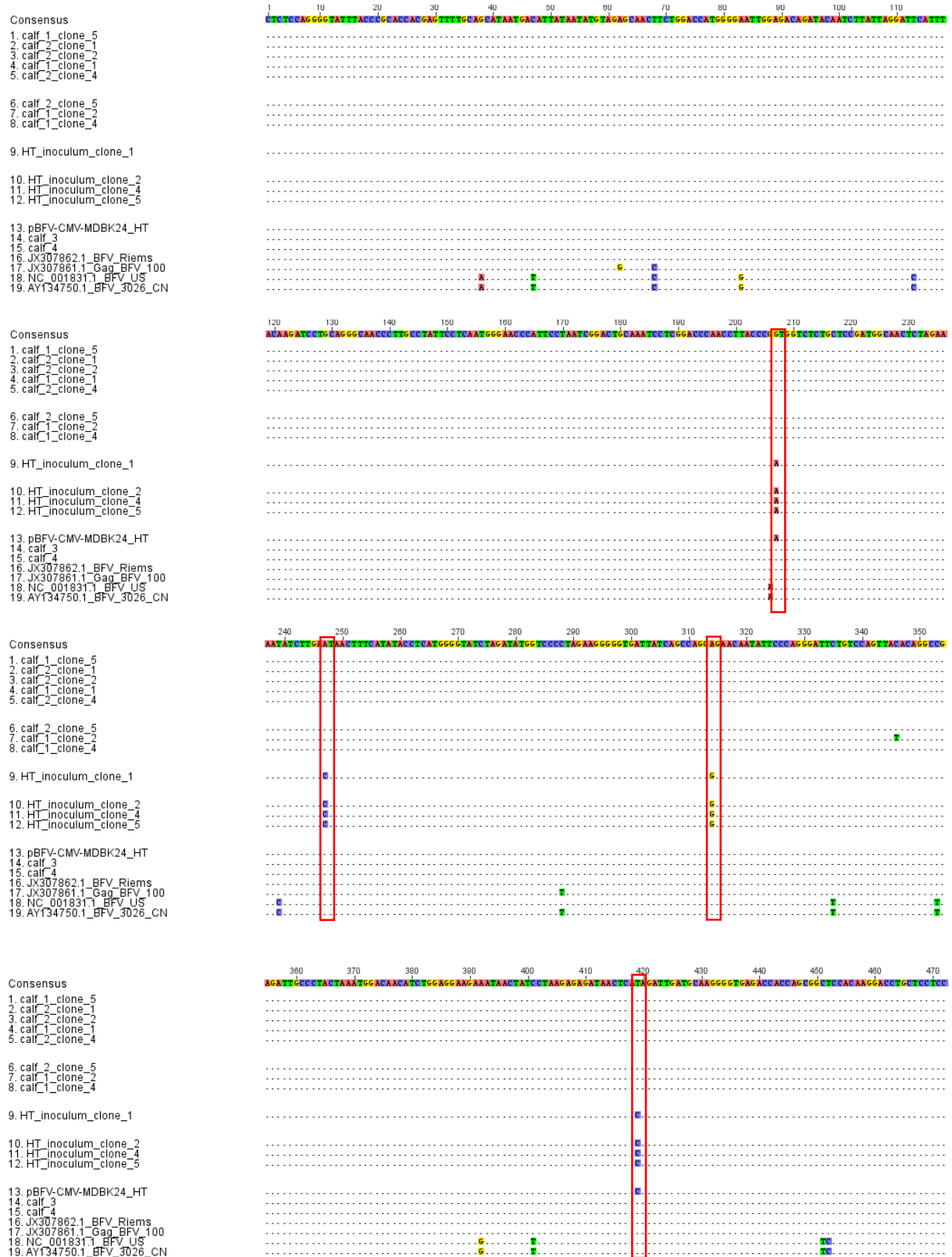
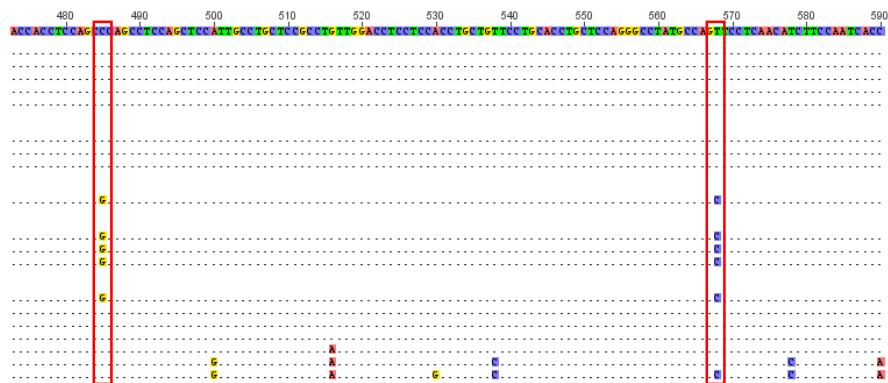


