VH CDR1 Alignments

```
A1
SEQ ID No: 21      ggctacgcattcagtaactcctggataaactgg
SEQ ID No: 33      ggctacgcattcagtagctactggatgaactgg
                   ********************* ** ****** ******
A2
SEQ ID No: 22      ggttactcattcattgagtacaccataaactgg
SEQ ID No: 35      ggttactcattcactgactacaacatgaactgg
                   ************* *** **** *** ******

A3
SEQ ID No: 62      ggctacacattctctgactactgggtacactgg
SEQ ID No: 68      ggctacaccttcaccagctactggatgcactgg
                   ******** *** *   ******* * ******
```

Figure 1a

VH CDR2 Alignments

```
A1
SEQ ID No: 23      ggacagatttatcctggagattatgatactaactacaatggaaaattcaag
SEQ ID No: 34      ggacagatttatcctggagatggtgatactaactacaacggaaagttcaag
                   ********************  *************** ***** ******
A2
SEQ ID No: 24      ggaaatattgatccttattatggaaccacttattacaatcagatgttcacg
SEQ ID No: 36      ggagtaattaatcctaactatggtactactagctacaatcagaagttcaag
                   ***   *** ***** * ***** ** ***   ********** ***** *
A3
SEQ ID No: 63      ggagcgattgatggttctgatacttttaatgactacagtcagaagtttaag
SEQ ID No: 69      ggagagattgatccttctgatagttatactaactacaatcaaaagttcaag
                   **** *******  ******** **  * * ****** *** ***** ***
```

Figure 1b

VK CDR1 Alignments

```
A1
SEQ ID No: 27      actgccagctcacgtgtaagttccagttacttgcac
SEQ ID No: 37      actgccagctcaagtgtaagttccagttacttgcac
                   ************ ************************
A2
SEQ ID No: 28      agtgccagctcaagtgtaacttacatgtac
SEQ ID No: 40      agtgccagctcaagtgtaagttacatgtac
                   ******************* **********
A3
SEQ ID No: 65      cgagcaagtgaaaacatttacagttatttagca
SEQ ID No: 70      cgagcaagtgagaatatttacagttatttagca
                   *********** ** ******************
```

Figure 2a

VK CDR2 Alignments

```
A1
SEQ ID No: 29      agtacatccaacctggcttct
SEQ ID No: 38      agcacatccaacctggcttct
                   ** ******************
A2
SEQ ID No: 30      gacacatccaacctggcttct
SEQ ID No: 41      gacacatccaacctggcttct
                   **********************
A3
SEQ ID No: 66      aatacaaaaaccttaggagaa
SEQ ID No: 71      aatgcaaaaaccttagcagaa
                   *** ************ ****
```

Figure 2b

VK CDR3 Alignments

```
A1
SEQ ID No: 31      caccagtatcatcgttccccgtacacg
SEQ ID No: 39      caccagtatcatcgttccccaccca--
                   ********************   **
A2
SEQ ID No: 32      cagcagtggagtaattacccactcacg
SEQ ID No: 42      cagcagtggagtagttacccaccca--
                   ************* ******** **
A3
SEQ ID No: 67      caacatcattatggtactccattcacg
SEQ ID No: 72      caacatcattatggtactcctcc----
                   ********************
```

