

FIGURE 1

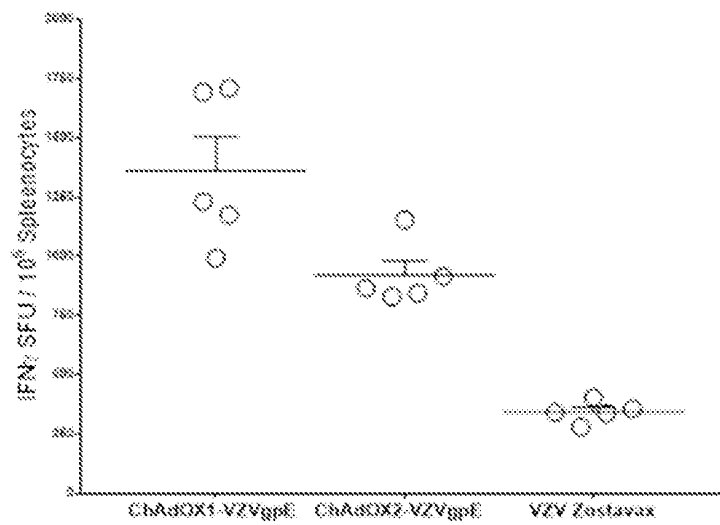


FIGURE 2

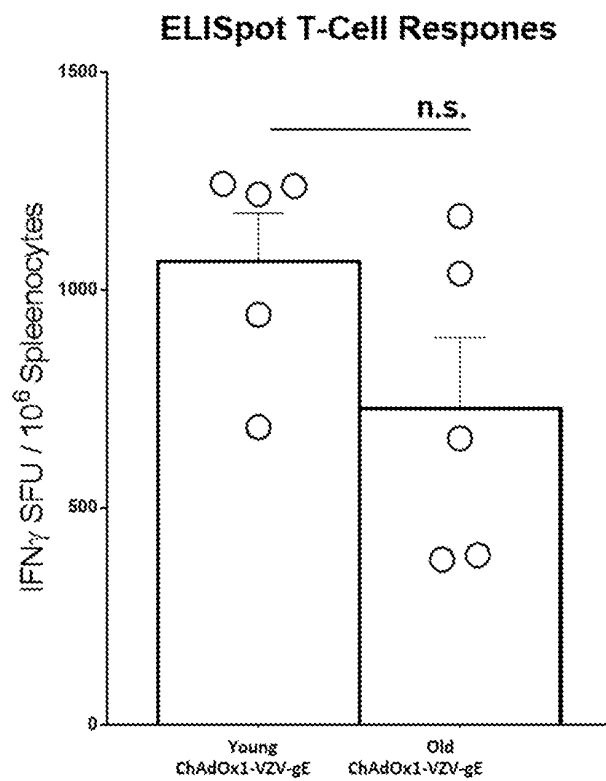


FIGURE 3

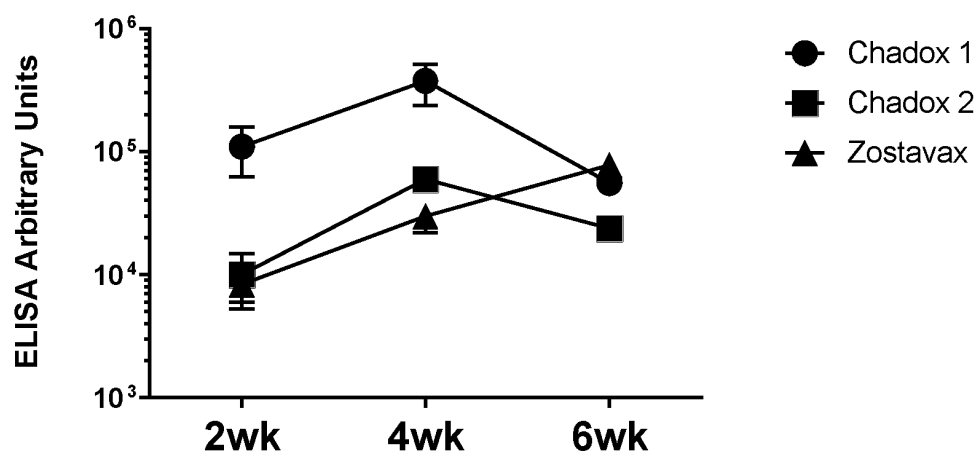


FIGURE 4

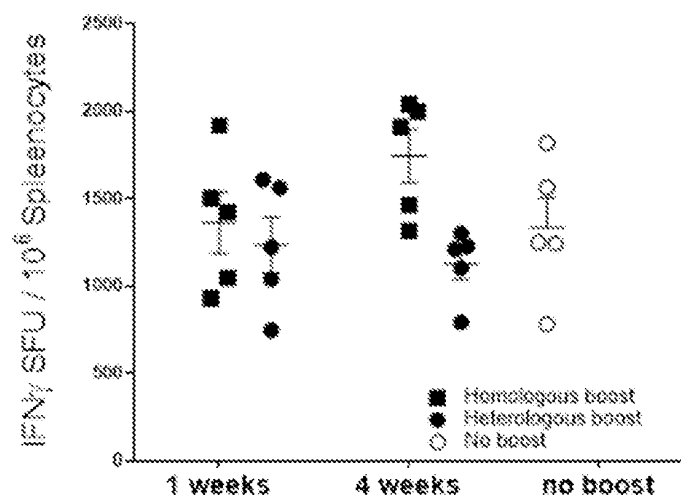


FIGURE 5

```
Insert
AY253715.1
ATGGGCACCGTGAACAAGCCCGTCGTGGGCGTGCTGATGGGCTTCGGCATCATCACCGGC 60
ATGGGGACAGTTAATAAACCCTGTGGTGGGGGTATTGATGGGGTTCGGAATTATCACGGGA 60
***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** *
***** ** ** ** ** *
Insert
AY253715.1
ACCTGCGGATCACCAATCCTGTGCGGGCCAGCGTGCTGAGATACGACGACTTCCACATC 120
ACGTTGCGTATAACGAATCCGGTCAGAGCATCCGTCTTGGGATACGATGATTTTCACATC 120
** **** ** ** ***** ** * ** ***** ** ** *****
GACGAGGACAAGCTGGACACCAACAGCGTGTACGAGCCCTACTACCACAGCACCACGCC 180
GATGAAGACAAACTGGATACAAACTCCGTATATGAGCCTTACTACCATTCAGATCATGCG 180
** ** ***** ** ** ** ***** ***** ** ** **
Insert
AY253715.1
GAGAGCAGCTGGGTCAACAGAGCGGAGTCCAGCCGGAAGGCCCTACGACCACAACAGCCCC 240
GAGTCTTCATGGGTAATCGGGGAGAGTCTTCGCGAAAAAGCGTACGATCATAACTCACCT 240
*** ***** ** * ** ***** ** ** ** ***** ** ** **
TACATCTGGCCCCGGAACGACTACGACGGCTTCCTGGAAAAATGCCACGAGCACCACGGC 300
TATATATGGCCACGTAATGATTATGATGGATTTTATAGAGAACGGACACGAACACCATGGG 300
** ** ***** ** ** ** ** ** ** ** ** ** ** * ** ** ***** **
Insert
AY253715.1
GTGTACAACCCAGGGCAGAGGCATCGACAGCGGCGAGAGACTGATGACGCCACCCAGATG 360
GTGTATAATCAGGGCCCGTGGTATCGATAGCGGGGGAACGGTTAATGCAACCCACACAAATG 360
***** ** ***** * ** ***** ***** ** * ***** ** ***
AGCGCCCAAGGAAGATCTGGGCGACGACACCCGGCATCCACGTGATCCCTACCCCTGAACGGC 420
TCTGCACAGGAGGATCTTGGGGACGATACGCGGCATCCACGTTATCCCTACGTTAAACGGC 420