Figure S2. Alignment of 1295 bp nucleotide sequence of BFVBta *gag* gene amplified from calves two weeks post inoculation with HT BFVBta Riems (calves 1 and 2) and wt BFVBta Riems (calves 3 and 4) variants as well as HT BFVBta Riems inoculum (HT inoculum) used for inoculation of calves 1 and 2. Red boxes indicate the sites where adaptive mutations in HT BFVBta infected calves were noted. Dark blue bars indicate insertions and gray bars deletions leading to frame-shift mutations. Reference sequences were as follows: pBFV-CMV-MDBK24\_HT [1] and GenBank derived: JX307862.1\_BFV Riems; JX307861.1\_BFV100; NC001831.1\_BFV\_US; AY134750.1 BFV\_3026\_CN.



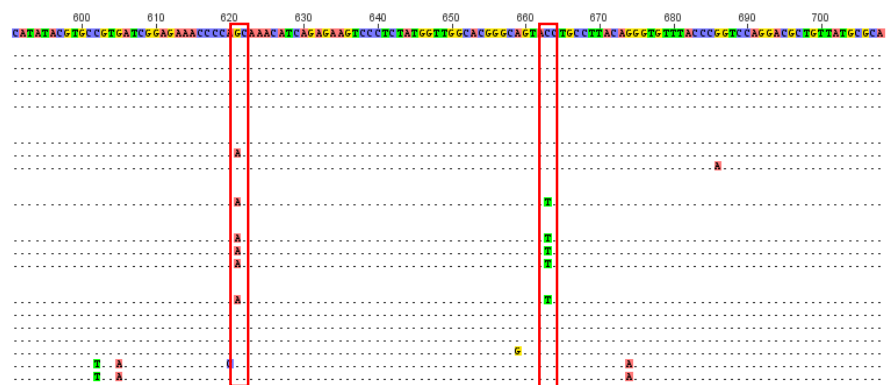
# Consensus

1. calf\_1\_clone\_5
2. calf\_2\_clone\_1
3. calf\_2\_clone\_2
4. calf\_1\_clone\_1
5. calf\_2\_clone\_4
6. calf\_2\_clone\_5
7. calf\_1\_clone\_2
8. calf\_1\_clone\_4
9. HT\_inoculum\_clone\_1
10. HT\_inoculum\_clone\_2
11. HT\_inoculum\_clone\_4
12. HT\_inoculum\_clone\_5
13. pBFV-CMV-MDBK24\_HT
14. calf\_3
15. calf\_4
16. JX307862.1\_BFV\_Riems
17. JX307861.1\_Gag\_BFV\_100
18. NC\_001831.1\_BFV\_US
19. AY134750.1\_BFV\_3026\_CN



