## FIG. 1 Anti-Cadherin-17 PTA001_A1 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
     -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagccgaagtg
     S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  E  V

121 cagctgttggagactgggggaggcgtagtgaagcccggagggtcccttaaactctcctgt
     Q  L  L  E  T  G  G  G  V  V  K  P  G  G  S  L  K  L  S  C

                    CDR1
              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 gcagcctctggattcactttcagtaactatggcatgtcttgggttcgccagactccggag
     A  A  S  G  F  T  F  S  N  Y  G  M  S  W  V  R  Q  T  P  E

                                          CDR2
                          ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 aagaggctggagtgggtcgcagccattaatcgtgatggtggtaccacctactatacagac
     K  R  L  E  W  V  A  A  I  N  R  D  G  G  T  T  Y  Y  T  D

    ~~~~~~~~~~~~
301 aatgtgaagggccgattcaccatctccagagacaatgccaagaacagcctgtacctgcaa
     N  V  K  G  R  F  T  I  S  R  D  N  A  K  N  S  L  Y  L  Q

                                                          ~~~~~~~~~
361 atgagcagtctgaggtctgaggacacagccttgtattactgtgcaagacagttccttctc
     M  S  S  L  R  S  E  D  T  A  L  Y  Y  C  A  R  Q  F  L  L

            CDR3
    ~~~~~~~~~~~~~~~~~~~~~~~~~
421 tgggacggctggtacttcgatgtctggggcgcagggaccacggtcaccgtctcctcagcc
     W  D  G  W  Y  F  D  V  W  G  A  G  T  T  V  T  V  S  S  A

481 aaaacgacaccccatctgtctatccactggcccctggatctgctgcccaaactaactcc
     K  T  T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S

541 atggtgaccctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctgg
     M  V  T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W

601 aactctggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctc
     N  S  G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L

661 tacactctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacc
     Y  T  L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T

721 tgcaacgttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggat
     C  N  V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D

781 tgt
     C
```

## FIG. 2 Anti-Cadherin-17 PTA001_A2 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
      -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
      S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgagttggtgaaacctggagcttcagtgaagatatcctgc
      Q  L  Q  Q  S  D  A  E  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggtttctggctacaccttcagtgaccatgctattcactggatgagtcagagacctgga
      K  V  S  G  Y  T  F  S  D  H  A  I  H  W  M  S  Q  R  P  G

                                                CDR2
                            ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctgaaatggattggatatatttatcctagacatgggactactaactacaatgag
      Q  G  L  K  W  I  G  Y  I  Y  P  R  H  G  T  T  N  Y  N  E

    ~~~~~~~~~~~~~
301 aacttcaagggcaaggccacactgactgcagacacatcctccagcacagcctacatgcag
      N  F  K  G  K  A  T  L  T  A  D  T  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~~
361 ctcaacagcctgacatctgaagattctgccgtctatttctgtgcaagaatgagaaactac
      L  N  S  L  T  S  E  D  S  A  V  Y  F  C  A  R  M  R  N  Y

        CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttctatgttatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
      F  Y  V  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acaccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
      T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
      T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
      G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
      L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
      V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

## FIG. 3 Anti-Cadherin-17 PTA001_A3 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
     -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
     S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 ctgctgcaacagtctgacgctgagttggtgaaacctggggcttcagtgaagatatcctgc
     L  L  Q  Q  S  D  A  E  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactgggtgaagcagaggcctgaa
     K  A  S  G  Y  T  F  T  D  H  A  I  H  W  V  K  Q  R  P  E

                                                CDR2
                              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctgaacatggaactattaagtataatgag
     Q  G  L  E  W  I  G  Y  I  Y  P  E  H  G  T  I  K  Y  N  E

    ~~~~~~~~~~~~~
301 aagttcaagggcaaggccacattgactgcagataaatcctccagcactgcctatatgcag
     K  F  K  G  K  A  T  L  T  A  D  K  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~~
361 ctcaacagcctgacatctgaggattcagcagtgtatttctgttcaagactcactaactac
     L  N  S  L  T  S  E  D  S  A  V  Y  F  C  S  R  L  T  N  Y

       CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttctatgttatggagtattggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
     F  Y  V  M  E  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acacccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
     T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
     T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
     G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
     L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
     V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

## FIG. 4 Anti-Cadherin-17 PTA001_A4 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
     -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagccgaggtt
     S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  E  V

121 cagctgcagcagtctgtcgctgagttggtgaaacctggagcttcagtgaagatgtcatgc
     Q  L  Q  Q  S  V  A  E  L  V  K  P  G  A  S  V  K  M  S  C

                          CDR1
               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggtttctggctacaccctcactgaccatactattcactggatgaagcagaggcctgaa
     K  V  S  G  Y  T  L  T  D  H  T  I  H  W  M  K  Q  R  P  E

                                                CDR2
                              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttaccctagagatggaataactgggtacaatgag
     Q  G  L  E  W  I  G  Y  I  Y  P  R  D  G  I  T  G  Y  N  E

    ~~~~~~~~~~~~
301 aagttcaagggcaaggccacactgactgcagacacttcttccagcacagcctacatgcag
     K  F  K  G  K  A  T  L  T  A  D  T  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~
361 ctcaacagcctgacatctgaggattctgcagtctatttctgtgccagatggggctatagt
     L  N  S  L  T  S  E  D  S  A  V  Y  F  C  A  R  W  G  Y  S

           CDR3
    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tacaggaattacgcgtactactatgactactggggccaaggcaccactctcacagtctcc
     Y  R  N  Y  A  Y  Y  Y  D  Y  W  G  Q  G  T  T  L  T  V  S

481 tcagccaaaacgacaccccatctgtctatccactggcccctggatctgctgcccaaact
     S  A  K  T  T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T

541 aactccatggtgaccctgggatgcctggtcaagggctatttccctgagccagtgacagtg
     N  S  M  V  T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V

601 acctggaactctggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtct
     T  W  N  S  G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S

661 gacctctacactctgagcagctcagtgactgtccctccagcacctggcccagcgagacc
     D  L  Y  T  L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T

721 gtcacctgcaacgttgcccacccggccagcagcaccaaggtggacaagaaaattgtgccc
     V  T  C  N  V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P

781 agggattgt
     R  D  C
```

## FIG. 5 Anti-Cadherin-17 PTA001_A5 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
      -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
      S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgacttggtgaaacctggggcttcagtgaagatatcctgc
      Q  L  Q  Q  S  D  A  D  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactgggtgaaacagaggcctgaa
      K  A  S  G  Y  T  F  T  D  H  A  I  H  W  V  K  Q  R  P  E

                                                CDR2
                              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctgaacatggaactattaagtataatgag
      Q  G  L  E  W  I  G  Y  I  Y  P  E  H  G  T  I  K  Y  N  E

    ~~~~~~~~~~~~
301 aagttcaagggcaaggccacattgactgcagataaatcctccagcactgcctatatgcag
      K  F  K  G  K  A  T  L  T  A  D  K  S  S  S  T  A  Y  M  Q

                                                        ~~~~~~~~~
361 ctcaacagcctgacatctgaggattcagcagtgtatttctgtgcaagactcaggaactat
      L  N  S  L  T  S  E  D  S  A  V  Y  F  C  A  R  L  R  N  Y

      CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttgtatattatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
      L  Y  I  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acacccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
      T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
      T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
      G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtccctccagcacctggcccagcgagaccgtcacctgcaac
      L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
      V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

**FIG. 6 Anti-Cadherin-17 PTA001_A6, PTA001_A9 and PTA001_A10 VH**

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
      -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
      S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgagttggtgaaacctggggcttcagtgaagatatcctgc
      Q  L  Q  Q  S  D  A  E  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactgggtgaagcagaggcctgaa
      K  A  S  G  Y  T  F  T  D  H  A  I  H  W  V  K  Q  R  P  E

                                                  CDR2
                               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctgaacatggaactattaagtataatgag
      Q  G  L  E  W  I  G  Y  I  Y  P  E  H  G  T  I  K  Y  N  E

