

AVI_RefSeq

Section 1

NC_001344 (1) 1 10 20 30 40 54
 (1) CATGCA CACCTAAAAGCTTATGCAAAAATTAATGAGGAATCTTTGGATAGGGCT
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 . . . CDS(2524..414): Pre C/C (core) orf
 . . . CDS(2653..414): CDS nucleocapsid protein

NC_001486 (1) CATACC CACTTACGTGTTTATACTAAATTGAATGAACAAAGCTTTGGACAAGCT
 NC_005888 (1) CATGCTCACCTGAAAGCATA TGCAAAAATAAATGAGGAATCTTTAGATAGAGCT
 NC_005890 (1) CATGCTCATTGAAAGCATA CGCTAAGATTAATGAGGAATCTTTGGATAAGGCT
 NC_005950 (1) CATGCACATCTAAAAGCTTATGCAAAAATTAACGAGGAATCTTTGGATCGGGCT
 Consensus (1) CATGC CACCTAAAAGCTTATGCAAAAATTAATGAGGAATCTTTGGATAGGGCT

Section 2

NC_001344 (55) 55 60 70 80 90 108
 (55) AGGAGATTGCTTTGGTGGCATTACA AACTGTTTACTGTGGGGAGAAGCTAACGTT
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (55) CGCAGATTGCTTTGGTGGCATTACA AACTGCTTCCTCTGGGGAGAAGCCA CTGTT
 NC_005888 (55) AGGAGATTGCTTTGGTGGCATTATA AACTGTTTATTGTGGGGCGAGCCTAACGTT
 NC_005890 (55) AGGAGATTGCTTTGGTGGCATTATA AACTGTTTACTGTGGGGAGAAGCTAACGTT
 NC_005950 (55) AGACGATTGCTTTGGTGGCATTACA AACTGTTTACTGTGGGGAGAAGCTAACGTTA
 Consensus (55) AGGAGATTGCTTTGGTGGCATTACA AACTGTTTACTGTGGGGAGAAGCTAACGTT

NC_001344 (109) 109 120 130 140 150 162
 (109) ACTAATTAACATTTCTCGGCTCCGTACTTGGTTGTCAACTCCGGAAAAGTACC GA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (109) ACA AAT TATATTTCTCGCCTCCGTACTTGGCTTTC TACTCCGAAA AATATCGA
 NC_005888 (109) ACCAAC TATATTTCTGAGATTAAAGAACTTGGTTATCCACACCTGAAA AATACAGA
 NC_005890 (109) ACTAAT TATATTTCTCGTTTACGTACTTGGTTATCAACACCTGAGAGATATAGA
 NC_005950 (109) ACA AAC TATATTTCTCGCCTCCGTACTTGGTTGTCAACTCCTGAAA AAGTATAGA
 Consensus (109) AC AATTATATTTCTCG CTCCGTACTTGGTT TCAACTCCTGAAA AATATAGA

NC_001344 (163) 163 170 180 190 200 216
 (163) GGC CGT GATGCCCA ACCATTGAAGCAATCACTAGACCAATCCAAGCGGCTCAG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (163) GGC AAG GATGCCCA ACCATTGAAGCAATCACTAGACCAATCCA GGTGGCTCA A
 NC_005888 (163) GGA AAA GATGCCCA ACCATTGAAGCAATCACTAGACCAATCCA A GTGGC GCA G
 NC_005890 (163) GGTAGA GATGCCCA ACCATTGAAGCAATCACTAGACCAATCCA A GTGGC TCA G
 NC_005950 (163) GGCAG G GATGCCCA ACCATTGAAGCAATCACTAGACCAATCCA A GTGGC TCA G
 Consensus (163) GGCAG GATGCCCA ACCATTGAAGCAATCACTAGACCAATCCA A GTGGC TCA G

NC_001344 (217) 217 230 240 250 260 270
 (217) GGAGGCAGAAAACA TCTTC GGGAAC TAGAAAA CCTCGTGGACT CGAACCTAGA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (217) GGAGGCAGAAA TCAA ACTAA GGGAAC TAGAAAA CCTCGTGGACT CGAACCTAGA
 NC_005888 (217) GGAGGCAGAAA TAA GACTCAG GGAGT TAGAAAA TCTCGTGGACT CGAACCTAGG
 NC_005890 (217) GGAGGCAGAAA TAAAA CTCA GGGTT CTAGAAAA CCTCGTGGATT GCAACCTAGA
 NC_005950 (217) GGAGGCAGAAA ACA TCTAC GGCTA CTAGAAAA CCTCGTGGACT CGAACCTAGA
 Consensus (217) GGAGGCAGAAATAAACT AGGGAAC TAGAAAACCTCGTGGACTCGAACCTAGA

NC_001344 (271) 271 280 290 300 310 324
 (271) AGAAGAA AAGTTAAAACCACAG TTGTCTATGGGAGAAGACGTTCA AAGTCCAGG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (271) AGA C GAAAG GTTAAAACCACAG TTGTCTATGGGAGAAGACGTTCA AAGTCCCGA
 NC_005888 (271) AGAAGAAAGAGTTAAAACCACAA TTGTCTATGGGAGAAGACGTTCA AAGTCCAGG
 NC_005890 (271) AGAAGGAAAGTTAAAACCACAG TTGTCTATGGGAGAAGACGTTCA AAGTCCAGG
 NC_005950 (271) AGAAGAA AAGTTAAAACCACAG TTGTCTATGGGAGAAGACGTTCA AAGTCCCGG
 Consensus (271) AGAAGAAAAGTTAAAACCACAGTTGTCTATGGGAGAAGACGTTCAAAGTCCAGG