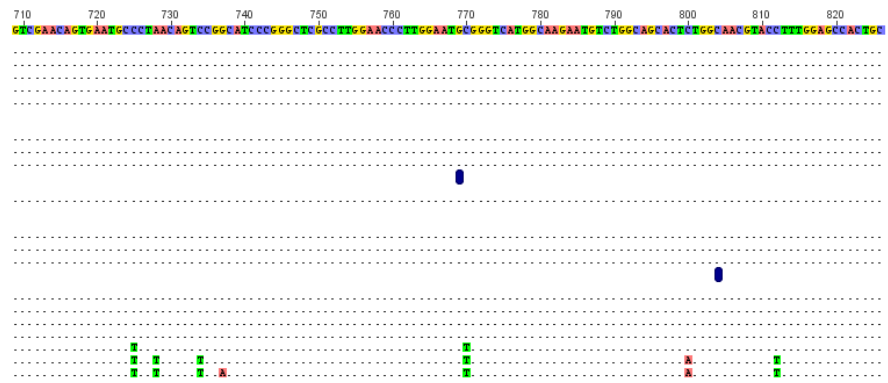
# Consensus

1. calf\_1\_clone\_5
2. calf\_2\_clone\_1
3. calf\_2\_clone\_2
4. calf\_1\_clone\_1
5. calf\_2\_clone\_4
6. calf\_2\_clone\_5
7. calf\_1\_clone\_2
8. calf\_1\_clone\_4
9. HT\_inoculum\_clone\_1
10. HT\_inoculum\_clone\_2
11. HT\_inoculum\_clone\_4
12. HT\_inoculum\_clone\_5
13. pBFV-CMV-MDBK24\_HT
14. calf\_3
15. calf\_4
16. JX307862.1\_BFV\_Riems
17. JX307861.1\_Gag\_BFV\_100
18. NC\_001831.1\_BFV\_US
19. AY134750.1\_BFV\_3026\_CN



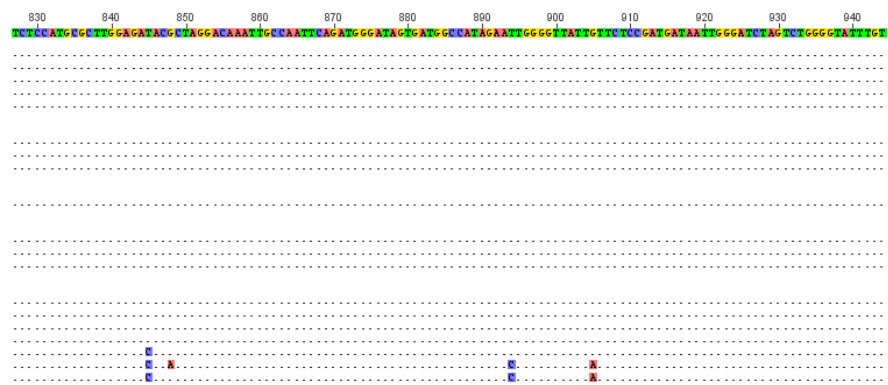
# Consensus

1. calf\_1\_clone\_5
2. calf\_2\_clone\_1
3. calf\_2\_clone\_2
4. calf\_1\_clone\_1
5. calf\_2\_clone\_4
6. calf\_2\_clone\_5
7. calf\_1\_clone\_2
8. calf\_1\_clone\_4
9. HT\_inoculum\_clone\_1
10. HT\_inoculum\_clone\_2
11. HT\_inoculum\_clone\_4
12. HT\_inoculum\_clone\_5
13. pBFV-CMV-MDBK24\_HT
14. calf\_3
15. calf\_4
16. JX307862.1\_BFV\_Riems
17. JX307861.1\_Gag\_BFV\_100
18. NC\_001831.1\_BFV\_US
19. AY134750.1\_BFV\_3026\_CN



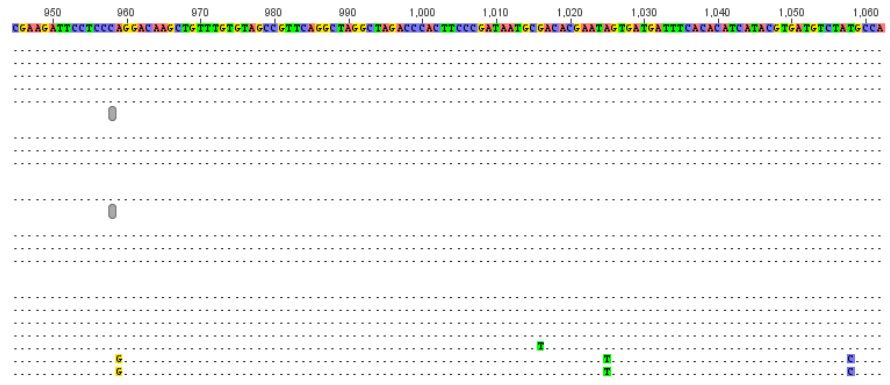
# Consensus

1. calf\_1\_clone\_5
2. calf\_2\_clone\_1
3. calf\_2\_clone\_2
4. calf\_1\_clone\_1
5. calf\_2\_clone\_4
6. calf\_2\_clone\_5
7. calf\_1\_clone\_2
8. calf\_1\_clone\_4
9. HT\_inoculum\_clone\_1
10. HT\_inoculum\_clone\_2
11. HT\_inoculum\_clone\_4
12. HT\_inoculum\_clone\_5
13. pBFV-CMV-MDBK24\_HT
14. calf\_3
15. calf\_4
16. JX307862.1\_BFV\_Riems
17. JX307861.1\_Gag\_BFV\_100
18. NC\_001831.1\_BFV\_US
19. AY134750.1\_BFV\_3026\_CN