    ~~~~~~~~~~~~~~~~
301 aagttcaagggcaaggccacattgactgcagataaatcctccagcactgcctatatgcag
      K  F  K  G  K  A  T  L  T  A  D  K  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~
361 ctcaacagcctgacatctgaggattcagcagtgtatttctgttcaagactcactaactac
      L  N  S  L  T  S  E  D  S  A  V  Y  F  C  S  R  L  T  N  Y

        CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttctatgttatggagtattggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
      F  Y  V  M  E  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acaccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
      T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
      T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
      G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
      L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
      V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

## FIG. 7 Anti-Cadherin-17 PTA001_A7 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
      -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
      S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgagttggtgaaacctggagcctcagtgaagatatcctgc
      Q  L  Q  Q  S  D  A  E  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggtttctggctacaccttcactgaccatgctattcactggatgaaacagaggcctgaa
      K  V  S  G  Y  T  F  T  D  H  A  I  H  W  M  K  Q  R  P  E

                                                    CDR2
                              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctagagatggttttactaagtacaatgag
      Q  G  L  E  W  I  G  Y  I  Y  P  R  D  G  F  T  K  Y  N  E

    ~~~~~~~~~~~~~
301 aagttcaagggcaaggccacactgactgcagacacatcctccagcacagcctacatgcag
      K  F  K  G  K  A  T  L  T  A  D  T  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~
361 ctcaacagcctgacatctgaggattctacagtctatttctgtgcaagaatgactaactac
      L  N  S  L  T  S  E  D  S  T  V  Y  F  C  A  R  M  T  N  Y

        CDR3
    ~~~~~~~~~~~~~~~~~~
421 ttctatactatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
      F  Y  T  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acaccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
      T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
      T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
      G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtccctccagcacctggcccagcgagaccgtcacctgcaac
      L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
      V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

## FIG. 8 Anti-Cadherin-17 PTA001_A8 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
      -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
      S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgacttggtgaaacctggggcttcagtgaagatatcctgc
      Q  L  Q  Q  S  D  A  D  L  V  K  P  G  A  S  V  K  I  S  C

                              CDR1
                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactgggtgaaacagaggcctgaa
      K  A  S  G  Y  T  F  T  D  H  A  I  H  W  V  K  Q  R  P  E

                                                    CDR2
                               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctgaacatggaactattaagtataatgag
      Q  G  L  E  W  I  G  Y  I  Y  P  E  H  G  T  I  K  Y  N  E

    ~~~~~~~~~~~~~
301 aagttcaagggcaaggccacattgactgcagataaatcctccagcactgcctatatgcag
      K  F  K  G  K  A  T  L  T  A  D  K  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~~
361 ctcaacagcctgacatctgaggattcagcagtgtatttctgttcaagactcactaactac
      L  N  S  L  T  S  E  D  S  A  V  Y  F  C  S  R  L  T  N  Y

       CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttctatgttatggagtattggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
      F  Y  V  M  E  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acacccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
      T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
      T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
      G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
      L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
      V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

## FIG. 9 Anti-Cadherin-17 PTA001_A11 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
      -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
     S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgagttggtgaaacctggggcttcagtgaagatatcctgc
     Q  L  Q  Q  S  D  A  E  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactgggtgaagcagaggcctgaa
     K  A  S  G  Y  T  F  T  D  H  A  I  H  W  V  K  Q  R  P  E

                                                      CDR2
                              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctgaacatggtagtattacgtataatgag
     Q  G  L  E  W  I  G  Y  I  Y  P  E  H  G  S  I  T  Y  N  E

    ~~~~~~~~~~~~~
301 aagttcaagggcaaggccacattgactgcagataaatcctccagtactgtctatatgcac
     K  F  K  G  K  A  T  L  T  A  D  K  S  S  S  T  V  Y  M  H

                                                          ~~~~~~~~~~
361 ctcaatagcctgacatctgaggattcagcagtgtatttctgtgcaagactcaggaactac
     L  N  S  L  T  S  E  D  S  A  V  Y  F  C  A  R  L  R  N  Y

       CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttgtatgttatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
     L  Y  V  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acaccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
     T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
     T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
     G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
     L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
     V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

**FIG. 10 Anti-Cadherin-17 PTA001_A12 VH**

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
     -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
     S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgaggctgagcttgtgaagcctggggcttcagtgaagctgtcctgc
     Q  L  Q  Q  S  E  A  E  L  V  K  P  G  A  S  V  K  L  S  C

                          CDR1
               ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactggatgaaacagaggcctgaa
     K  A  S  G  Y  T  F  T  D  H  A  I  H  W  M  K  Q  R  P  E

                                                    CDR2
                              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatctaccccagagatgattttgctaaggtgaatgag
     Q  G  L  E  W  I  G  Y  I  Y  P  R  D  D  F  A  K  V  N  E

    ~~~~~~~~~~~~
301 aagttcaagggcaaggccacactgacagcagacacatcctccagcacagcctacatgcag
     K  F  K  G  K  A  T  L  T  A  D  T  S  S  S  T  A  Y  M  Q

                                                          ~~~~~~~~~~
361 ctcaacagcctgacatctgaggattctgcagtctatttctgtgcaagaatgactaactac
     L  N  S  L  T  S  E  D  S  A  V  Y  F  C  A  R  M  T  N  Y

       CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ctctatattatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
     L  Y  I  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acaccccatctgtctatccactggcccctggatctgctgcccaaactaactccatggtg
     T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
     T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
     G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
     L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
     V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

## FIG. 11 Anti-Cadherin-17 PTA001_A13 VH

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
     -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
    S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgctgagttggtgaaacctggggcttcagtgaagatatcctgc
    Q  L  Q  Q  S  D  A  E  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggcttctggctacaccttcactgaccatgctattcactgggtgaagcagaggcctgaa
    K  A  S  G  Y  T  F  T  D  H  A  I  H  W  V  K  Q  R  P  E

                                                    CDR2
                          ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatatttatcctgaacatggtactattacgtataatgag
    Q  G  L  E  W  I  G  Y  I  Y  P  E  H  G  T  I  T  Y  N  E

    ~~~~~~~~~~~~
301 aagttcaagggcaaggccacattgactgcagataaatcctccagtactgtctatatgcac
    K  F  K  G  K  A  T  L  T  A  D  K  S  S  S  T  V  Y  M  H

                                                          ~~~~~~~~~
361 ctcaatagcctgacatctgaggattcagcagtgtatttctgtgcaagactcaggaactat
    L  N  S  L  T  S  E  D  S  A  V  Y  F  C  A  R  L  R  N  Y

      CDR3
    ~~~~~~~~~~~~~~~~~~~
421 ttgtatattatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
    L  Y  I  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acacccccatctgtctatccactggcccccggatctgctgcccaaactaactccatggtg
    T  P  P  S  V  Y  P  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
    T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
    G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
    L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
    V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

