## A. IIA1 $V_H$ sequences
## [NA, SEQ ID NO: 1; AA, SEQ ID NO: 2]

```
   1  ATGGCTGTCCTGGGGCTGCTTCTCTGCCTGGTGACTTTCCCAAGCTGTGTCCTGTCCCAG
       M  A  V  L  G  L  L  L  C  L  V  T  F  P  S  C  V  L  S  Q
  61  GTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAGCCTGTCCATCACA
       V  Q  L  K  E  S  G  P  G  L  V  A  P  S  Q  S  L  S  I  T
 121  TGCACCATCTCAGGGTTCTCATTAACCGACTATGGTGTTCACTGGGTTCGCCAGCCTCCA
       C  T  I  S  G  F  S  L  T  D  Y  G  V  H  W  V  R  Q  P  P
 181  GGAAAGGGTCTGGAGTGGCTGGTAGTGATTTGGAGTGATGGAAGCTCAACCTATAATTCA
       G  K  G  L  E  W  L  V  V  I  W  S  D  G  S  S  T  Y  N  S
 241  GCTCTCAAATCCAGAATGACCATCAGGAAGGACAACTCCAAGAGCCAAGTTTTCTTAATA
       A  L  K  S  R  M  T  I  R  K  D  N  S  K  S  Q  V  F  L  I
 301  ATGAACAGTCTCCAAACTGATGACTCAGCCATGTACTACTGTGCCAGACATGGAACTTAC
       M  N  S  L  Q  T  D  D  S  A  M  Y  Y  C  A  R  H  G  T  Y
 361  TACGGTATGACTACGACGGGGGATGCTTTGGACTACTGGGGTCAAGGAACCTCAGTCACC
       Y  G  M  T  T  T  G  D  A  L  D  Y  W  G  Q  G  T  S  V  T
 421  GTCTCCTCA
       V  S  S
```

## B. IIA1 $V_L$ sequences
## [NA, SEQ ID NO: 3; AA, SEQ ID NO: 4]

```
   1  ATGGATTTTCAGGTGCAGATTTTCAGCTTCCTGCTAATCAGTGCCTCAGTCATAATGTCC
       M  D  F  Q  V  Q  I  F  S  F  L  L  I  S  A  S  V  I  M  S
  61  AGAGGACAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTCTAGGGGAACGG
       R  G  Q  I  V  L  T  Q  S  P  A  I  M  S  A  S  L  G  E  R
 121  GTCACCATGACCTGCACTGCCAGTTCAAGTGTAAGTTCCAATTACTTGCACTGGTACCAG
       V  T  M  T  C  T  A  S  S  S  V  S  S  N  Y  L  H  W  Y  Q
 181  CAGAAGCCAGGATCCGCCCCCAATCTCTGGATTTATAGCACATCCAACCTGGCTTCTGGA
       Q  K  P  G  S  A  P  N  L  W  I  Y  S  T  S  N  L  A  S  G
 241  GTCCCAGCTCGTTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGC
       V  P  A  R  F  S  G  S  G  S  G  T  S  Y  S  L  T  I  S  S
 301  ATGGAGGCTGAAGATGCTGCCACTTATTACTGCCACCAGTATCTTCGTTCCCCACCGACG
       M  E  A  E  D  A  A  T  Y  Y  C  H  Q  Y  L  R  S  P  P  T
 361  TTCGGTGGAGGCACCAAGCTGGAAATCAAA
       F  G  G  G  T  K  L  E  I  K
```

**FIGURE 1**

## A. M200 $V_H$ sequences
## [NA, SEQ ID NO: 5; AA, SEQ ID NO: 6]

```
   1  TCTAGACCACCATGGCTGTCCTGGGGCTGCTTCTCTGCCTGGTGACTTTCCCAAGCTGTG
                 M  A  V  L  G  L  L  L  C  L  V  T  F  P  S  C
  61  TCCTGTCCCAGGTGCAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAGCC
      V  L  S  Q  V  Q  L  K  E  S  G  P  G  L  V  A  P  S  Q  S
 121  TGTCCATCACATGCACCATCTCAGGGTTCTCATTAACCGACTATGGTGTTCACTGGGTTC
      L  S  I  T  C  T  I  S  G  F  S  L  T  D  Y  G  V  H  W  V
 181  GCCAGCCTCCAGGAAAGGGTCTGGAGTGGCTGGTAGTGATTTGGAGTGATGGAAGCTCAA
      R  Q  P  P  G  K  G  L  E  W  L  V  V  I  W  S  D  G  S  S
 241  CCTATAATTCAGCTCTCAAATCCAGAATGACCATCAGGAAGGACAACTCCAAGAGCCAAG
      T  Y  N  S  A  L  K  S  R  M  T  I  R  K  D  N  S  K  S  Q
 301  TTTTCTTAATAATGAACAGTCTCCAAACTGATGACTCAGCCATGTACTACTGTGCCAGAC
      V  F  L  I  M  N  S  L  Q  T  D  D  S  A  M  Y  Y  C  A  R
 361  ATGGAACTTACTACGGAATGACTACGACGGGGGATGCTTTGGACTACTGGGGTCAAGGAA
      H  G  T  Y  Y  G  M  T  T  T  G  D  A  L  D  Y  W  G  Q  G
 421  CCTCAGTCACCGTCTCCTCAG^GTAAGAATGGCCTCTAGA
      T  S  V  T  V  S  S
```

## B. M200 $V_L$ sequences
## [NA, SEQ ID NO: 7; AA, SEQ ID NO: 8]

```
   1  ACGCGTCCACCATGGATTTTCAGGTGCAGATTTTCAGCTTCCTGCTAATCAGTGCCTCAG
                 M  D  F  Q  V  Q  I  F  S  F  L  L  I  S  A  S
  61  TCATAATGTCCAGAGGACAAATTGTTCTCACCCAGTCTCCAGCAATCATGTCTGCATCTC
      V  I  M  S  R  G  Q  I  V  L  T  Q  S  P  A  I  M  S  A  S
 121  TAGGGGAACGGGTCACCATGACCTGCACTGCCAGTTCAAGTGTCAGTTCCAATTACTTGC
      L  G  E  R  V  T  M  T  C  T  A  S  S  S  V  S  S  N  Y  L
 181  ACTGGTACCAGCAGAAGCCAGGATCCGCCCCCAATCTCTGGATTTATAGCACATCCAACC
      H  W  Y  Q  Q  K  P  G  S  A  P  N  L  W  I  Y  S  T  S  N
 241  TGGCTTCTGGAGTCCCAGCTCGTTTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCA
      L  A  S  G  V  P  A  R  F  S  G  S  G  S  G  T  S  Y  S  L
 301  CAATCAGCAGCATGGAGGCTGAAGATGCTGCCACTTATTACTGCCACCAGTATCTTCGTT
      T  I  S  S  M  E  A  E  D  A  A  T  Y  Y  C  H  Q  Y  L  R
 361  CCCCACCGACGTTCGGTGGAGGCACCAAGCTGGAAATCAAAC^GTAAGTAGAATCCAAAGT
      S  P  P  T  F  G  G  G  T  K  L  E  I  K
 421  CTAGA
```

**FIGURE 2**