NC_001344 (325) 325 330 340 350 360 378
 (325) GAAAGGAGAGCCCTTCACCCCAA CGTGCGGGCTCCCCTCTCCCA CGTAA GTTCG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (325) GGCAGGAGATCCTCTC CATCCCAA CGTGCGGGCTCCCCTCTCCCA CGTAA TCGG
 NC_005888 (325) GAAAGGAGAGCCCTTACCCCA GCGTGCGGGCTCCCCTCTCCCG CGTAA TTCG
 NC_005890 (325) GATAGGAGAGCCCTTCACCCCAA CGTGCGGGCTCCCCTCTCCCA CGTCC TTCG
 NC_005950 (325) GAAAGGAGAGCCTCTTCACCCCAA CGTGCGGGCTCCCCTCTCCCA CGTAA GTTCG
 Consensus (325) GAAAGGAGAGCCCTTTCACCCCAACGTGCGGGCTCCCCTCTCCACGTA TTCG

NC_001344 (379) 379 390 400 410 420 432
 (379) AGCAGC CACCA TAGATCTCCCTCG CCTAGGA AATAAA TTA CCTGCTAAG CATCA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (379) GGAAC CAGACA CGATCC CCCTCA CCTAGGG AATA GGAC CCTGC ACGG CATAA
 NC_005888 (379) AGGAC CACCAC GATCT CCCTCG CCTAGGG AATA AAGAC CCGCT CGT CATAA
 NC_005890 (379) ACTAGT CACCAC GATCT CCCTCG CCTAGGA AATA AAGA CCTGC AAGG CATCA
 NC_005950 (379) AGCAGC CACCAC GATCT CCCTCG CCTAGGA AATAAA TTA CCTGCTAAG CATCA
 Consensus (379) AG AGCCACCACCGATCTCCCTCGCCTAGGAAATAAAGAACCTGCTAGGCATCA

NC_001344 (433) 433 440 450 460 470 486
 (433) CTTGGGGAAGTTGTCAGGTTTATATCAAATGAAGGGTTGTACC TTTAACCC TGA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (433) ACTGGGAA AATTAACTGGGTTGTATCAAATGAAGGGCTGTGAGTTTAAACCCACA
 NC_005888 (433) ACTGGGGAAGTTATCCGATTGTATCAAATGAAGGGCTGTGAGTTTAAACCCCA
 NC_005890 (433) TTTAGGTAAATTGTCAGGATTTATATCAAATGAAGGGTTGTGATTTTAAATCC TGC
 NC_005950 (433) CTTAGGA A AATTGTCAGGTTTATATCAAATGAAGGGCTGTACTTTTAAACCCAAA
 Consensus (433) TTGGG AAATTGTCAGG TTATATCAAATGAAGGGCTGTGA TTTAACCC A

NC_001344 (487) 487 500 510 520 530 540
 (487) ATGGAAAGTACCTGATATTTTCGGATACTCATTTT GATTTTAC AAGTAGTA AATGA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (487) CTGGAA GATACCAGACATTTTCGGCTACAACTTCTCTCAGGAGATAATTAACGA
 NC_005888 (487) ATGGAAAGTACCTGATATTTTCGGATACTCATTTTAAATTTAGATATAATTAATGA
 NC_005890 (487) ATGGAAAGTACCAGACATTTTCGGATACTCATTTTAAATATTGATATAAAAATGA
 NC_005950 (487) TTTGGAAAGTTCCTGATATTTTCGGATACTCATTTT GATTTTACGTTACAAATGA
 Consensus (487) ATGGAAAGTACCTGATATTTTCGGATACTCATTTT AT T GA ATAATAAATGA

NC_001344 (541) 541 550 560 570 580 594
 (541) GTGCCCTTCCCGAAATTGGAAATAATTGACTCCAGCCAAATTTTGGCCCAAGAG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (541) GTGCCCTTCCCGAAATTGGAAATACTTGACTCCAGCCAAAGTTTGGCCCAAGAG
 NC_005888 (541) GTGCCCTTCCAGAAATTGGAAATACCTTGACTCCAGCCAAATTTTGGCCCAAGAG
 NC_005890 (541) GTGCCCTTCCCGAAATTGGAAATAATTGACTCCAGCCAAATTTTGGCCCAAGAG
 NC_005950 (541) GTGCCCTTCCCGAAATTGGAAATACTTGACTCCAGCCAAATTTTGGCCCAAGAG
 Consensus (541) GTGCCCTTCCCGAAATTGGAAATATCTGACTCCAGCCAAATTTTGGCCCAAGAG

NC_001344 (595) 595 600 610 620 630 648
 (595) CATTTCTACTTTCCAGTTCAGGCAGGGGTTAAAGCGAAATATCCTGACAACGT
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (595) CATTTCTACTTCAGTTCAGTTCAGGGGTTAAACCCAAAGTACCCAGATTCCCA
 NC_005888 (595) CATTTCTACTTTCCAGCGCATTCAGGGGTTAAACCCAAAGTATCCGGATGACGT
 NC_005890 (595) CATTTCTACTTTCCAGTACATGCAGGGGTTAAACCCAAATATCCTGACAATGT
 NC_005950 (595) CATTTCTACTTTCCATACAGGCAGGGGTTAAACCAAGTATCCTGACAATGT
 Consensus (595) CATTTCTACTTTCCAGT CATGCAGGGGTTAAACCCAAAGTATCCTGACAACGT