** ***** ***** ** ***** ** ***** ***** * *****
```

FIGURE 5 CONTINUED

```

Insert      GACGACCGGCACAAGATCGTGAACGTGGACCAGCGGCAGTACGGCGACGTGTTCAAGGGC 480
AY253715.1  GATGACAGACATAAAATTGTAAATGTGGACCAACGTCAATACGGTGACGTGTTTAAAGGA 480
** *** * ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
Insert      GACCTGAACCCCAAGCCCCAGGGACAGCGGCTGATTGAGGTGTCCGTGGAAGAGAACCAC 540
AY253715.1  GATCTTAATCCAAAAACCCCAAGGCCAAAGACTCATTTGAGGTGTCTAGTGGAAAGAAAATCAC 540
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
Insert      CCTTTCACCTGAGAGCCCCCATCCAGAGAATCTACGGCGTGGCTATACCGAGACTTGG 600
AY253715.1  CCGTTTACTTTACGGCGACCGGATTTCAGCGGATTTATGGAGTCCGGTACCCGAGACTTGG 600
** ** ** * ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **
Insert      AGCTTCCTGCCAGCCTGACCTGTACTGGCGACGCCGCTCCTGCCATCCAGCACATCTGC 660
AY253715.1  AGCTTTTGGCCGTCAATTAACCTGTACGGGAGACGCAGCGCCCGCATCCAGCATATATGT 660
***** **** * ***** ** ***** ** ** ***** ** **
Insert      CTGAAGCACACCACTGTTTCCAGGACGTGGTGGTGGACGTGGACTGCCGCCGAGAACACC 720
AY253715.1  TTAAAAACATACAAACATGCTTTCAAGACGTGGTGGTGGATGTGGATTGCGCGGAAAAATACT 720
* ** ** ** ** ** ** ** ** ** ** ** ** ** ***** ***** ***** ** **
Insert      AAAGAGGACCAAGCTGGCCGAGATCAGCTACCGGTTCCAGGGCAAGAAAGAGGCCGACCCAG 780
AY253715.1  AAAGAGGATCAGTTGGCCGAAATCAGTTACCGTTTTCAGAGGTAAGAAAGGAAAGCGGACCAA 780
***** *** ***** ***** ** ** ***** ** ** *****
Insert      CCTGGATCGTCGTGAACACACAGCACCCCTGTTTCGACGAGCTGGAACCTGGACCCCGCGAG 840
AY253715.1  CCGTGGATTGTTGTAACACACGAGCACACTGTTTGATGAACCTCGAATTAGACCCCGCGAG 840
** ***** ** ** ***** ***** ** ** ***** *****

