```
                    10        20        30        40        50
                    |....|....|....|....|....|....|....|....|....|....
hLiv22 HA   QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYYMHWVRQAPGQGLEWMGWIDPENGDTEY
hLiv22 HB   ..........................IE..............................
hLiv22 HC   ....................................................................
hLiv22 HD   ..........................F.....................................
hLiv22 HE   ..........................F.IE.................I.....................
hLiv22 HF   ..........................L.IE.....................................
hLiv22 HG   ..........................L.IE.....................................
mLiv22 H    E...Q.....LVRS.....L..T...LNIE.......K.R.E.....I.....................
CDRs                                  *****                 ***********

                    60        70        80        90        100       110
                    |....|....|....|....|.......|....|....|....|.......|....|..
hLiv22 HA   GPKFQGRVTMTRDTSISTAYMELSRLRSDDTAVYYCARHNAHYGTWFAYWGQGTLVTVSS
hLiv22 HB   ................N.....................................................
hLiv22 HC   ......KA...A.....................................................
hLiv22 HD   ..................................TV.....................
hLiv22 HE   ......KA...A....N.................TV.....................
hLiv22 HF   ..................................V.....................
hLiv22 HG   ................N.................V.....................
mLiv22 H    ......KA...A...SN...LQ..S.T.G.....TV.....................A
CDRs        ******                              **********
```

FIGURE 16A

```
                    10        20        30        40        50
                    ....|....|....|....|....|.....|....|....|....|....|....|
hLiv22 LA   DVVMTQSPLSLPVTLGQPASISCRSSQSLLHSSGNTYLEWFQQRPGQSPRRLIYKISTRF
hLiv22 LB   ..........................................Y...................
hLiv22 LC   ..........................................L...................
hLiv22 LD   ..................................................K..........
hLiv22 LE   ..................................................L..........
hLiv22 LF   ..........................................YL.......KL.........
hLiv22 LG   ..........................................Y.........P.........
mLiv22 L    ..L...T......S..DQ.....................YL.......KP.........
CDRs                             ****************                ******

                    60        70        80        90        100
                    ....|....|....|....|....|....|....|....|....|...
hLiv22 LA   SGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCFQGSHVPYTFGGGTKVEIKR
hLiv22 LB   ..................................................
hLiv22 LC   ..................................................
hLiv22 LD   ..................................................
hLiv22 LE   ..................................................
hLiv22 LF   ..................................................
hLiv22 LG   ..................................................
mLiv22 L    ........................L.L.................L....
CDRs        *                              *********
```

FIGURE 16B

```
                    10        20        30        40        50
                    |....|....|....|....|....|....|....|....|....|....|....
hLiv22 HA   QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYYMHWVRQAPGQGLEWMGWIDPENGDTEY
hLiv22 HB   ..........................IE..............................
hLiv22 HC   ..................................................................
hLiv22 HD   ........................L.....................................
hLiv22 HE   ........................LNIE..............I...................
hLiv22 HF   ........................L.IE..............................
hLiv22 HG   ........................L.IE..............................
mLiv22 H    E...Q.....LVRS.....L..T...LNIE.......K.R.E.....I.............
CDRs                                  *****                ***********

                    60        70        80          90        100         110
                    |....|....|....|....|.......|....|....|....|.......|....|...
hLiv22 HA   GPKFQGRVTMTRDTSISTAYMELSRLRSDDTAVYYCARHNAHYGTWFAYWGQGTLVTVSS
hLiv22 HB   ................N.....................................................
hLiv22 HC   ......KA...A.....................................................
hLiv22 HD   ...................................TV.....................
hLiv22 HE   ......KA...A....N.................TV.....................
hLiv22 HF   ...................................V......................
hLiv22 HG   ................N.................V......................
mLiv22 H    ......KA...A...SN...LQ..S.T.G.....TV....................A
CDRs        ******                              ***********

hLiv22 HA
hLiv22 HB
hLiv22 HC
hLiv22 HD
hLiv22 HE
hLiv22 HF
hLiv22 HG
hLiv22 H
```

FIGURE 16A

```
                    10        20        30        40        50
                ....|....|....|....|....|.........|....|....|....|....|....|
hLiv22 LA       DVVMTQSPLSLPVTLGQPASISCRSSQSLLHSSGNTYLEWFQQRPGQSPRRLIYKISTRF
hLiv22 LB       ..........................................Y.................
hLiv22 LC       ..........................................L.................
hLiv22 LD       ..................................................K.........
hLiv22 LE       ..................................................P.........
hLiv22 LF       ..........................................YL.......KP.........
hLiv22 LG       ..........................................y.........p.........
mLiv22 L        ..L...T......S..DQ........................YL.......KP.........
CDRs                                  ****************                ******

                    60        70        80        90        100
                ....|....|....|....|....|....|....|....|....|....|...
hLiv22 LA       SGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCFQGSHVPYTFGGGTKVEIKR
hLiv22 LB       ..................................................
hLiv22 LC       ..................................................
hLiv22 LD       ..................................................
hLiv22 LE       ..................................................
hLiv22 LF       ..................................................
hLiv22 LG       ..................................................
mLiv22 L        ............................L.L..................L....
CDRs            *                                  *********
```

FIGURE 16B