Section 13

NC_001344 (649) **GATGCA**G**CATGAG**GC**CAATA**GT**AGGTAAA**T**ATTTGAA**C**AGGCTCTA**T**GAAGCAGG**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf

NC_001486 (649) **G**C**AAA**A**T**C**ATGAG**T**C**A**CT**G**G**T**AAA**T**GAT**T**AT**C**T**C**AAT**A**AGCTCT**T**TGAAGCAGG**
 NC_005888 (649) **G**G**CAGGA**C**ATGAG**C**AAA**T**AGT**G**GGTCAA**T**ATTTAA**C**CAAGCTCT**T**TGAAGCGGG**
 NC_005890 (649) **GATGCAA**C**ATGAG**C**AAA**T**TGT**AG**GTAAA**T**ATTTAA**C**CAAGCTCTA**T**GAAGCAGG**
 NC_005950 (649) **GATGCAA**C**ATGA**A**TCAATA**GT**AGGTAAA**T**ATTTGAG**C**CAAGCTCTA**T**GAAGCAGG**
 Consensus (649) **GATGCAACATGAG** **CAATAGTAGGTAAA**T**ATTT** **A** **CAAGCTCTATGAAGCAGG**

Section 14

NC_001344 (703) **AATCCT**T**TATAAGCG**GA**TAT**C**TAAACATTTGGT**T**ACATT**C**AAAGG**CA**AGCCTTA**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 TATA Signal(710..713): TATA Box

NC_001486 (703) **AATCCT**C**TATAAGCG****AGT**T**TCTAAACATTTGGT**C**ACATT**C**AAAGG**C**CCG**T**ATTT**
 NC_005888 (703) **AATCCT**T**TATAAGCG****AGAA**T**TCTAAACATTTGGT**C**ACT**T**TTAAAGGG**A**ACC**C**CTTA**
 NC_005890 (703) **AATCCT**T**TATAAGCG****GATA**T**CAAAACATTTGGTAA**C**ATT**T**AAAGG**T**CGGCCTTA**
 NC_005950 (703) **AATCCT**T**TATAAGCG****AGTA**T**TCTAAACATTTGGT**C**ACATT**T**AAAGG**A**CAACCTTA**
 Consensus (703) **AATCCTTTATAAGCGAGTAT**C**TAAACATTTGGT**C**ACATT**T**AAAGG** **C** **GCCTTA**

AVI_RefSeq

Section 15

NC_001344 (757) 757 770 780 790 800 810
 TAATTGGGAAC TTCAATACCTTGTCAA GCAACATCAA GTTCCTGATGGGA CAAC
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (757) CACTGGGAACAAAAGCACCTTGTCCGCAACA-----ACATGGGGCA TA
 NC_005888 (757) TCAGTGGGAACGACAATACCTTGTCAATCAACCTGCTGATTTACATGGGGCAGC
 NC_005890 (757) TCCATGGGAACAGCAATACCTTGTCAATCAACATCTTGACAAAATGGGGCAA
 NC_005950 (757) TAATTGGGAACGACAATACCTTGTCAATCAACATCTAGTACCTGATGGGGCAAC
 Consensus (757) TAATTGGGAAC ACAATACCTTGTCAATCAACATC G A ATGGGGCAAC

Section 16

NC_001344 (811) 811 820 830 840 850 864
 AAC CAGCAAAATCAATGGA C GTGC GGAGAATC GAAGGAGGAGAGC TCTGCTAA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (802) CTCAGCAAAATCAACGACAGACAGGAGAGTAGAAGGAGGAGAA TATTACTGC
 NC_005888 (811) AAC CAGCAAAATCAATGGCA GAAAGAAGAGTCGAAGGAGCGGAATCCTCTTC
 NC_005890 (811) CACCAGCAAAATCAATGGATGTGAGAAGAATAGAAGGAGGAGAGATTTTATTGA
 NC_005950 (811) ATCAAGCAAAATCAATGGATGCTCGGAGAATC GAAGGAGGAGAA TACTTTTAA
 Consensus (811) AAC CAGCAAAATCAATGGA G AGGAGAATCGAAGGAGGAGAA T CT CT A

NC_001344 (865) 865 870 880 890 900 918
 (865) ATCAATTAGCAGGCCGATGAT --- TCCGAAA --- GGGACTGTAACATGGT

Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (856) AACATCTAGCAGGAAGAATGATTCCTCCGAAATTTTCGGGCCATAACAACGG
 NC_005888 (865) AACCAATTGGCAGGAAGGATGAT --- CCCAAA --- GGGACGGTCACATGGT
 NC_005890 (865) ATCAACTAGCAGGAAGAATGAT --- CCCAAA --- GGGACTGTACATGGT
 NC_005950 (865) ATCAACTGGCAGGACGATGAT --- ACCAAA --- GGGACAGTAACATGGT
 Consensus (865) ATCAACTAGCAGGAAG ATGAT CCCAAA GGGAC GTAACATGGT

NC_001344 (919) 919 930 940 950 960 972
 (910) CGGGCAAATTTCCAACAATAGATCATTATTAGACCATGTGCAACAATGGAAGG

Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

Protein Binding Site(948..958): protein binding site ...