**FIG. 12 Anti-Cadherin-17 PTA001_A14 VH**

```
1   tgactgggaaaaccctggcgttacccacgctttgtacatggagaaaataaagtgaaacaa
     -  L  G  K  P  W  R  Y  P  R  F  V  H  G  E  N  K  V  K  Q

61  agcactattgcactggcactcttaccgctcttatttacccctgtggcaaaagcccaggtt
     S  T  I  A  L  A  L  L  P  L  L  F  T  P  V  A  K  A  Q  V

121 cagctgcaacagtctgacgccgcgttggtgaaacctggagcttcagtgaagatatcgtgc
     Q  L  Q  Q  S  D  A  A  L  V  K  P  G  A  S  V  K  I  S  C

                          CDR1
              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 aaggtttctggctacaccttcagtgaccatgctattcactggatgaagcagaggcctgaa
     K  V  S  G  Y  T  F  S  D  H  A  I  H  W  M  K  Q  R  P  E

                                                    CDR2
                          ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cagggcctggaatggattggatatattttcctagagatgcttttagtttgaacaatgag
     Q  G  L  E  W  I  G  Y  I  F  P  R  D  A  F  S  L  N  N  E

    ~~~~~~~~~~~~
301 aagttcaagggcaaggccacactgagtgcagacacatcctccagcacagcctacatggag
     K  F  K  G  K  A  T  L  S  A  D  T  S  S  S  T  A  Y  M  E

                                                          ~~~~~~~~~
361 ctcaccagcctgacatttgaggattctgcagtctatttctgtgcaagaatgagaaactac
     L  T  S  L  T  F  E  D  S  A  V  Y  F  C  A  R  M  R  N  Y

       CDR3
    ~~~~~~~~~~~~~~~~~~
421 ttctatgttatggactactggggtcaaggaacctcagtcaccgtctcctcagccaaaacg
     F  Y  V  M  D  Y  W  G  Q  G  T  S  V  T  V  S  S  A  K  T

481 acacccccatctgtctatacactggcccctggatctgctgcccaaactaactccatggtg
     T  P  P  S  V  Y  T  L  A  P  G  S  A  A  Q  T  N  S  M  V

541 accctgggatgcctggtcaagggctatttccctgagccagtgacagtgacctggaactct
     T  L  G  C  L  V  K  G  Y  F  P  E  P  V  T  V  T  W  N  S

601 ggatccctgtccagcggtgtgcacaccttcccagctgtcctgcagtctgacctctacact
     G  S  L  S  S  G  V  H  T  F  P  A  V  L  Q  S  D  L  Y  T

661 ctgagcagctcagtgactgtcccctccagcacctggcccagcgagaccgtcacctgcaac
     L  S  S  S  V  T  V  P  S  S  T  W  P  S  E  T  V  T  C  N

721 gttgcccacccggccagcagcaccaaggtggacaagaaaattgtgcccagggattgt
     V  A  H  P  A  S  S  T  K  V  D  K  K  I  V  P  R  D  C
```

**FIG. 13 Anti-Cadherin-17 PTA001_A1 VK**

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgtttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatgttgtgctgacccagactccactctcc
      L  L  L  A  A  Q  P  A  M  A  D  V  V  L  T  Q  T  P  L  S

                                                    ~~~~~~~~~~~~~~~~~~~~~~
181 ctgcctgtcactcttggagatcaagcctccatctcttgcagatctagtcagagcctttta
      L  P  V  T  L  G  D  Q  A  S  I  S  C  R  S  S  Q  S  L  L

      CDR1
    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cacagtaatggaaacacctatttacattggtacctgctgaagccaggccagtctccaaag
      H  S  N  G  N  T  Y  L  H  W  Y  L  L  K  P  G  Q  S  P  K

                        CDR2
                  ~~~~~~~~~~~~~~~~~~~~~~
301 ctcctgatctacaaagtttccaaccgatttttctggggtcccagacaggttcagtggcagt
      L  L  I  Y  K  V  S  N  R  F  S  G  V  P  D  R  F  S  G  S

361 ggatcagggacagatttcacactcaagatcaccagagtggaggctgaggatctgggagtt
      G  S  G  T  D  F  T  L  K  I  T  R  V  E  A  E  D  L  G  V

                        CDR3
                ~~~~~~~~~~~~~~~~~~~~~~~~~
421 tatttctgctctcaaagtacacatgtgctcacgttcggtgctgggaccaagctggagctg
      Y  F  C  S  Q  S  T  H  V  L  T  F  G  A  G  T  K  L  E  L

481 aaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagttaaca
      K  R  A  D  A  A  P  T  V  S  I  F  P  P  S  S  E  Q  L  T

541 tctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaatgtc
      S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N  V

601 aagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgatcag
      K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D  Q

661 gacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgagtat
      D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E  Y

721 gaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccattgtc
      E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I  V

781 aagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

## FIG. 14 Anti-Cadherin-17 PTA001_A2 and PTA001_A3 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                                    ~~~~~~~~~~~~~~~~~~~~~~

181 gtacctgtcactcctggagagtcagtatccatctcctgcacgtctagtaagagtctcctg
      V  P  V  T  P  G  E  S  V  S  I  S  C  T  S  S  K  S  L  L

      CDR1
      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~

241 cgtagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                              CDR2
                        ~~~~~~~~~~~~~~~~~~~~~~

301 ctcctgatatatcggatgtccaaccttgcctcgggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  M  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtcaggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                              CDR3
                        ~~~~~~~~~~~~~~~~~~~~~~~~~~~~

421 tattactgtatgcaacatctagaatatcctttcacgttcggctcggggacaaagttggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  S  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  F  P  P  S  S  E  Q  L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

## FIG. 15 Anti-Cadherin-17 PTA001_A4 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
        -   -   -   R   I   L   P   D   A   F   Y   R   N   S   L   L   F   L   H   T

61  cgttttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
        R   F   F   G   W   S   E   T   M   K   Y   L   L   P   T   A   A   A   G   L

121 ttattactcgctgcccaaccagccatggccgacatcgttatgtctcagtctccatcctcc
        L   L   L   A   A   Q   P   A   M   A   D   I   V   M   S   Q   S   P   S   S

                                                                ~~~~~~~~~~~~~~~~~~~~~~
181 ctagctgtgtcagttggagagaaggttactatgagctgcaagtccagccagagcctttta
        L   A   V   S   V   G   E   K   V   T   M   S   C   K   S   S   Q   S   L   L

        CDR1
        ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 catagtagcaatcaaaagaactacttggcctggtaccagcagaaaccagggcagtctcct
        H   S   S   N   Q   K   N   Y   L   A   W   Y   Q   Q   K   P   G   Q   S   P

                                CDR2
                                ~~~~~~~~~~~~~~~~~~~~~~
301 aaagtgctgatttactgggcatccactagagaatctggggtccctgatcgcttcacaggc
        K   V   L   I   Y   W   A   S   T   R   E   S   G   V   P   D   R   F   T   G

361 agtggatctgggacagatttcactctcaccatcaccagtgtgaagtctgaagacctggca
        S   G   S   G   T   D   F   T   L   T   I   T   S   V   K   S   E   D   L   A

                                CDR3
                                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 gtttattactgtcagcaatattatagctatccgtggacgttcggtggcggcaccaggctg
        V   Y   Y   C   Q   Q   Y   Y   S   Y   P   W   T   F   G   G   G   T   R   L

481 gaaatcaaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcag
        E   I   K   R   A   D   A   A   P   T   V   S   I   F   P   P   S   S   E   Q

541 ttaacatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatc
        L   T   S   G   G   A   S   V   V   C   F   L   N   N   F   Y   P   K   D   I

601 aatgtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggact
        N   V   K   W   K   I   D   G   S   E   R   Q   N   G   V   L   N   S   W   T

661 gatcaggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggac
        D   Q   D   S   K   D   S   T   Y   S   M   S   S   T   L   T   L   T   K   D

721 gagtatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcaccc
        E   Y   E   R   H   N   S   Y   T   C   E   A   T   H   K   T   S   T   S   P

781 attgtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagc
        I   V   K   S   F   N   R   N   E   S   Y   P   Y   D   V   P   D   Y   A   S