Figure 2c

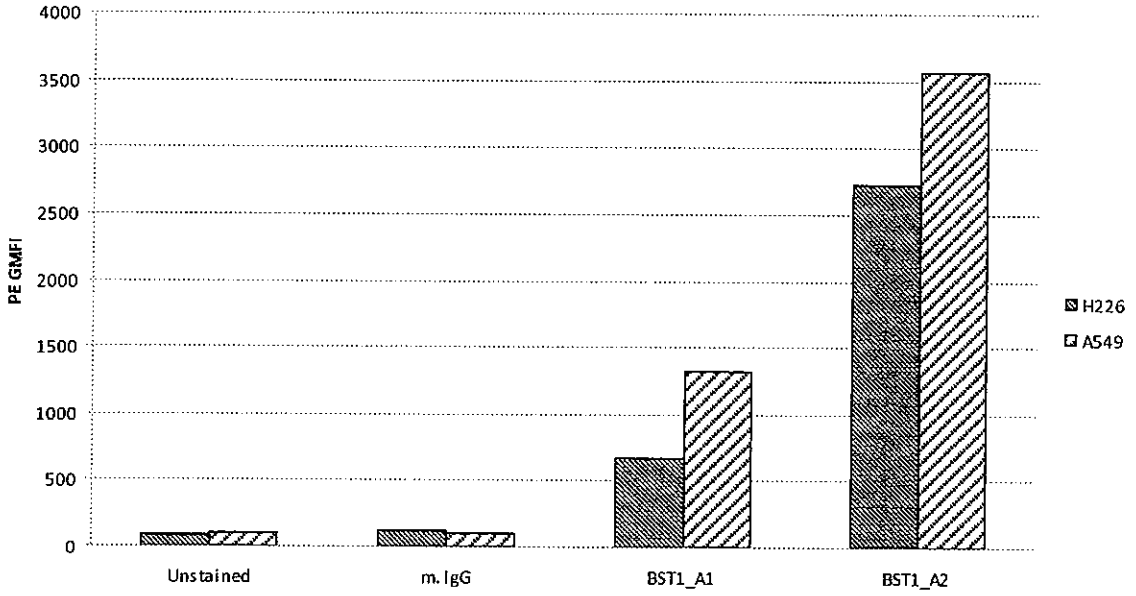


Figure 3a

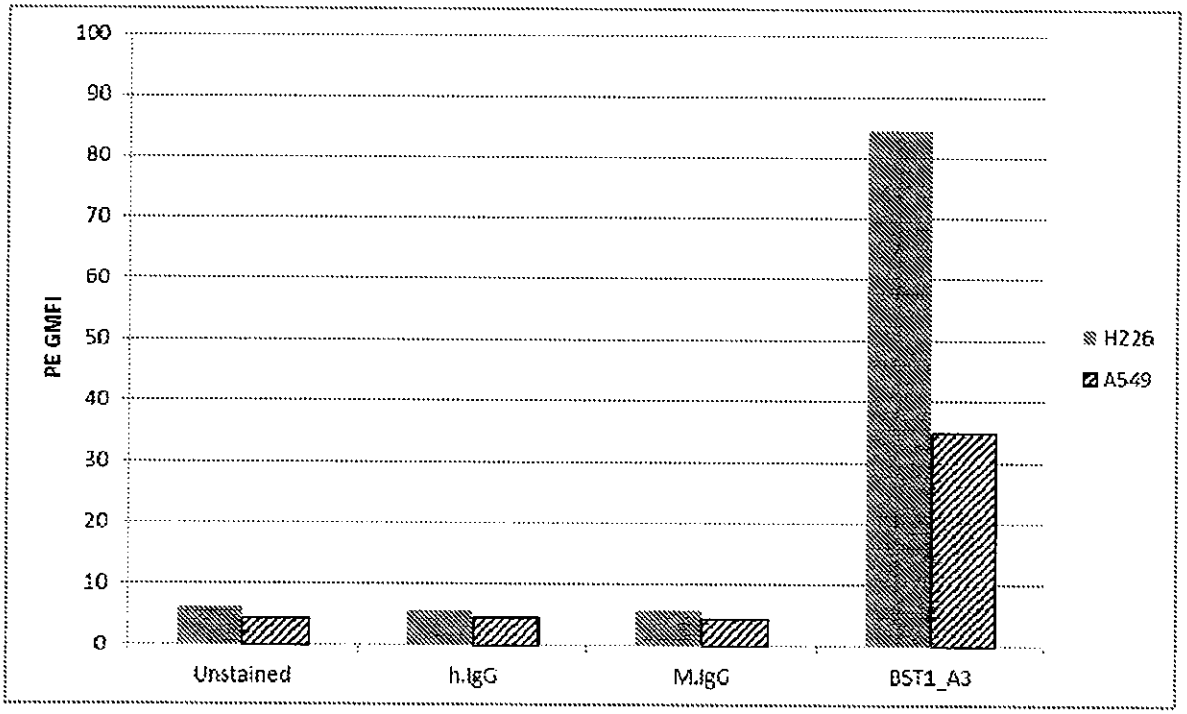


Figure 3b

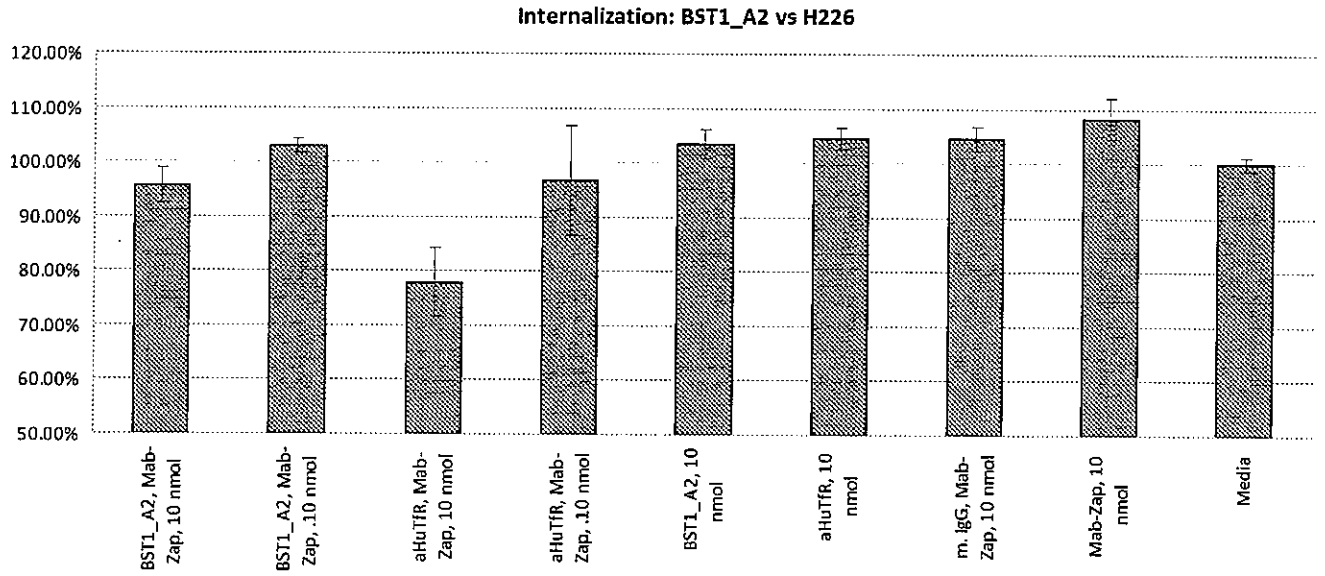


Figure 4a

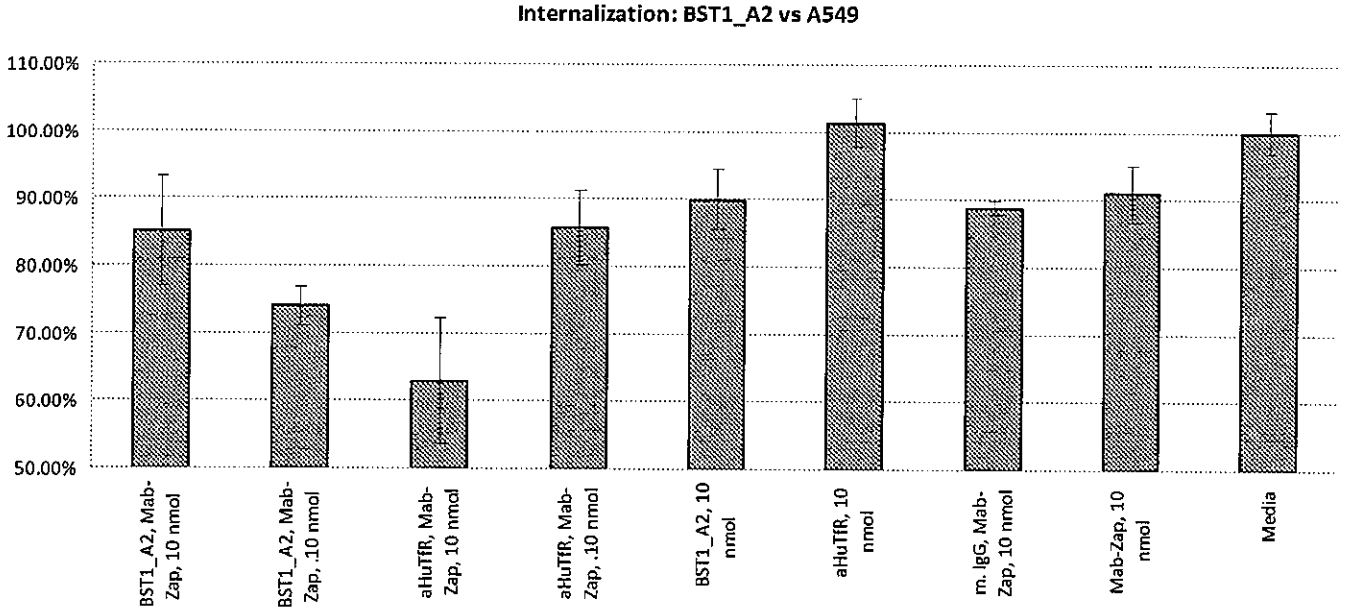


Figure 4b

```
                        1          2          3          4
                   123456789 0123456789 0123456789 0123456789
SEQ ID No: 45      QAYLQQSGP ELVKAGASVK MSCKASGYSF IEYTINWVKQ SHGKSLEWIG
SEQ ID No: 46      QVQLVQSGA EVKKPGASVK VSCKASGYSF IEYTINWVRQ APGQGLEWIG
SEQ ID No: 47      QVQLVQSGA EVKKPGASVK VSCKASGYSF TXXXXXWVRQ APGQGLEWMG

                   5          6          7          8
                   01223456789 0123456789 0123456789 0122223456789