NC_001486 (910) CAGGAAAATTTCTTACCATTCAACACGTTGATGGATCACATCGACTCAGTGGAAAG
 NC_005888 (910) CAGGAAAATATCCTACCATTGGAACACGTTATGGACCATGTGCAACAATGGAAG
 NC_005890 (910) CGGGCAAATATCCAACGATAGATCACCTATTAGACCATGTGCAACAATGGAAG
 NC_005950 (910) CGGGAAAATTTCCATCAATAGATCACGTTGATGGATCATGTGCAACAATGGAAG
 Consensus (919) C GG AAATTTCCAAC ATAGATCACGT ATGGACCATGTGCAACAATGGAAG

NC_001344 (973) 973 980 990 1000 1010 1026
 (964) **A**GG**TAAACAC**T**CTTCAACA**A**CAGGGCGCTTGGCC**T**GCTGGGGCGGGAAGACGAT**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (964) **A**A**CTTCGGAC****CCTACA**AG**CAAGG**GG**GCAC**TGG**CCG**GA**GGG**GA**CAG**CA**CGCCGAT**
 NC_005888 (964) **A**GA**TAAACAC****CATGCAACA**CA**AGGG**GC**T**TGG**CCG**GA**AGG**AG**CA**GG**GAGGAGAC**
 NC_005890 (964) **A**A**A**T**A**A**A**T**A**C**TCTT**CA**GCA**CA**AGG**T**GC**TGG**CC**T**CA**AG**GGG**CG**GGA**AG**GAGAT**
 NC_005950 (964) **A**A**A**T**A**A**A**CA**CCTG**CA**AAA**CA**GGT**GC**T**TGG**CC**A**GA**AG**GG**CG**AG**GA**AGGAGG**
 Consensus (973) AAATAAACACCCCT CAACAACAGGG GC TGGCC GAAGGGGCAGGAAGGAGAT

NC_001344 (1018) (1027) 1027 1040 1050 1060 1070 1080
TGGGACTGACCA**AATCC**ACT**CCTCA**CG**GAGAC**GC**CTCAGCC**TC**AGTGGAC**T**CCCG**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (1018) **TGGG**CT**TGG**---**ATCA**AC**CG**GG**CC**AC**CC**CT**CC**AC**CC**AT**CACG**TGG**AC**AG**AAG**
 NC_005888 (1018) **TGGG**ACT**AAC**CA**ACC**AG**CTCC**CC**CTG**CC**GCTCC**GG**TGATA**AA**AT**TGG**AC**ACC**GG**
 NC_005890 (1018) **TGGG**AT**TGG**AAA**ATCC**CA**ATCCT**CA**AGAG**AT**TCTC**AG**CCCG**TT**TGG**ACT**CCAG**
 NC_005950 (1018) **TAGG**T**CTC**AG**AACC**CT**ACC**CT**CA**AG**AGAT**T**CCTCA**AC**CC**CA**CTGG**AC**ACCAG**
 Consensus (1027) TGGGACTGAC AATCC ACTCCTCA GAGACTCCTCAGCCC A TGGACACCAG

(1081) 1081 1090 1100 1110 1120 1134
 NC_001344 (1072) **A**G**G**A**A**G**A**T**C**A**A**A**A**A**G**C**T**C**G**C**G**A**G**G**C**T**T**T**C**G**T**C**G**A**T**A**T**C**A**A**G**A**A**G**A**A**A**G**G**C**C**A**C**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (1069) **A**A**G**A**A**G**A**C**A**A**A**A**A**G**G**C**CA**A**G****G**A**G**T**T**C**TT**CA**AG**CA**AT**A**T**C**A**A**G**A**ACC**G**T**C**C** --
 NC_005888 (1072) **A**A**G**A**G**G**A**C**G**C**CA**A**G**C**CG**A**GA**A**T**A**T**T**TT**C**AG**A**AG**A**T**A**T**C**A**A**GA**A**G**A**G**A**CC**AA
 NC_005890 (1072) **A**G**G**A**A**G**A**T**C**A**A**C**G**T**G**C**AC**G**A****G**A**G**G**C**T**T**T**C**A**AA**A**AT**A**T**C**AA**A**AG**A**A**A**G**A**CC**T**C**
 NC_005950 (1072) **A**A**G**A**A**G**A**T**C**A**G**A**A**A**G**C**T**C**G**G**A**G**G**C**T**T**T**C**G**C**AG**A**T**A**T**C**A**G**GA**A**G**A**A**A**G**A**CC**T**C**
 Consensus (1081) AAGAAGATCAAAA GC CG GAGGCTTTTCG AGATATCAAGAAGAAAGACC C

(1135) 1135 1140 1150 1160 1170 1188
 NC_001344 (1126) **C**G**G**A**A**A ----- **CC**A**CC** ----- **AC**CA**TT**G**C**T**C** -----
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (1121) -- **G**A**A**A**CCC**-----G----- **C**CG**AA**AC**GG**CA**CC**A**CC**T**CC**CA**T**C**ACC**G**AG**T**T**G**C**A**C**G
 NC_005888 (1126) AG**G**A**A**A-----C**A**----- **CC**A**CC**AT**T**C**T**-**CC**CA**CA**AG**T**C-----
 NC_005890 (1126) **C**A**G**A**A**G**AG**AT**T**CC**G**AG**T**C**TT**TC**G**AA**A**AG**G****CC**A**CC**CG**A**AG**AA****ACC**AA**AA**AT**T**C-----
 NC_005950 (1126) **C**A**G**A**A**A----- **CC**A**CC**----- **AC**CA**TT**CC**AC**-----
 Consensus (1135) C GAAA C CCACC ACCA TC