```

FIGURE 5 CONTINUED

```

Insert      ATTGAACCCGGGGTGTGAAGGTGCTGGGACCGAGAAGCAGTACCTGGGAGTGTACATC 900
AY253715.1  ATTGAACCCGGGTGTCTTGAAGTACTTCGGACAGAAAAACAATACTTGGGTGTGTACATT 900
            ***** ** ** ***** ** ** ***** ** ** ***** *****
Insert      TGGAAACATGCGGGGACGACGGCACCTCTACCTACGCCACCTTCCTCGTGACCTGGAAG 960
AY253715.1  TGGAAACATGCGGGGCTCCGATGGTACGTCTACCTACGCCACGTTTCTTGGTCACCTGGAAA 960
            ***** ** ** ***** ** ** ***** ** ** *****
Insert      GCGGACGAGAAAAACCCGGAACCCCTACCCCTGCCGTGACCCCTCAGCCTAGAGGCGCCGAG 1020
AY253715.1  GGGGATGAAAAAACAAGAAACCCCTAGGCCCGCAGTAACCTCCTCAACCAAGAGGGCTGAG 1020
            ** ** ***** * ***** ** ** ***** ** ***** ** **
Insert      TTTCACATGTGGAATTACCACAGCCACGTTTCAGCGTGGCGGACACCTTCTCCCTGGCC 1080
AY253715.1  TTTCATATGTGGAATTACCACCTCGCATGTATTTTCAGTTGGTGATACGTTTAGCTTGGCA 1080
            ***** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** *
Insert      ATGCATCTGCAGTACAAGATCCACGAGGCCCCCTTCGACCTGCTGGAATGGCTGTAC 1140
AY253715.1  ATGCATCTTCAGTATAAGATAACATGAAGCGCCATTTGATTTGCTGTTAGAGTGGTTGTAT 1140
            ***** ***** ** ** ** * ***** * ** *****
Insert      GTGCCCATCGACCCCTACCTGCCAGCCCATGCGGGCTGTACTCCACCTGTCTGTACCAACCCC 1200
AY253715.1  GTCCCCATCGATCCTACATGTCAACCAATGCGGGTTATATCTACGTGTTTGTATCATCCC 1200
            ** ***** ***** ** ** ***** * ** ** ***** ** **
Insert      AACGCCCCCAGTGCCTGAGCCACATGAATAGCGGCTGCACCTTCACCAGCCCCACCTG 1260
AY253715.1  AACGCACCCCAATGCCTCTCTCATATGAATTCGGTTGTACATTTACCTCGCCACATTTA 1260
            ***** ***** ** ***** *** ** ** ***** ** ** *

```

FIGURE 5 CONTINUED

```

Insert      GCTCAGAGGGTGGCCAGCACCGTGTACCAGAAATTGCGAGACGCCGCAACTACACCGCC 1320
AY253715.1  GCCCAGCGTGTGTCGAAGCACACAGTGTATCAAAAATTGTGAACATGCAGATAACTACACCGCA 1320
** *** * ** ** ***** ***** ** ***** ** ** ** *****
Insert      TACTGCCCTGGGCATCAGCCACATGGAACCTAGCTTCGGCCTGATCCTGCACGACGGCGGC 1380
AY253715.1  TATTGTCTGGGAATATCTCATATGGAGCCTAGCTTTGGTCTAATCTTACACGACGGGGGC 1380
** ** ***** ** ** ***** ***** ** ** *** * *****
Insert      ACCACCCCTGAAGTTCGTGGATACCCAGAGAGCCTGAGCGGCCCTGTACGTGTTCGTGGTG 1440
AY253715.1  ACCACGTTAAAGTTTGTAGATACACCCGAGAGTTTGTCTGGGATTATACGTTTTTGTGGTG 1440
***** * ***** ** ***** ** ***** ** ** * *****
Insert      TACTTCAACGGCCACGTGGAAGCCGTGGCCTACACCCGTGGTGTCACCGTGGACCACTTC 1500
AY253715.1  TATTTTAAACGGGCATGTTGAAGCCGTAGCATACACTGTTGTATCCACAGTAGATCATTTT 1500
** ** ***** ** ** ***** ** ** ***** ** ** ** ** ** ** ** ** ** ** ** ** 
Insert      GTGAACGCCATCGAGGAACGGGGCTTCCCTCCAACCTGCTGGACAGCCTCCTGCCACCACC 1560
AY253715.1  GTAAACGCAATTGAAGAGCGTGGATTTCGCCCAACGGCCGGTCAGCCACCGCGGACTACT 1560
** ***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** 
Insert      AAGCCCAAAAGAAATCACCCCGTGAACCCCGGCACCAAGCCCTCTGCTGGCTATGCTGCT 1620
AY253715.1  AAACCCAAAGGAAATTACCCCGTAAACCCCGGAACGTCACCACTTCTACGATATGCCGCA 1620
** ***** ***** ***** ***** ** ** ** ** ** ** 
Insert      TGGACAGGCGGACTGGCTGCTGTGGTGTGCTGTGCCTCGTGATTTTCCCTGATCTGCACC 1680
AY253715.1  TGGACCGGAGGGCTTGCAGCAGTAGTACTTTTATGTCTCGTAATATTTTAAATCTGTACG 1680
***** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** ** 