841 taa
```

## FIG. 16 Anti-Cadherin-17 PTA001_A5 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgtttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                                    ~~~~~~~~~~~~~~~~~~~~~~
181 gtacctgtcactcctggagagtcagtatccatctcctgcaggtctagtaagagtctcctg
      V  P  V  T  P  G  E  S  V  S  I  S  C  R  S  S  K  S  L  L

          CDR1
      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cgcagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                          CDR2
                    ~~~~~~~~~~~~~~~~~~~~~
301 ctcctgatatatcggctgtccaaccttgcctcaggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  L  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtctggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                          CDR3
                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tattactgtatgcaacatctagaatatcctttcacattcggctcggggacaaagttggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  S  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  F  P  P  S  S  E  Q  L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

## FIG. 17 Anti-Cadherin-17 PTA001_A6 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgttttttggatggagtgaaacgataaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  I  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                                ~~~~~~~~~~~~~~~~~~~~~~
181 gtacctgtcactcctggagagtcagtatccatctcctgcacgtctagtaagagtctcctg
      V  P  V  T  P  G  E  S  V  S  I  S  C  T  S  S  K  S  L  L

      CDR1
     ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cgtagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                          CDR2
                    ~~~~~~~~~~~~~~~~~~~~~
301 ctcctgatatatcggatgtccaaccttgcctcgggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  M  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtcaggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                          CDR3
                  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tattactgtatgcaacatctagaatatcctttcacgttcggctcggggacaaagttggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  S  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatcctcccaccatccagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  L  P  P  S  S  E  Q  L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

**FIG. 18 Anti-Cadherin-17 PTA001_A7 VK**

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -   -   -   R   I   L   P   D   A   F   Y   R   N   S   L   L   F   L   H   T

61  cgttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R   F   F   G   W   S   E   T   M   K   Y   L   L   P   T   A   A   A   G   L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L   L   L   A   A   Q   P   A   M   A   D   I   V   M   T   Q   A   A   P   S

                                                                ~~~~~~~~~~~~~~~~~~~~~~
181 gtacctgtcactcctggagagtcagtttccatctcctgcaggtcttctaagagtctcctg
      V   P   V   T   P   G   E   S   V   S   I   S   C   R   S   S   K   S   L   L

        CDR1
      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cgtactaatggcaacacttacttgcattggttcctgcagaggccaggccagtctcctcag
      R   T   N   G   N   T   Y   L   H   W   F   L   Q   R   P   G   Q   S   P   Q

                            CDR2
                      ~~~~~~~~~~~~~~~~~~~~~~
301 ctcctgatatatcggatgtccaaccttgcctcaggagtcccagacaggttcagtggcagt
      L   L   I   Y   R   M   S   N   L   A   S   G   V   P   D   R   F   S   G   S

361 gggtcaggaactgttttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G   S   G   T   V   F   T   L   R   I   S   R   V   E   A   E   D   V   G   V

                          CDR3
                  ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tattactgtatgcaacatctagaatatccattcacgttcggctcggggacaaagttggaa
      Y   Y   C   M   Q   H   L   E   Y   P   F   T   F   G   S   G   T   K   L   E

481 ataaaaagggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagtta
      I   K   R   A   D   A   A   P   T   V   S   I   F   P   P   S   S   E   Q   L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T   S   G   G   A   S   V   V   C   F   L   N   N   F   Y   P   K   D   I   N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V   K   W   K   I   D   G   S   E   R   Q   N   G   V   L   N   S   W   T   D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q   D   S   K   D   S   T   Y   S   M   S   S   T   L   T   L   T   K   D   E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y   E   R   H   N   S   Y   T   C   E   A   T   H   K   T   S   T   S   P   I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V   K   S   F   N   R   N   E   S   Y   P   Y   D   V   P   D   Y   A   S   -
```

## FIG. 19 Anti-Cadherin-17 PTA001_A8 VK

```
1   taagattagcggatcctaccttacgctttttatcgcaactctctactgtttctccatacc
      -   -   -   R   I   L   P   Y   A   F   Y   R   N   S   L   L   F   L   H   T

61  cgttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R   F   F   G   W   S   E   T   M   K   Y   L   L   P   T   A   A   A   G   L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L   L   L   A   A   Q   P   A   M   A   D   I   V   M   T   Q   A   A   P   S

                                                        ~~~~~~~~~~~~~~~~~~~~~~
181 gtacctgtcactcctggagaatcagtatccatctcctgcaggtctagtaagagtctcctg
      V   P   V   T   P   G   E   S   V   S   I   S   C   R   S   S   K   S   L   L

      CDR1
      ~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cgtagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R   S   N   G   N   T   Y   L   Y   W   F   L   Q   R   P   G   Q   S   P   Q

                          CDR2
                    ~~~~~~~~~~~~~~~~~~~~~~
301 ctcctgatatatcggctgtctaaccttgcctcaggagtcccagacaggttcagtggcagt
      L   L   I   Y   R   L   S   N   L   A   S   G   V   P   D   R   F   S   G   S

361 gggtcaggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G   S   G   T   A   F   T   L   R   I   S   R   V   E   A   E   D   V   G   V

                          CDR3
                 ~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tattactgtatgcaacatctagaatatcctttcacattcggctcggggacaaagttggaa
      Y   Y   C   M   Q   H   L   E   Y   P   F   T   F   G   S   G   T   K   L   E

481 ataaaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagtta
      I   K   R   A   D   A   A   P   T   V   S   I   F   P   P   S   S   E   Q   L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T   S   G   G   A   S   V   V   C   F   L   N   N   F   Y   P   K   D   I   N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V   K   W   K   I   D   G   S   E   R   Q   N   G   V   L   N   S   W   T   D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q   D   S   K   D   S   T   Y   S   M   S   S   T   L   T   L   T   K   D   E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y   E   R   H   N   S   Y   T   C   E   A   T   H   K   T   S   T   S   P   I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V   K   S   F   N   R   N   E   S   Y   P   Y   D   V   P   D   Y   A   S   -
```

## FIG. 20 Anti-Cadherin-17 PTA001_A9 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                                    ~~~~~~~~~~~~~~~~~~~~~~

181 gtacctgtcactcctggagagtcagtatccatctcctgcacgtctagtaagagtctcctg
      V  P  V  T  P  G  E  S  V  S  I  S  C  T  S  S  K  S  L  L

      CDR1
      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~

241 cgtagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                          CDR2
                          ~~~~~~~~~~~~~~~~~~~~~~

301 ctcctgatatatcggatgtccaaccttgcctcgggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  M  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtcaggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                          CDR3
                          ~~~~~~~~~~~~~~~~~~~~~~~~~~~~

421 tattactgtatgcaacatctagaatatcctttcacgttcggctcggggacaaagttggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  S  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatctccccaccatccagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  S  P  P  S  S  E  Q  L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

## FIG. 21 Anti-Cadherin-17 PTA001_A10 and PTA001_A12 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                t in A12
                                  ~          ~~~~~~~~~~~~~~~~~~~~
181 gtacctgtcactcctggagagtcagtatccatctcctgcaggtccagtaagagtctcctg
      V  P  V  T  P  G  E  S  V  S  I  S  C  R  S  S  K  S  L  L

          CDR1
    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cgtagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                        CDR2
                  ~~~~~~~~~~~~~~~~~~~~
301 ctcctcatatatcggatgtccaaccttgcctcaggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  M  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtcaggaactgccttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                        CDR3
                ~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tattactgtatgcaacatctagaatatcctttcacgttcggaggggggaccaagctggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  G  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  F  P  P  S  S  E  Q  L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

## FIG. 22 Anti-Cadherin-17 PTA001_A11 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctcttctgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgtttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                                  ~~~~~~~~~~~~~~~~~~~~~~
181 gtatctgtcactcctggagagtcagtatccatctcctgcaggtctactaagagtctcctg
      V  S  V  T  P  G  E  S  V  S  I  S  C  R  S  T  K  S  L  L

    CDR1
    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
241 cgtagtaatggcaacacttacttgtattggttcctccagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                        CDR2
                  ~~~~~~~~~~~~~~~~~~~~~~
301 ctcctgatatatcggatgtccaaccttgcctcaggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  M  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtcaggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                        CDR3
                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 tattactgtatgcaacatctagaatatcctttcacgttcggaggggggaccaagctggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  G  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatcttcccaccatccagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  F  P  P  S  S  E  Q  L

541 acatctggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  S  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