(1189) 1189 1200 1210 1220 1230 1242
 NC_001344 (1147) CTA CGTC ACCAA CTC C GTGG AAGCT ACA ACCA GGG GAC GAT CCA CTCCT GGAAA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (1165) CTG CAGA ACC TC CTCAGTGG AAG A TTTC ACC AGAAGAC --- CCTTTACT CAAAG
 NC_005888 (1156) CACCG--AA-AACTCAGTGGAGCTGAA ACCCGGAGA --- TCCTCTCCTCAGCA
 NC_005890 (1177) CACCCTCAACTCTCTCAGTGGAACTGCAACCCGGAGA --- TTCTCTCCTGGGAA
 NC_005950 (1147) CAAC---ACCAA CTC C GTGG AA ACTGCA ACC CGGG GAC GAT CCA CTCCT GGAAA
 Consensus (1189) CA C ACCAACTCAGTGG AAGCTGCAACCCGGAGAC TCCTCTCCTGGGAA

(1243) 1243 1250 1260 1270 1280 1296
 NC_001344 (1201) ACA AGTCTTTACTCGA GACTCATCCTCTTTTAC CAGAATCC C GAGCCAGC CGTGC
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein

NC_001486 (1216) CAAAGGC-----G---CTTATCCCGT--CAAG-----GAACCAGAGGTAC
 NC_005888 (1204) CGCAACC---ACTGT--ACCGAC CAGCAGAAACCAG---CGGAACCGGATATTTC
 NC_005890 (1228) ATCAATCTTTACTGGA GACTCATCGTTATAACCGGAATCCGGAACCAGCAGTCC
 NC_005950 (1198) CCAAGTCTTTACTAGAAACGCGACTGCAAAACCCAGAATTC C GAGCCAGCCGTGC
 Consensus (1243) C AAGTC TTACT GA ACTCATCCGC ACCAGAAT C GAACCAGC GT C

(1297) 1297 1310 1320 1330 1340 1350
 NC_001344 (1255) CTGTGATAAAGACTCCTCCCTCA --- AGAAGAAGA AAAATGCTGGTACCTTCG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein
 NC_001486 (1252) CGATCC TCAAGGTC CCAAGCTCA CCAAC AAGAAGA AAAATGGGAGCTACCTTCG
 NC_005888 (1249) CGGTCATCAAACACCGAAAGTCC --- CGAAGAAA --- TGTCTCTACCTTCG
 NC_005890 (1282) CAGTGATAAAACCTCCAGACTGA --- AAAGAAGA --- TGTCTGGTTCTTCG
 NC_005950 (1252) CTGTAATAAAGTACCCTCGTCA --- AGAAGAAGA AAAATGCTGGTACCTTCG
 Consensus (1297) C GT ATAAAGAC CC A CTCA AGAAGAAGAAAATGTCTGTACCTTCG

(1351) 1351 1360 1370 1380 1390 1404
 NC_001344 (1306) GGGGAATACTAGCTGGCCTAATCGGATTACTGGTAAGCTTTTTCTTGTGATAA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein
 NC_001486 (1306) GGGGAATACTAGCTGGCCTAATCGGTTACTGGTAGGATTTTTCTTGTGATCAA
 NC_005888 (1297) GGGGAATACTAGCTGGCCTAATCGGATTACTGGTAGGATTTTTCTTGTGATAA
 NC_005890 (1330) AGGGGAATACTAGCTGGCCTAATCGGATTACTGGTAGGCTTTTTCTTGTGATAA
 NC_005950 (1303) AGGGGAATACTAGCTGGCCTAATCGGATTACTGGTAGGCTTTTTCTTGTGATAA
 Consensus (1351) GGGGAATACTAGCTGGCCTAATCGGATTACTGGTAGGCTTTTTCTTGTGATAA

(1405) 1405 1410 1420 1430 1440 1458
 NC_001344 (1360) AAATTCTCGAAATACTACGGAGGCTAGATTGGTGGTGGATTTCTCTCAGTTCTC
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1360) AAATTCTAGAAATACTGAGGAGCTAGATCGGTGGTGGATTTCTCTCAGTTCTC
 NC_005888 (1351) AAATTCTAGAAATACTGCGGAGGCTAGATCGGTGGTGGATTTCTCTCAGTTCTC
 NC_005890 (1384) AAATTCTCGAAATACTGAGGAGGCTAGATTGGTGGTGGATTTCTCTCAGTTCTC
 NC_005950 (1357) AAATTCTAGAAATACTACGGAGGCTAGATTGGTGGTGGATTTCTCTCAGTTCTC
 Consensus (1405) AAATTCTAGAAATACTGCGGAGGCTAGATTGGTGGTGGATTTCTCTCAGTTCTC

(1459) 1459 1470 1480 1490 1500 1512
 NC_001344 (1414) CAAAGGGA AAAAATGCAATGCGCTTTCCAAGATACTGGAGGCCAAAATCTCTCCAC
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1414) CAAAGGGA AAAAATGCAATGCGCTTTCCA AATACTGGT GCCAAAATCTCA CCAC
 NC_005888 (1405) CAAAGGGA AAACATGCAATGCGCTTTCCA AATACTGGAGGCCAAAATCTCTCCAC
 NC_005890 (1438) CAAAGGGA AAAAATGCAATGCGCTTTCCAAGATACTGGAGGCCAAAATCTCTCCAC
 NC_005950 (1411) CAAAGGGA AAAAATGCAATGCGCTTTCCAAGATACTGGAGGCCAAAATCTCA CCAC
 Consensus (1459) CAAAGGGA AAAAATGCAATGCGCTTTCCAAGATACTGGAGGCCAAAATCTCTCCAC