```


FIGURE 6 CONTINUED

vaccine	SAQEDLGDDTGTHVPTLNGDDRRHKIVNVDQRQYGDVFKGDLNPKPQGQRLIEVSVEENH	180
AY253715.1	SAQEDLGDDTGTHVPTLNGDDRRHKIVNVDQRQYGDVFKGDLNPKPQGQRLIEVSVEENH	180

vaccine	PFTLRAPIQRIYGVRYTETWSFLPSLTCTGDAAPAIQIHCCLKHTTCFQDVVVDVDCAENT	240
AY253715.1	PFTLRAPIQRIYGVRYTETWSFLPSLTCTGDAAPAIQIHCCLKHTTCFQDVVVDVDCAENT	240

vaccine	KEDQLAEISYRFQKKKEADQPWIVVNTSTLFELELDPPPEIEPGVLKVLRTKQYLGVI	300
AY253715.1	KEDQLAEISYRFQKKKEADQPWIVVNTSTLFELELDPPPEIEPGVLKVLRTKQYLGVI	300

vaccine	WNMRGSDGTSTYATFLVTWKGDEKTRNPTPAVTPQPRGAEFHMWNHSHVFSVGDTFSLA	360
AY253715.1	WNMRGSDGTSTYATFLVTWKGDEKTRNPTPAVTPQPRGAEFHMWNHSHVFSVGDTFSLA	360

vaccine	MHLQYKIHEAPFDLLEWLYVPIDPTCQPMRLYSTCLYHPNAPQCLSHMNSGCTFTSPHL	420
AY253715.1	MHLQYKIHEAPFDLLEWLYVPIDPTCQPMRLYSTCLYHPNAPQCLSHMNSGCTFTSPHL	420

vaccine	AQRVASTVYQNCHEADNYTAYCLGISHMEPSFGLILHDGGTTLKFVDTPESLSGLYVFVV	480
AY253715.1	AQRVASTVYQNCHEADNYTAYCLGISHMEPSFGLILHDGGTTLKFVDTPESLSGLYVFVV	480

vaccine	YFNHGHVEAVAYTVVSTVDHFVNAIIEERGFPPTAGQPPATTKPKEITPVNPGTSPLLRVAA	540
AY253715.1	YFNHGHVEAVAYTVVSTVDHFVNAIIEERGFPPTAGQPPATTKPKEITPVNPGTSPLLRVAA	540

FIGURE 6 CONTINUED

vaccine	WTGGLAAVVLLCLVIFLICTAKRMRVKAYRVDKSPYNQSMYYAGLPVDDFEDSESTDTEE	600
AY253715.1	WTGGLAAVVLLCLVIFLICTAKRMRVKAYRVDKSPYNQSMYYAGLPVDDFEDSESTDTEE	600

vaccine	EFGNAIGGSHGGSSYTVYIDKTR	623
AY253715.1	EFGNAIGGSHGGSSYTVYIDKTR	623

FIGURE 7

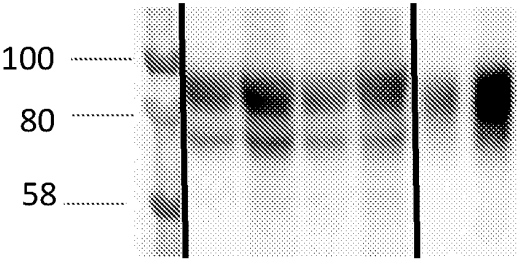
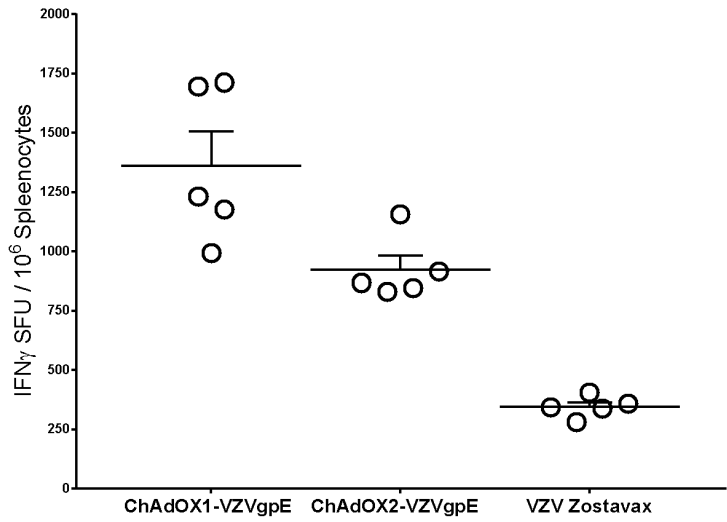