## FIG. 23 Anti-Cadherin-17 PTA001_A13 VK

```
1   taagattagcggatcctacctgacgctttttatcgcaactctctactgtttctccatacc
      -  -  -  R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T

61  cgttttttggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattg
      R  F  F  G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L

121 ttattactcgctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctct
      L  L  L  A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S

                                                    ~~~~~~~~~~~~~~~~~~~~~~

181 gtacctgtcactcctggagagtcagtatccatctcctgcaggtctagtaagagtctcctg
      V  P  V  T  P  G  E  S  V  S  I  S  C  R  S  S  K  S  L  L

          CDR1
      ~~~~~~~~~~~~~~~~~~~~~~~~~~~~

241 cgcagtaatggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcag
      R  S  N  G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q

                            CDR2
                     ~~~~~~~~~~~~~~~~~~~~~~

301 ctcctgatatatcggctgtccaaccttgcctcaggagtcccagacaggttcagtggcagt
      L  L  I  Y  R  L  S  N  L  A  S  G  V  P  D  R  F  S  G  S

361 gggtcaggaactgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtt
      G  S  G  T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V

                            CDR3
                  ~~~~~~~~~~~~~~~~~~~~~~~~~~~

421 tattactgtatgcaacatctagaatatcctttcacattcggctcggggacaaagttggaa
      Y  Y  C  M  Q  H  L  E  Y  P  F  T  F  G  S  G  T  K  L  E

481 ataaaacgggctgatgctgcaccaactgtatccatcttcccacaatacagtgagcagtta
      I  K  R  A  D  A  A  P  T  V  S  I  F  P  Q  Y  S  E  Q  L

541 acaactggaggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaat
      T  T  G  G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N

601 gtcaagtggaagattgatggcagtgaacgacaaaatggcgtcctgaacagttggactgat
      V  K  W  K  I  D  G  S  E  R  Q  N  G  V  L  N  S  W  T  D

661 caggacagcaaagacagcacctacagcatgagcagcaccctcacgttgaccaaggacgag
      Q  D  S  K  D  S  T  Y  S  M  S  S  T  L  T  L  T  K  D  E

721 tatgaacgacataacagctatacctgtgaggccactcacaagacatcaacttcacccatt
      Y  E  R  H  N  S  Y  T  C  E  A  T  H  K  T  S  T  S  P  I

781 gtcaagagcttcaacaggaatgagtcttatccatatgatgtgccagattatgcgagctaa
      V  K  S  F  N  R  N  E  S  Y  P  Y  D  V  P  D  Y  A  S  -
```

**FIG. 24 Anti-Cadherin-17 PTA001_A14 VK**

```
1   cggatcctacctgacgctttttatcgcaactctctactgtttctccatacccgttttttt
     R  I  L  P  D  A  F  Y  R  N  S  L  L  F  L  H  T  R  F  F

61  ggatggagtgaaacgatgaaatacctattgcctacggcagccgctggattgttattactc
     G  W  S  E  T  M  K  Y  L  L  P  T  A  A  A  G  L  L  L  L

121 gctgcccaaccagccatggccgatattgtgatgacccaggctgcaccctctgtacctgtc
     A  A  Q  P  A  M  A  D  I  V  M  T  Q  A  A  P  S  V  P  V

                                                    CDR1
                                          ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
181 actcctggagagtcagtatccatctcctgcacgtctagtaagagtctcctgcgtagtaat
     T  P  G  E  S  V  S  I  S  C  T  S  S  K  S  L  L  R  S  N

    ~~~~~~~~~~~~~~~~~~~
241 ggcaacacttacttgtattggttcctgcagaggccaggccagtctcctcagctcctgata
     G  N  T  Y  L  Y  W  F  L  Q  R  P  G  Q  S  P  Q  L  L  I

               CDR2
       ~~~~~~~~~~~~~~~~~~~~~~
301 tatcggatgtccaaccttgcctcgggagtcccagacaggttcagtggcagtgggtcagga
     Y  R  M  S  N  L  A  S  G  V  P  D  R  F  S  G  S  G  S  G

361 actgctttcacactgagaatcagtagagtggaggctgaggatgtgggtgtttattactgt
     T  A  F  T  L  R  I  S  R  V  E  A  E  D  V  G  V  Y  Y  C

               CDR3
    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
421 atgcaacatctagaatatcctttcacgttcggctcggggacaaatttggaaataaaacgg
     M  Q  H  L  E  Y  P  F  T  F  G  S  G  T  N  L  E  I  K  R

481 gctgatgctgcaccaactgtatccatcttcacaacatccagagagcagttaacatctgga
     A  D  A  A  P  T  V  S  I  F  T  T  S  R  E  Q  L  T  S  G

541 ggtgcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatcaatgtcaag
     G  A  S  V  V  C  F  L  N  N  F  Y  P  K  D  I  N  V  K
```

## FIG. 25 VH CDR1 Alignments

```
PTA001_A1
VH CDR1                 GGATTCACTTTCAGTAACTATGGCATGTCT
VH7-39                  GGATTCACTTTCAGTAGCTATGGCATGTCT
                        ********** ********** **********


PTA001_A2, PTA001_A14
VH CDR1                 GGCTACACCTTCAGTGACCATGCTATTCAC
VHII gene H17           GGCTACACCTTCACTGACCATGCTATTCAC
                        ********** ********** **********


PTA001_A3, PTA001_A5, PTA001_A6, PTA001_A7, PTA001_A8, PTA001_A9,
PTA001_A10, PTA001_A11, PTA001_A12, PTA001_A13
VH CDR1                 GGCTACACCTTCACTGACCATGCTATTCAC
VHII gene H17           GGCTACACCTTCACTGACCATGCTATTCAC
                        ********** ********** **********


PTA001_A4
VH CDR1                 GGCTACACCCTCACTGACCATACTATTCAC
VHII gene H17           GGCTACACCTTCACTGACCATACTATTCAC
                        ********* ********** **********
```

## FIG. 26 VH CDR2 Alignments

```
PTA001_A2
VH CDR2            TATATTTATCCTAGACATGGGACTACTAACTACAATGAGAACTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   *************** **** * ****** *********** *********

PTA001_A3, PTA001_A5, PTA001_A6, PTA001_A8, PTA001_A9, PTA001_A10
VH CDR2            TATATTTATCCTGAACATGGAACTATTAAGTATAATGAGAAGTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   ************  * **** * ** ****** ******************

PTA001_A4
VH CDR2            TATATTTACCCTAGAGATGGAATAACTGGGTACAATGAGAAGTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   ******** *********** *  ***  ***********************

PTA001_A7
VH CDR2            TATATTTATCCTAGACATGGGACTACTAACTACAATGAGAACTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   *************** **** * ****** *********** *********

PTA001_A11
VH CDR2            TATATTTATCCTGAACATGGTAGTATTACGTATAATGAGAAGTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   ************  * ********* ** *** ******************

PTA001_A12
VH CDR2            TATATCTACCCCAGAGATGATTTTGCTAAGGTGAATGAGAAGTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   ***** ** ** ******* *  * *****   ******************

PTA001_A13
VH CDR2            TATATTTATCCTGAACATGGTACTATTACGTATAATGAGAAGTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   ************  * ****** ** ** *** ******************

PTA001_A14
VH CDR2            TATATTTTTCCTAGAGATGCTTTTAGTTTGAACAATGAGAAGTTCAAGGGC
VHII region VH105  TATATTTATCCTAGAGATGGTAGTACTAAGTACAATGAGAAGTTCAAGGGC
                   ******* *********** *  ** *  * ********************
```

## FIG. 27 VK CDR1 Alignments

```
PTA001_A1
VK CDR1         AGATCTAGTCAGAGCCTTTTACACAGTAATGGAAACACCTATTTACAT
VK1-110         AGATCTAGTCAGAGCCTTGTACACAGTAATGGAAACACCTATTTACAT
                ****************** ****************************

PTA001_A4
VK CDR1         AAGTCCAGCCAGAGCCTTTTACATAGTAGCAATCAAAAGAACTACTTGGCC
VK8-30          AAGTCCAGTCAGAGCCTTTTATATAGTAGCAATCAAAAGAACTACTTGGCC
                ******** ************ ******************************


PTA001_A2, PTA001_A3, PTA001_A6, PTA001_A9, PTA001_A14
VK CDR1         GTCTAGTAAGAGTCTCCTGCGTAGTAATGGCAACACTTACTTGTAT
VK24-140        GTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ******************** ************************

PTA001_A5, PTA001_A13
VK CDR1         AGGTCTAGTAAGAGTCTCCTGCGCAGTAATGGCAACACTTACTTGTAT
VK24-140        AGGTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ********************  ************************

PTA001_A7
VK CDR1         AGGTCTTCTAAGAGTCTCCTGCGTACTAATGGCAACACTTACTTGCAT
VK24-140        AGGTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ******  ************** ** ******************** **

PTA001_A8
VK CDR1         AGGTCTAGTAAGAGTCTCCTGCGTAGTAATGGCAACACTTACTTGTAT
VK24-140        AGGTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ********************** ************************

PTA001_A10
VK CDR1         AGGTCCAGTAAGAGTCTCCTGCGTAGTAATGGCAACACTTACTTGTAT
VK24-140        AGGTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ***** ***************** ************************

PTA001_A11
VK CDR1         AGGTCTACTAAGAGTCTCCTGCGTAGTAATGGCAACACTTACTTGTAT
VK24-140        AGGTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ******* ************** ************************

PTA001_A12
VK CDR1         AGGTCTAGTAAGAGTCTCCTACGTAGTAATGGCAACACTTACTTGTAT
VK24-140        AGGTCTAGTAAGAGTCTCCTGCATAGTAATGGCAACACTTACTTGTAT
                ******************** * ************************
```