(1513) 1513 1520 1530 1540 1550 1566
 NC_001344 (1468) **A**T**T**ACGT**C**GGAT**C**TG**C**CCCGTGGGGATGCC**C**AGGATTTCT**C**TGGACT**T**TATCT**C**A
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1468) **A**T**T**ACGT**A**GGAT**C**TG**C**CCCGTGGGGATGCC**C**AGGATTTCT**C**TGGACT**T**TATCT**C**A
 NC_005888 (1459) **A**T**T**ACGT**A**GGAT**C**TG**C**CCCGTGGGGATGCC**C**AGGATTTCT**T**TGGACT**C**TATCT**C**A
 NC_005890 (1492) **A**C**T**ACGT**A**GGAT**C**TG**C**CCCGTGGGGATGCC**C**AGGATTTCT**T**TGGACT**T**TATCT**C**A
 NC_005950 (1465) **A**T**T**ACGT**A**GGAT**C**TG**C**CCCGTGGGGATGCC**C**AGGATTTCT**C**TGGACT**T**TATCT**C**A
 Consensus (1513) ATTACGTAGGATCCTGCCCGTGGGGATGCCAGGATTTCTCTGGACTTATCTCA

(1567) 1567 1580 1590 1600 1610 1620
 NC_001344 (1522) **G**GCTTTT**T**ATCATCTT**C**CT**C**TT**A**A**T**CC**T**GC**T**AGTAGCAG**C**AGGCTTGCT**G**T**A**T**C**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1522) **G**GCTTTT**T**ATCATCTT**C**CT**C**TT**G**C**T**CC**T**GC**T**AGTAGCAG**C**AGGCTTGCT**G**T**T**T**C**
 NC_005888 (1513) **G**GCTTTT**T**ATCATCTT**C**CT**C**TT**A**A**T**CC**T**GC**A**TAGTAGCAG**C**AGGCTTGCT**A**T**A**T**C**
 NC_005890 (1546) **G**GCTTTT**T**ATCATCTT**C**CT**T**TT**A**A**T**CC**T**GC**T**AGTAGCAG**C**AGGCTTGCT**G**T**A**T**C**
 NC_005950 (1519) **G**GCTTTT**T**ATCATCTT**C**CT**C**TT**A**A**T**CC**T**GC**T**AGTAGCAG**C**AGGCTTGCT**G**T**A**T**C**
 Consensus (1567) GGCTTTTATCATCTTCTTTAATCCTGCTAGTAGCAGCAGGCTTGCTGTATC

(1621) 1621 1630 1640 1650 1660 1674
 NC_001344 (1576) TGACGGACAACATGTCTATATTTTAGA AAAGCTCCAATGGGAGTCGGTCTCAG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1576) TGACGGAAACAAGTCTACTATTTTCGA AAAGCTCCAATGGGAGTCGGTCTCAG
 NC_005888 (1567) TGACGGACAACATGTCTACTATTTTCGCAAAGCTCCAATGGGAGTCGGTCTCAG
 NC_005890 (1600) TGACGGACAACGGGTCTACTATTTTCGGAAAGCTCCAATGGGAGTCGGCCTTAG
 NC_005950 (1573) TGACGGACAACGGGTCTACTATTTTAGGAAAGCTCCAATGGGAGTCGGTCTCAG
 Consensus (1621) TGACGGACAACA GTCTACTATTTTCG AAAGCTCCAATGGGAGTCGGTCTCAG

(1675) 1675 1680 1690 1700 1710 1728
 NC_001344 (1630) TCCTTTCTCCTCCATCTCTTCACTACTGCCCTCGGATCCAGAAATCGCTCGTCG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1630) CCCTTTCTCCTCCATCTCTTCACTACTGCCCTCGGATCCAGAAATCGCTCGTCG
 NC_005888 (1621) CCCTTTCTCCTCCATCTCTTCACTACTGCCCTCGGATCCAGAAATCGCTCGTCG
 NC_005890 (1654) CCCTTTCTCCTCCATCTCTTCACTACTGCCCTCGGATCCAGAAATCGCTCGTCG
 NC_005950 (1627) CCCTTTCTCCTCCATCTCTTCACTACTGCCCTCGGATCCAGAAATCTCTCGTCG
 Consensus (1675) CCCTTTCTCCTCCATCTCTTCACTACTGCCCTCGGATCCAGAAATCGCTCGTCG

(1729) 1729 1740 1750 1760 1770 1782
 NC_001344 (1684) CTTTAA T GTTTGGACTTTT TACTTATATGGAT GACTTCCTCCTCTG C CACCCAA A
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1684) CTTTAA C GTTTGGACTTTT TCTTATATGGAC GACTTCCTCCTCTGT CACCCAA G
 NC_005888 (1675) CTTTAA T GTTTGGACTTTT TACTTATATGGAC GACTTCCTCCTCTGT CACCCAA A
 NC_005890 (1708) CTTTAA C GTTTGGACTTTT CACTTATATGGAT GACTTCCTCCTCTGT CACCCAA A
 NC_005950 (1681) CTTTAA T GTTTGGACTTTT TACTTATATGGAT GACTTCCTCCTCTG C CACCCAA A
 Consensus (1729) CTTTAA T GTTTGGACTTTT TACTTATATGGAT GACTTCCTCCTCTGT CACCCAA A

(1783) 1783 1790 1800 1810 1820 1836
 NC_001344 (1738) CGCTCGTCACCTT AACTCAA TTAGCCACGCTGTCTG TTTCTTCAAGAA TT
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Gene(693..1793): Gene_5
 CDS(693..1793): CDS Pre-S/S orf
 Gene(801..1793): Gene_6
 CDS(801..1793): CDS Pre S protein
 Gene(1290..1793): Gene_7
 CDS(1290..1793): CDS Surface protein