SEQ ID No: 45      NIDPYYGTTYY NQMFTGKATL TVDQSSNTAY MQLKSLTSEDSAV
SEQ ID No: 46      NIDPYYGTTYY NQMFTGRATL TVDTSISTAY MELSRLRSDDTAV
SEQ ID No: 47      XXXXXXXXXXX XXXXXXRVTL TRDTSISTAY MELSRLRSDDTAV

                              1          1
                   9          0          1
                   0123456789 0123456789 0123
SEQ ID No: 45      YFCARGSAWF -PYWGQGTLV TVSA
SEQ ID No: 46      YYCARGSAWF -PYWGQGTLV TVSS
SEQ ID No: 47      YYCARXXXXX XXXWGQGTLV PVSS
```

Figure 5

```
                             1          2          3
                   123456789 0123456789 0123456789 0123456789
SEQ ID No: 48      DIVMSQSPA IMSASPGEKV TMTCSAS-SS VTYMYWYQQK
SEQ ID No: 49      DIQMTQSPS SLSASVGDRV TITCSAS-SS VTYMYWYQQK
SEQ ID No: 50      DIQMTQSPS SLSASVGDRV TITCXXXXXX XXXXXWYQQK

                   4          5          6          7
                   0123456789 0123456789 0123456789 0123456789
SEQ ID No: 48      PGSSPRLLIY DTSNLASGVP VRFSGSGSGT SYSLTISRME
SEQ ID No: 49      PGKAPKLLIY DTSNLASGVP SRFSGSGSGT DYTLTISSLQ
SEQ ID No: 50      PGKAPKLLIY XXXXXXXGVP SRFSGSGSGT DFTLTISSLQ

                                        1
                   8          9          0
                   0123456789 0123456789 01234567
SEQ ID No: 48      AEDTATYYCQ QWSNYPLTFG AGTKLELK
SEQ ID No: 49      PEDFATYYCQ QWSNYPLTFG QGTKVEIK
SEQ ID No: 50      PEDFATYYCX XXXXXXXXFG QGTKVEIK
```