## FIG. 28 VK CDR2 Alignments

```
PTA001_A4
VK CDR2          TGGGCATCCACTAGAGAATCT
VK8-30           TGGGCATCCACTAGGGAATCT
                 ************** ******

PTA001_A2, PTA001_A3, PTA001_A6, PTA001_A9, PTA001_A14
VK CDR2          CGGATGTCCAACCTTGCCTCG
VK24-140         CGGATGTCCAACCTTGCCTCA
                 ********************

PTA001_A5, PTA001_A13
VK CDR2          CGGCTGTCCAACCTTGCCTCA
VK24-140         CGGATGTCCAACCTTGCCTCA
                 *** *****************

PTA001_A7, PTA001_A10, PTA001_A11, PTA001_A12
VK CDR2          CGGATGTCCAACCTTGCCTCA
VK24-140         CGGATGTCCAACCTTGCCTCA
                 ********************

PTA001_A8
VK CDR2          CGGCTGTCTAACCTTGCCTCA
VK24-140         CGGATGTCCAACCTTGCCTCA
                 *** **** ************
```

## FIG. 29 VK CDR3 Alignments

```
PTA001_A1
VK CDR3          TCTCAAAGTACACATGTGCTCACG
VK1-110          TCTCAAAGTACACATGTTCCTCCC
                 ***************** *   *

PTA001_A4
VK CDR3          CAGCAATATTATAGCTATCCGTGGACG
VK8-30           CAGCAATATTATAGCTATCCTCCCACA
                 ********************    **

PTA001_A2, PTA001_A3, PTA001_A6, PTA001_A9, PTA001_A10, PTA001_A11,
PTA001_A12, PTA001_A14
VK CDR3          ATGCAACATCTAGAATATCCTTTCACG
VK24-140         ATGCAACATCTAGAATATCCTTTCACA
                 *************************

PTA001_A5, PTA001_A8, PTA001_A13
VK CDR3          ATGCAACATCTAGAATATCCTTTCACA
VK24-140         ATGCAACATCTAGAATATCCTTTCACA
                 *************************

PTA001_A7
VK CDR3          ATGCAACATCTAGAATATCCATTCACG
VK24-140         ATGCAACATCTAGAATATCCTTTCACA
                 ******************* *****
```

**Anti-Cadherin-17 PTA001_A4 Western Blot**

Error! Objects cannot be created from editing field codes.