NC_001486 (1738) TCGCTCGTCACCTT AACCAA TTAGCCACGCTGTCTGCAC TTTTCTTCAAGAA TT
 NC_005888 (1729) CGCTCGTCACCTT AACTCAA GGAGCCACGCTGTCTGCT TTTTCTTCAAGAG CT
 NC_005890 (1762) CGCTCGTCACCTT CACGCAA TTAGCAACTCTGTTTGCAA TTTTCTTCAAGAG TT
 NC_005950 (1735) CGCTCGTCACCTT AACTCAA TTAGCCACGCTGTCTGCAC TTTTCTTCAAGAG CT
 Consensus (1783) CGCTCGTCACCTT AACTCAA TTAGCCACGCTGTCTGCAC TTTTCTTCAAGAG TT

(1837) 1837 1850 1860 1870 1880 1890
 NC_001344 (1792) **AGGAATACGCATAAACTTTGATAAGACTACTCCGTCTCCGTAAATGACATAAG**

Source(1..3027): Source_1

Gene(20..2536): Gene_3

CDS(20..2536): CDS Polymerase orf

Gene(170..2536): Gene_4

CDS(170..2536): CDS Polymerase protein

Gene(693..1793): Gene_5

CDS(693..1793): CDS Pre-S/S orf

Gene(801..1793): Gene_6

CDS(801..1793): CDS Pre S protein

Gene(1290..1793): Gene_7

CDS(1290..1793): CDS Surface protein

NC_001486 (1792) **CGGGATAAGGATCAACTTTGACAAAATGACTCCTTC CCGGTGAC AACGATCAG**

NC_005888 (1783) **AGGAGTGAGAATAAACTTCGACAAAACAACTCCTTCA CCACTAACTGAGATAAA**

NC_005890 (1816) **AGGAATTGGATCAATTTTGTATAAACACACCTTCTCCGTAACTGAAATAAG**

NC_005950 (1789) **AGGAATCCGAATAAACTTTGACAAAACACACCATCTCCGTTAATGAAATTAG**

Consensus (1837) **AGGAAT CG ATAACTTTGACAAAAC ACTCCTTCTCC GTAAGTGA ATAAG**

(1891) 1891 1900 1910 1920 1930 1944
 NC_001344 (1846) **ATTCCTCGGT TACCAGATTGATCAGAAATTCATGAAGATCGAAGA AAGCAGATG**

Source(1..3027): Source_1

Gene(20..2536): Gene_3

CDS(20..2536): CDS Polymerase orf

Gene(170..2536): Gene_4

CDS(170..2536): CDS Polymerase protein

NC_001486 (1846) **ATTTCTCGGC TACGAGATCAGCAAACAA CATATGAAGATCGAAGA AAGCAGATG**

NC_005888 (1837) **ATTCCTCGGT TACCTGATCGACGATAAATTTATGAAAATTGAGGATCAACGCTG**

NC_005890 (1870) **ATTCCTCGGATATCAAATTGATTCAAAATTTATGAGAATTGAAGACATGAGATG**

NC_005950 (1843) **ATTCCTCGGATATCAAATTGATCATCACTACATGAGGATTGAAGA AAGCAGATG**

Consensus (1891) **ATTCCTCGG TACCAGATTGAT A AAATTTATGAAGATTGAAGAAAGCAGATG**

(1945) 1945 1950 1960 1970 1980 1998
 NC_001344 (1900) **GA**T**A****GAA****CTAA****G****GA****CTGT****TAT****C****AAGAAA****AT****AAA****AT****AGG****TG****C****ATGGTATGAC****TG**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (1900) **GAATGAACTAAGA****ACTGTAAT****C****AAGAAA****AT****C****AAAG****TT****GGACA****ATGGTATGAT****TG**
 NC_005888 (1891) **GAATGAACTA****CGTCAAGTAAT****A****AAGAA****GATT****C****AAAT****C****GGAAA****ATGGTATGAC****TG**
 NC_005890 (1924) **GAC****TGAA****ATA****AGAA****TGT****CAT****T****AAGAAA****ATT****AAA****GT****C****GGAGA****ATGGTATGAC****TG**
 NC_005950 (1897) **GAA****A****GAA****T****TA****AGA****CTGT****AAT****T****AAGAAA****ATT****AAA****CCA****GGAGA****ATGGTATGAC****TG**
 Consensus (1945) **GAATGAACTAAGA****ACTGTAAT****A****AAGAAA****ATT****AAA****T****GGAGA****ATGGTATGAC****TG**

(1999) 1999 2010 2020 2030 2040 2052
 NC_001344 (1954) **GAAATGTATT****C****AAAGATT****TGTT****GGGCAT****TT****G****AACTT****TGT****G****TTACCA****TTT****ACT****TAA**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (1954) **GAAATGTATC****C****AAAGATT****CA****T****AGGC****CAT****C****T****CAAT****TT****T****GT****T****TACCTTT****T****ACT****GAA**
 NC_005888 (1945) **GAAATGTATC****CAAC****GATT****T****AT****T****GGACAT****TT****AAA****CTT****CAT****T****TACCTTT****CAC****AAA**
 NC_005890 (1978) **GAAATGTATT****C****AAAGATT****TGTT****GGGCAT****TT****AAA****CTT****TGT****A****TACCTTT****CAC****AAA**
 NC_005950 (1951) **GAAATGTATT****CAAC****GATT****TGTT****GGGCAT****TT****AAA****CTT****TGT****A****TACCTTT****T****ACT****TAA**
 Consensus (1999) **GAAATGTATT****C****AAAGATT****TGTT****GGGCAT****TT****AAA****CTT****TGT****T****TACCTTT****T****ACT****AA**