FIGURE 8

A



B

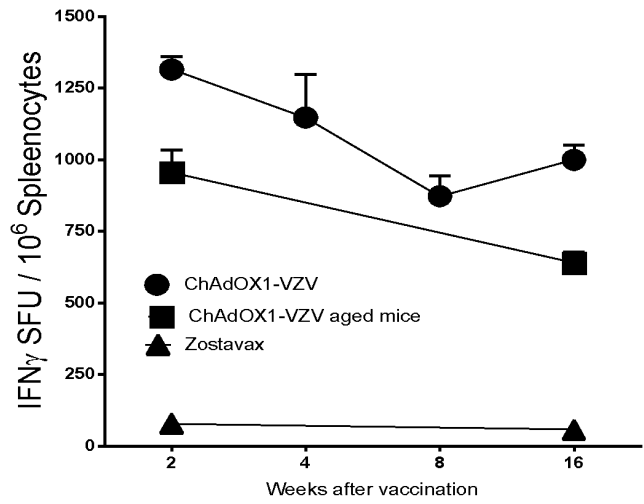


FIGURE 9

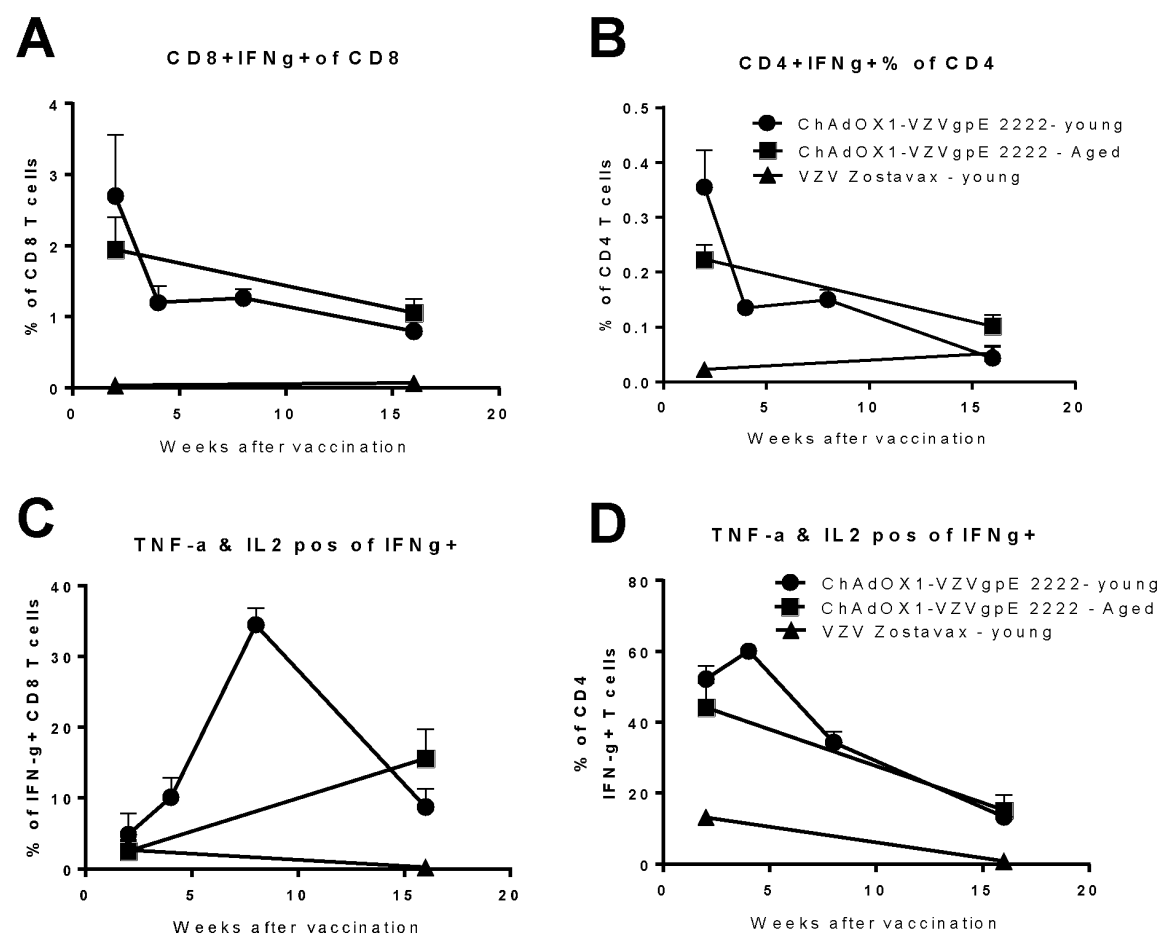


FIGURE 10