FIG. 30

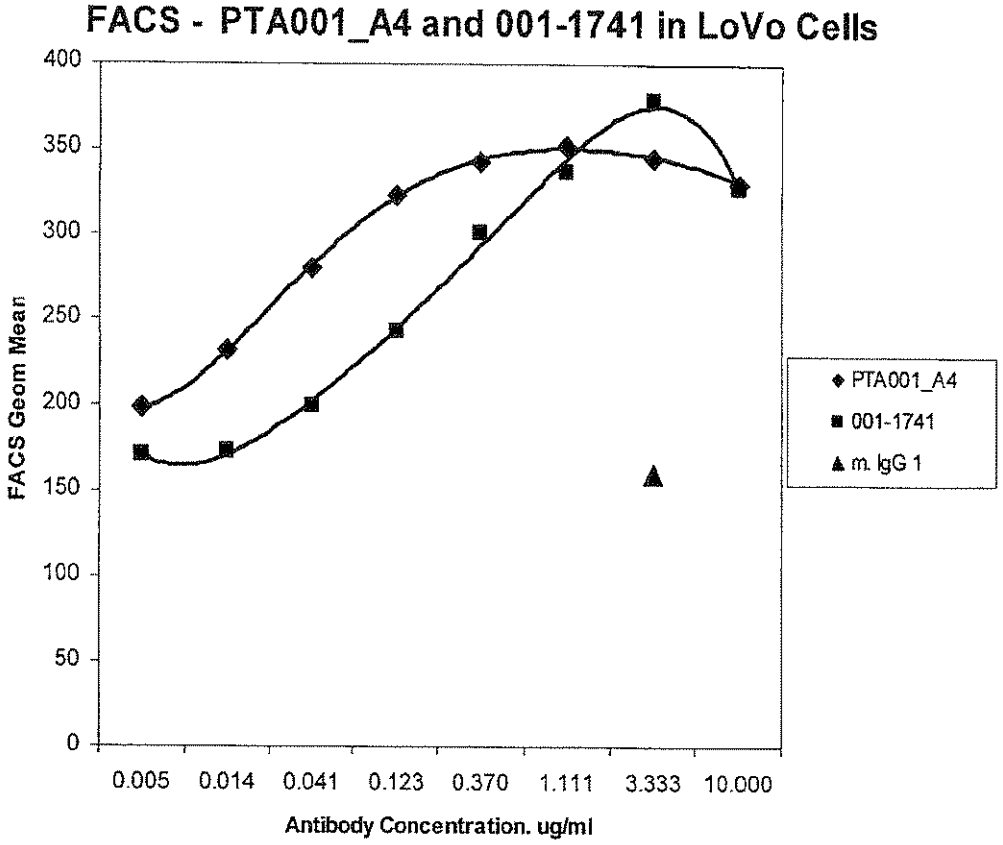



FIG. 31

**FACS: PTA001_A4 vs LoVo, LS 174T**

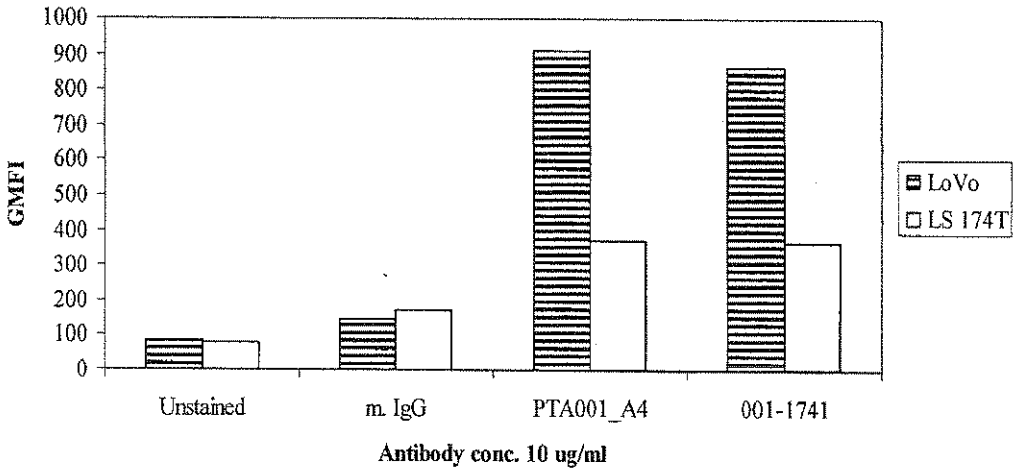



FIG. 32



FIG. 33A

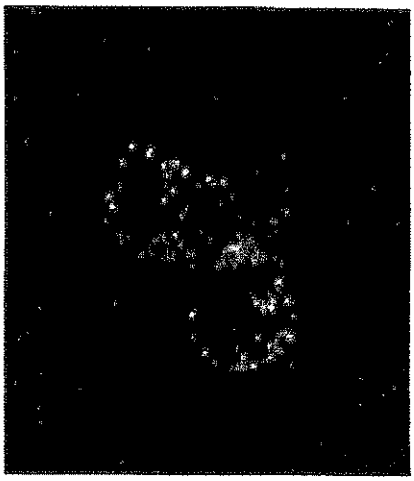


FIG. 33B

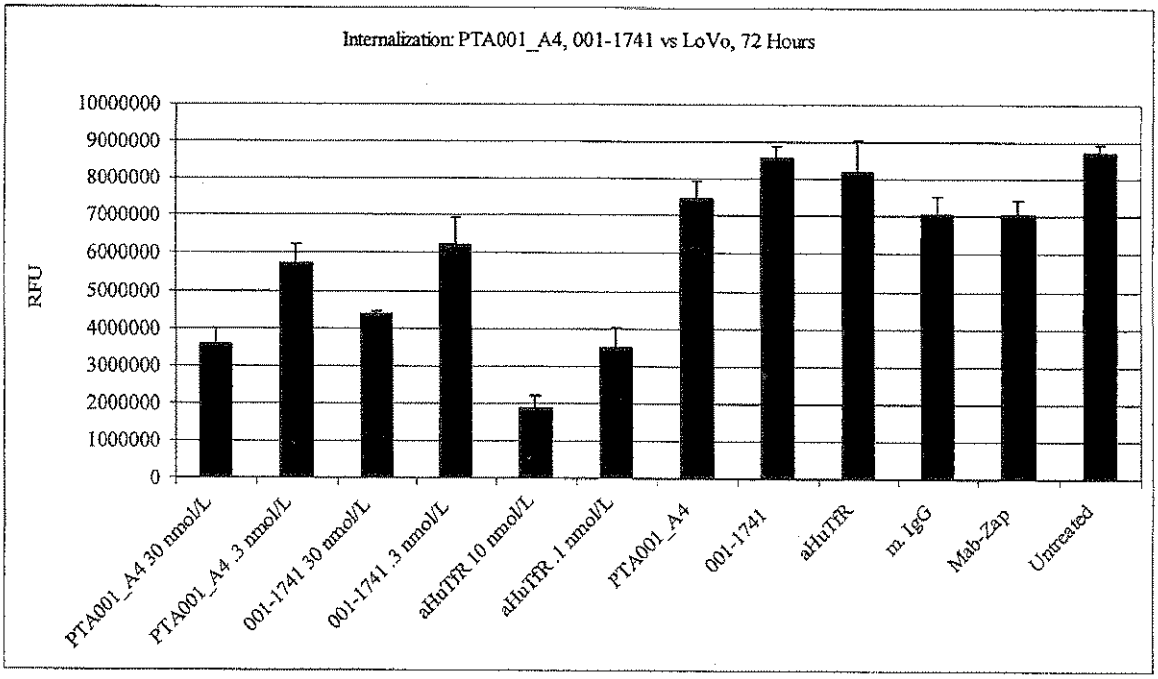



FIG. 34A

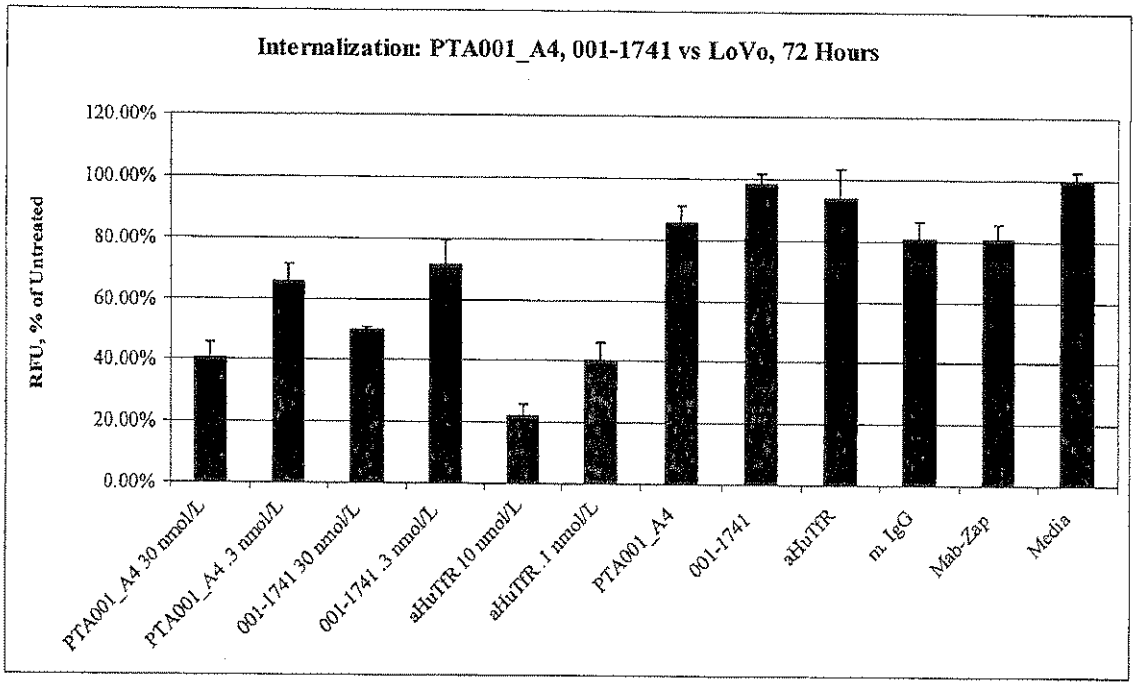



FIG. 34B

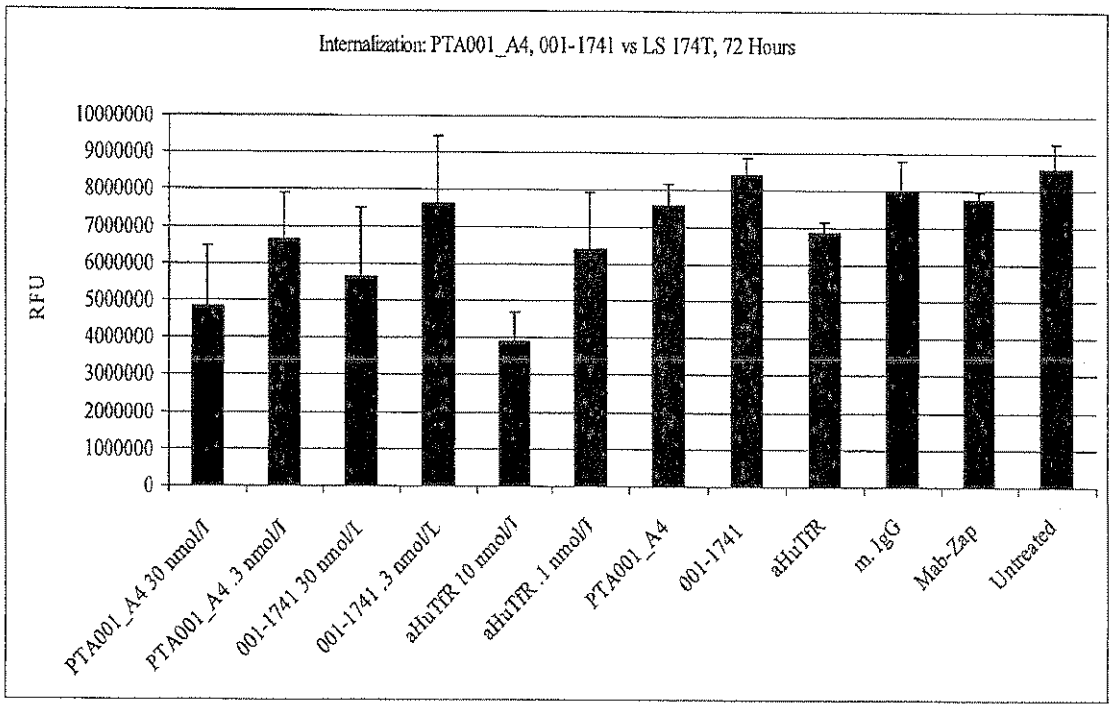