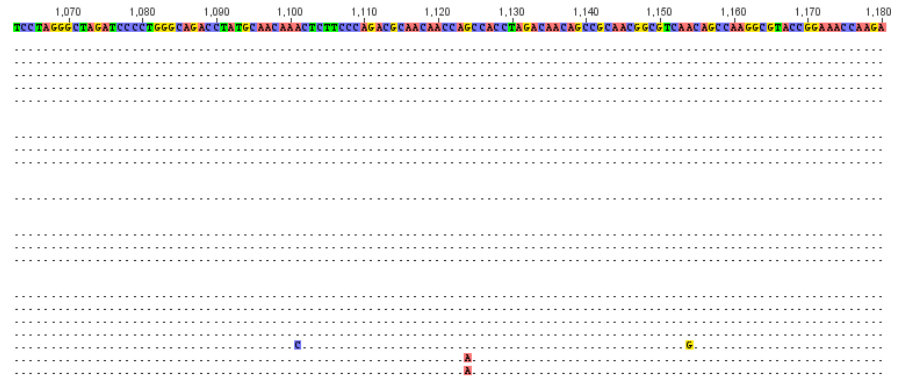
# Consensus

1. calf\_1\_clone\_5  
2. calf\_2\_clone\_1  
3. calf\_2\_clone\_2  
4. calf\_1\_clone\_1  
5. calf\_2\_clone\_4  
  
6. calf\_2\_clone\_5  
7. calf\_1\_clone\_2  
8. calf\_1\_clone\_4  
  
9. HT\_inoculum\_clone\_1  
  
10. HT\_inoculum\_clone\_2  
11. HT\_inoculum\_clone\_4  
12. HT\_inoculum\_clone\_5  
  
13. pBFV-CMV-MDBK24\_HT  
14. calf\_3  
15. calf\_4  
16. JX307862.1\_BFV\_Riems  
17. JX307861.1\_Gag\_BFV\_100  
18. NC\_001831.1\_BFV\_US  
19. AY134750.1\_BFV\_3026\_CN



# Consensus

1. calf\_1\_clone\_5  
2. calf\_2\_clone\_1  
3. calf\_2\_clone\_2  
4. calf\_1\_clone\_1  
5. calf\_2\_clone\_4  
  
6. calf\_2\_clone\_5  
7. calf\_1\_clone\_2  
8. calf\_1\_clone\_4  
  
9. HT\_inoculum\_clone\_1  
  
10. HT\_inoculum\_clone\_2  
11. HT\_inoculum\_clone\_4  
12. HT\_inoculum\_clone\_5  
  
13. pBFV-CMV-MDBK24\_HT  
14. calf\_3  
15. calf\_4  
16. JX307862.1\_BFV\_Riems  
17. JX307861.1\_Gag\_BFV\_100  
18. NC\_001831.1\_BFV\_US  
19. AY134750.1\_BFV\_3026\_CN



# Consensus

1. calf\_1\_clone\_5  
2. calf\_2\_clone\_1  
3. calf\_2\_clone\_2  
4. calf\_1\_clone\_1  
5. calf\_2\_clone\_4  
  
6. calf\_2\_clone\_5  
7. calf\_1\_clone\_2  
8. calf\_1\_clone\_4  
  
9. HT\_inoculum\_clone\_1  
  
10. HT\_inoculum\_clone\_2  
11. HT\_inoculum\_clone\_4  
12. HT\_inoculum\_clone\_5  
  
13. pBFV-CMV-MDBK24\_HT  
14. calf\_3  
15. calf\_4  
16. JX307862.1\_BFV\_Riems  
17. JX307861.1\_Gag\_BFV\_100  
18. NC\_001831.1\_BFV\_US  
19. AY134750.1\_BFV\_3026\_CN