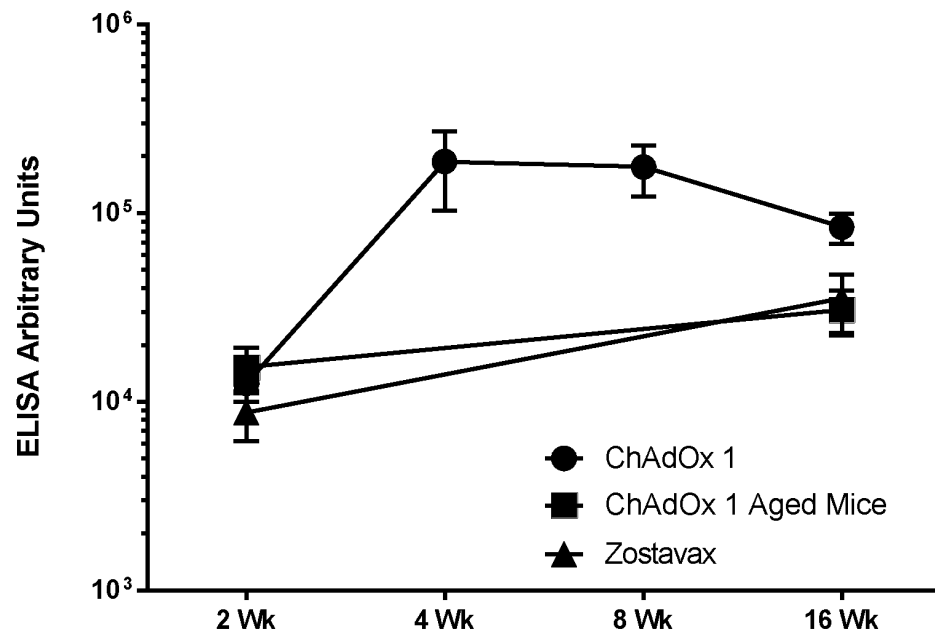
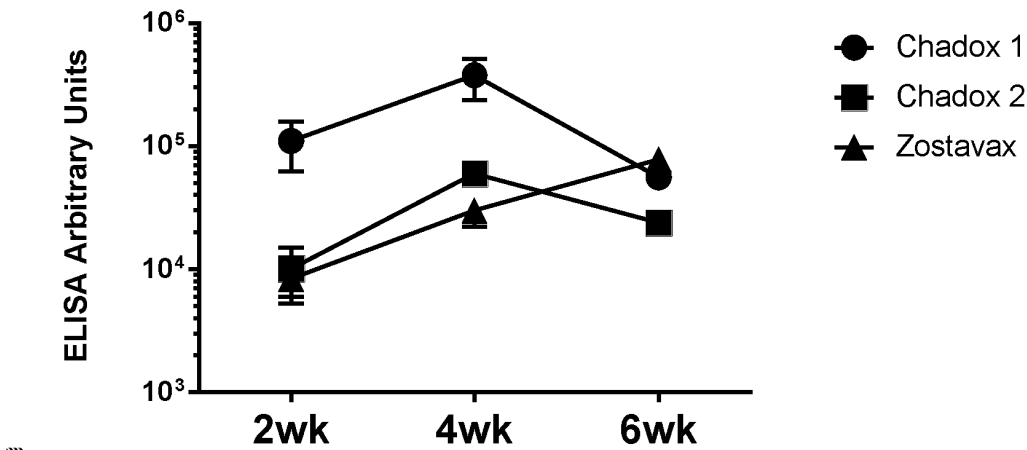
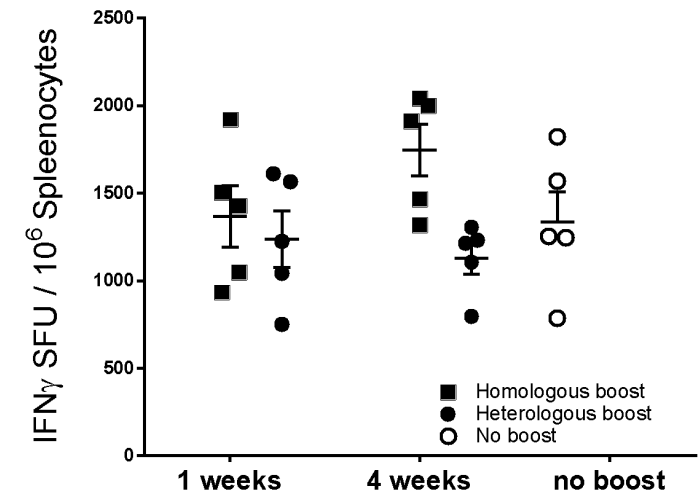


