y  I  Q  S  K  L  G  I
 781 CATCTGTGAGTGACTCTTTGACATGGAGAGAATTTCACTATATTCAGAGCAAGCTAGGAA
 260  V  S  L  L  L  G  T  I  H  A  L  I  F  A  W  N  K  W  I  D
 841 TTGTTTCCCTTCTACTGGGCACAATACACGCATTGATTTTTGCCTGGAATAAGTGGATAG
 280  I  K  Q  F  V  W  Y  T  P  P  T  F  M  I  A  V  F  L  P  I
 901 ATATAAAACAATTTGTATGGTATACACCTCCAACTTTTATGATAGCTGTTTTCCTTCCAA
 300  V  V  L  I  F  K  S  I  L  F  L  P  C  L  R  K  K  I  L  K
 961 TTGTTGTCCTGATATTTAAAAGCATACTATTCCTGCCATGCTTGAGGAAGAAGATACTGA
 320  I  R  H  G  W  E  D  V  T  K  I  N  K  T  E  I  C  S  Q  L
1021 AGATTAGACATGGTTGGGAAGACGTCACCAAAATTAACAAAACTGAGATATGTTCCCAGT
 340  *
1081 TGTAGaattactgtttacacacatttttgttcaatattgatatattttatcaccaacatt
1141 tcaagtttgtatttgttaataaaatgattacaaggaaaaaaaaaaaaaaaaa
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(57) Abstract: Antibodies and molecules derived therefrom that bind to novel STEAP-1 protein, and variants thereof, are described wherein STEAP-1 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in the cancers listed in Table I. Consequently, STEAP-1 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The STEAP-1 gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with STEAP-1 can be used in active or passive immunization.

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