Figure 6

```
SEQ ID No: 12      GNIDPYYGTTYYNQMFT
SEQ ID No: 51      GNIDPYYGTTYYNQMFQ
```

Figure 7

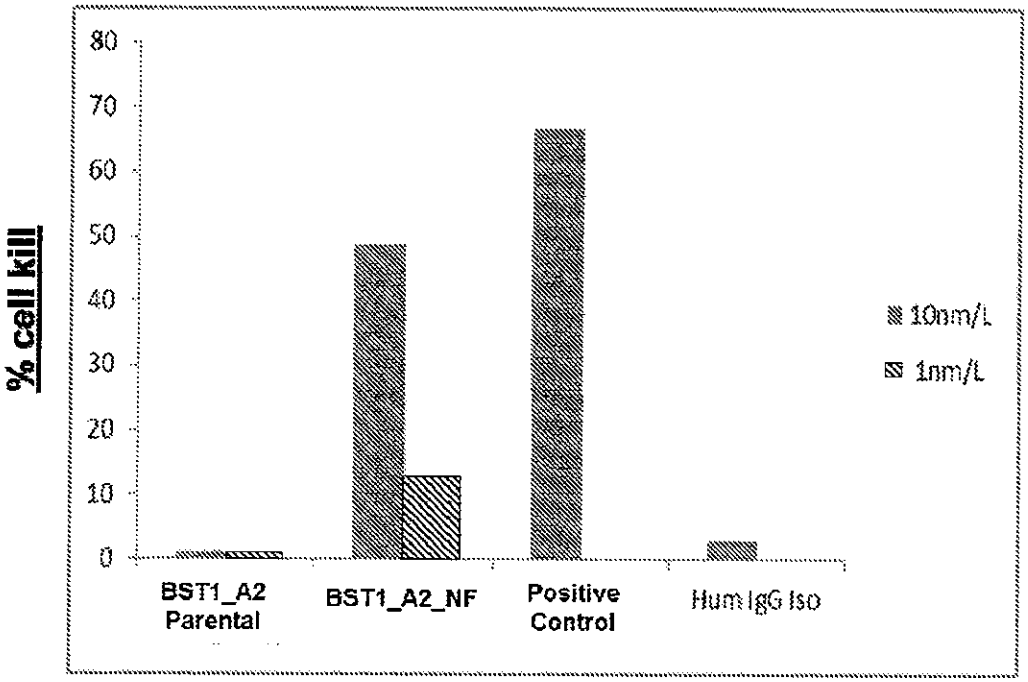


Figure 8a

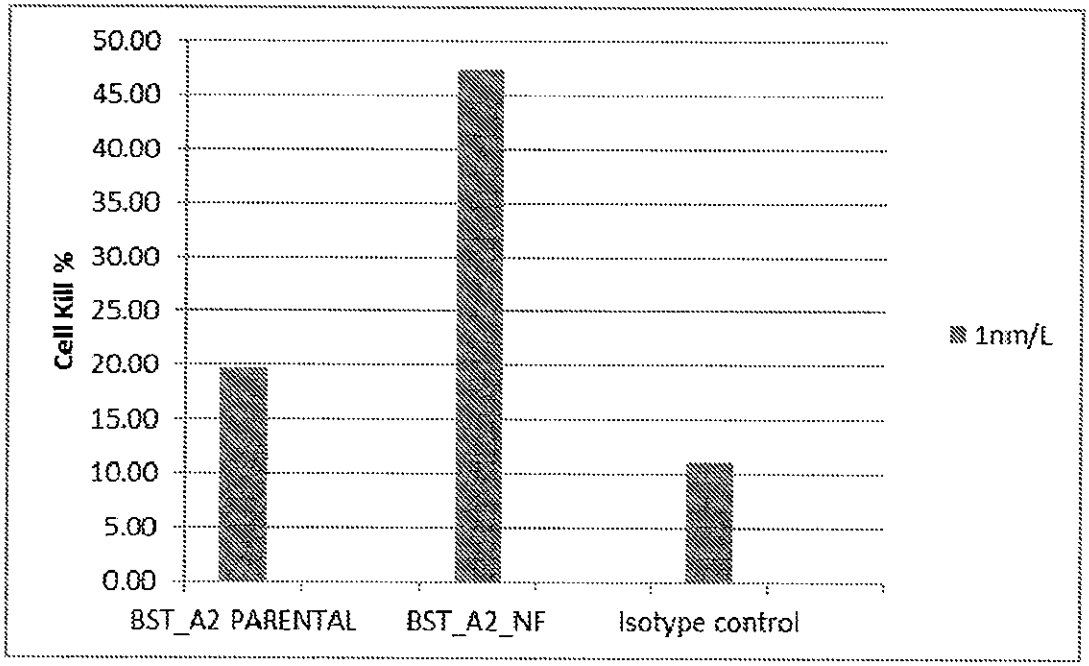


Figure 8b