FIGURE 11

A



B



C

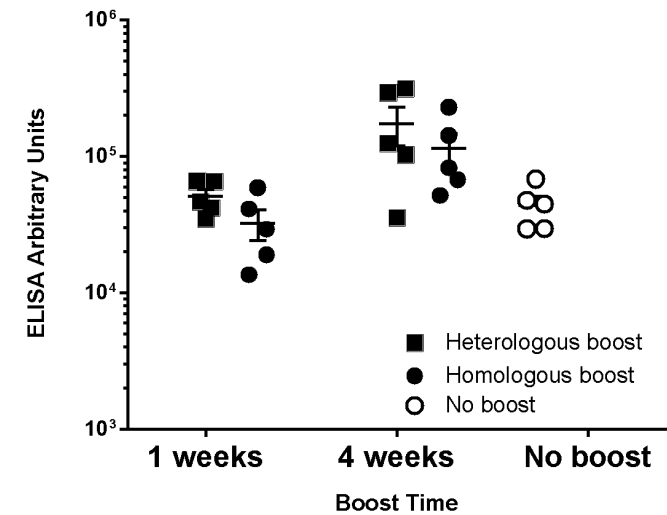


FIGURE 12

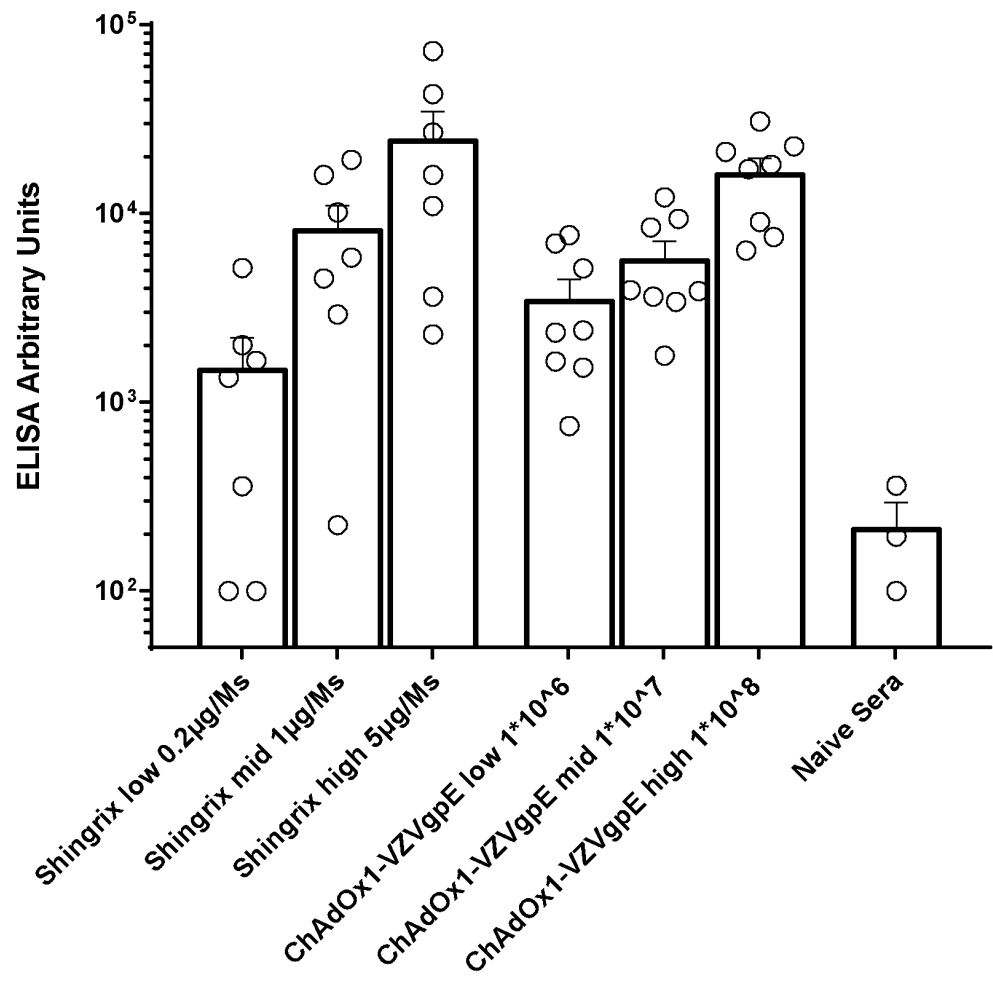