FIG. 34C

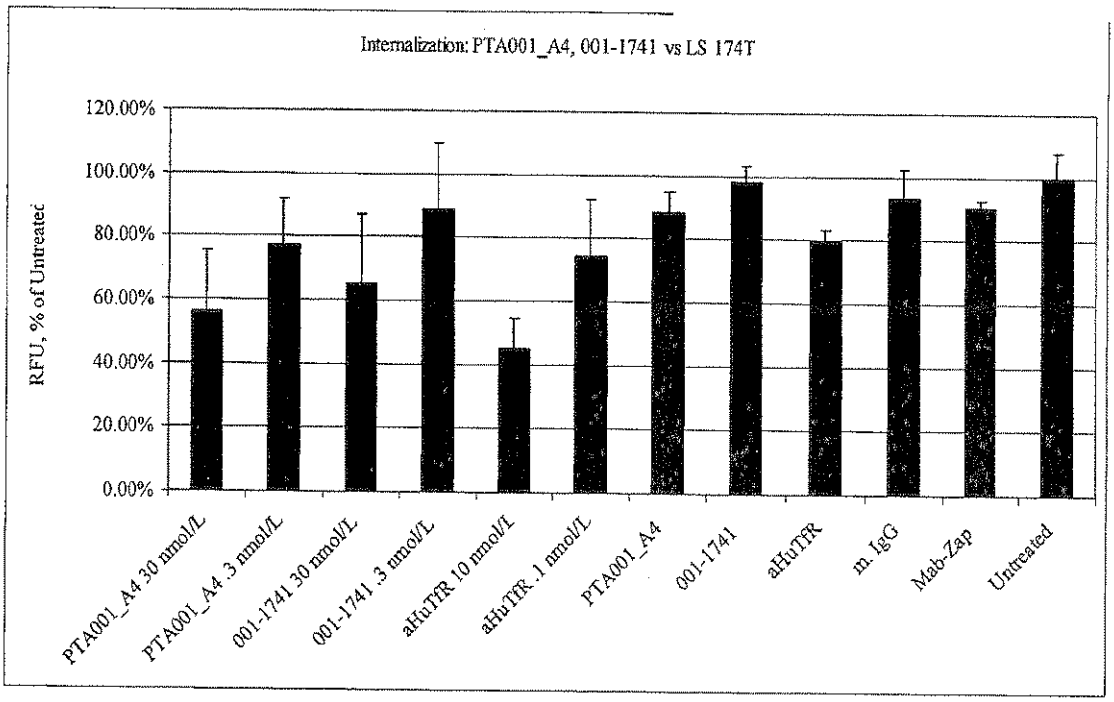



FIG. 34D

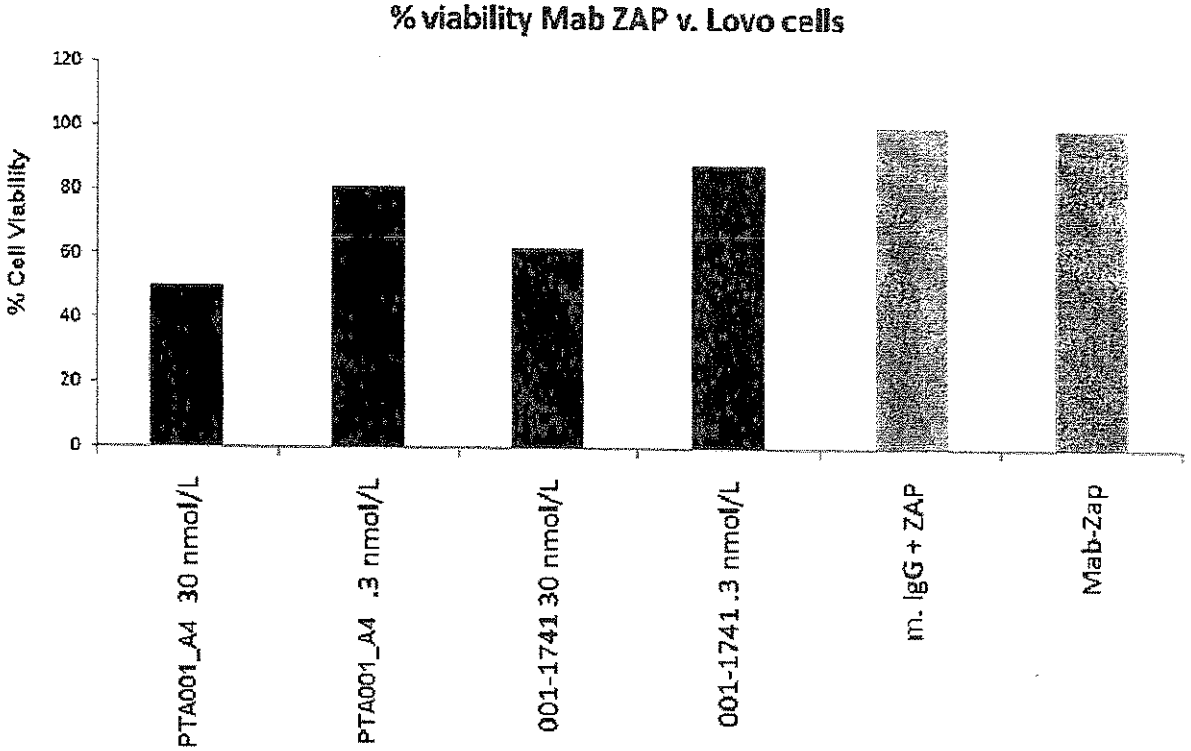



FIG. 35A

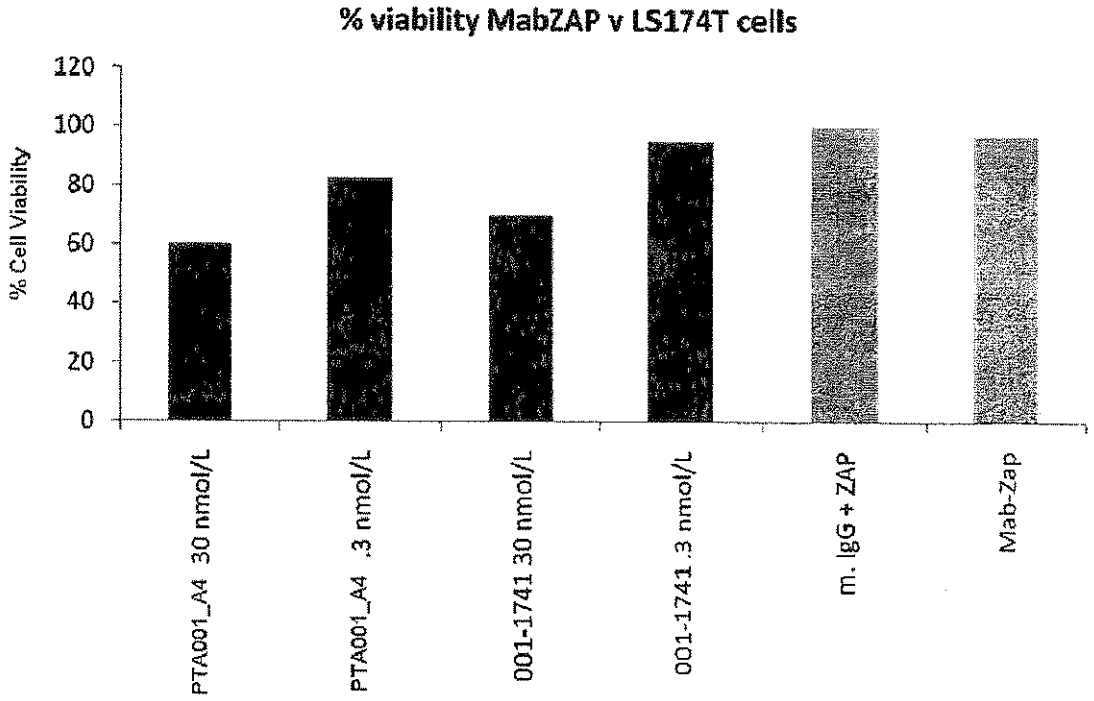

% viability MabZAP v LS174T cells
% Cell Viability
120
100
80
60
40
20
0
PTA001_A4 30 nmol/L
PTA001_A4 .3 nmol/L
001-1741 30 nmol/L
001-1741 .3 nmol/L
m. IgG + ZAP
Mab-Zap

FIG. 35B