FIGURE 13

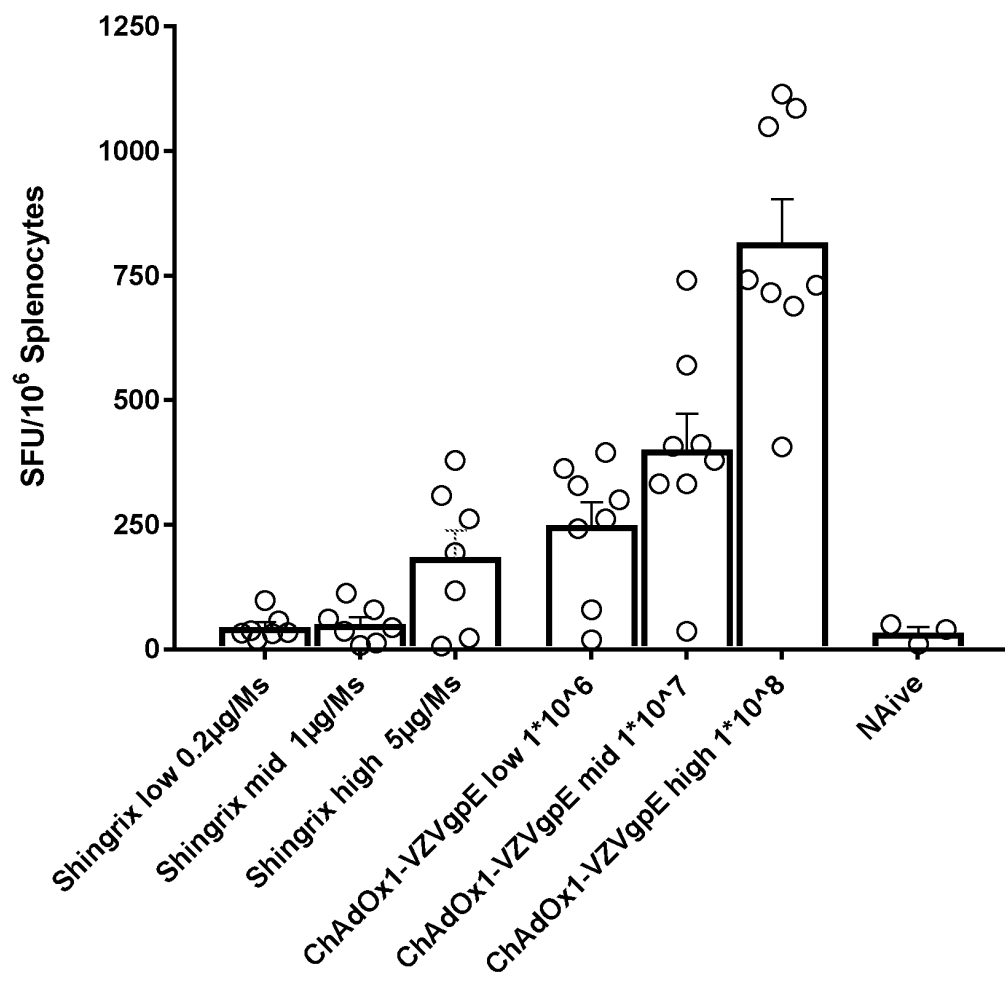


FIGURE 14

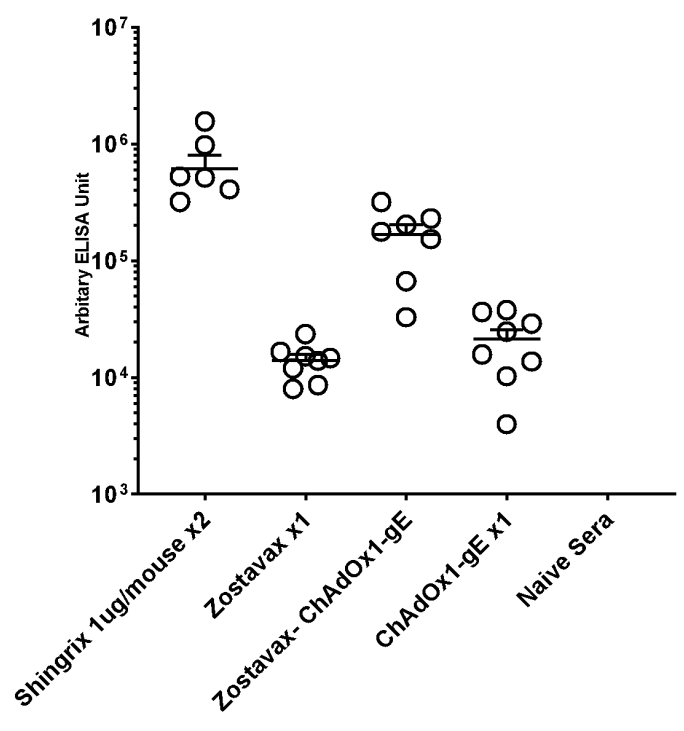


FIGURE 15