(2053) 2053 2060 2070 2080 2090 2106
 NC_001344 (2008) **AGG**TAA**CATT**GAAAT**GTTA**AAAC**CAAT**GTAT**GTGCTGCT**TATT**CTAA**C**AAAGTTAA**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (2008) **AGG**AAA**CATT**GAAAT**GCTA**AAAC**CTAT**GTAC**CGA**TGC**CTGTACTC**ATAG**AGTTAA**
 NC_005888 (1999) **AGG**AAAT**GTAG**GAAAT**GTTA**AAAC**CAAT**GTAT**CA**TGCT**GTGACT**CATA**AAAGTGAA**
 NC_005890 (2032) **AGG**AAAT**ACAG**GAAAT**GTTA**AAAC**CAAT**GTAT**ACT**GTCT**TATTTCCA**AT**CAAGTAAA**
 NC_005950 (2005) **AGG**TAA**TATT**GAAAT**GTTG**AAAC**CAAT**GTAT**GTGCTGCT**TATT**CTAA**C**AAAGTTAA**
 Consensus (2053) **AGG**AAATATT**GAAATGTT**AAAC**CAAT**GTAT**GTGCTGCT**TATT**CTAA**TAA**AGTTAA**

(2107) 2107 2120 2130 2140 2150 2160
 NC_001344 (2062) **CTTTAGCTTCTCT**TCAG**CTTATA**GGACT**TTATTGTA**C**AAATTAAC**TATGG**GTGT**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (2062) **CTTT**GC**CTTT**TCT**TCTAGG**TATA**AAATC**TT**GTGTATA**AAAT**TAAC**TATGG**AGT**
 NC_005888 (2053) **TTTTAG**TTTT**TCTAGTAGC**TATA**GGACTTTG**TT**GTATA**AAAT**TAAC**AATGG**GTGT**
 NC_005890 (2086) **TTTTAGCTTCTCT**TC**GGCTTATA**GGACT**TTGCTT**TATA**AAATTAAC**AATGG**AGT**
 NC_005950 (2059) **CTTTAGCTTCTCT**TC**GCTTATA**GGACT**TTGCTA**TATA**AAAC**TAAC**TATGGGTGT**
 Consensus (2107) **CTTTAGCTTCTCT**TCT**GCTTATA**GGACT**TTGTTGTATA**AAAT**TAAC**TATGG**GTGT**

(2161) 2161 2170 2180 2190 2200 2214
 NC_001344 (2116) T **TGTAAGTTAGCCAT**TCGA**CCAAAGTCCTCTGTACCTTTGCCACGTGTAGCCAC**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (2116) A **TGTAAGTTGACACTGGATCCAAAGGTCTCTTTACCTTTGCCACGTGTAGCCAC**
 NC_005888 (2107) C **TGTAAGCTTAGATTGAATCCAAAGGTCTCTTTACCTTTGCCACGTGTAGCCAC**
 NC_005890 (2140) A **TGTAAGTTGTCAATAAAACCAAGGTCTCTGTTCCCTTTGCCAAGAGTAGCCAC**
 NC_005950 (2113) T **TGTAAGTTGCAATAAATCCAAAGTCCTCTGTACCTTTGCCACGTGTAGCCAC**
 Consensus (2161) TGTAAGTTG CAAT AATCCAAAGGTCTCTGTACCTTTGCCACGTGTAGCCAC

(2215) 2215 2220 2230 2240 2250 2268
 NC_001344 (2170) A **GATGCTACTCCAACACATGGCGCAATATCCCATATCACCGCGGGAGCGCAGT**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Protein Binding Site(2185..2198): protein binding sit...

NC_001486 (2170) G **GATGCTACATTAAACACATGGCGCAATATCCCATATCACCGCGGGAGCGCAGT**
 NC_005888 (2161) A **GATGCAACTCTAAACACATGGCGCAATATCCCATATCACCGCGGGTGCAGT**
 NC_005890 (2194) G **GATGCTACACCAACACATGGCGCAATATCCCATATCACCGCGGGAGCGCAGT**
 NC_005950 (2167) T **GATGCTACACCAACACATGGCGCAATATCCCATATCACCGCGGGAGCGCAGT**
 Consensus (2215) GATGCTACACCAACACATGGCGCAATATCCCATATCACCGCGGGAGCGCAGT

(2269) 2269 2280 2290 2300 2310 2322
 NC_001344 (2224) GTTTGCCTTTTTCAAAGGTCAGGATATACATATACAGGAATTGCTGATGGTATG
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (2224) GTTTACCTTTTTCAAAGGTCAGAGACATACACATACAGGAATTGCTGATGGTATG
 NC_005888 (2215) GTTTACCTTTTTCAAAGGTTAGAGATATCCACATTCAGGAGCTTTTGTATGGCATG
 NC_005890 (2248) GTTTACTTTTTCAAAGGTCAGAGACATTCATGTGCAAGAATTGCTGATGGCATG
 NC_005950 (2221) GTTTGCCTTTTTCAAAGGTCAGGACATTCATATCCAGGAATTGCTTATGGTATG
 Consensus (2269) GTTTACCTTTTTCAAAGGTCAGAGACAT CATAT CAGGAATTGCTGATGGTATG

(2323) 2323 2330 2340 2350 2360 2376
 NC_001344 (2278) TTTAGCTAAGATAAATGATTAAACCAGATGTATACTCTCCGATTCTACTTTTGT
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein
 Primer Binding Site(2287..2301): protein binding site...

NC_001486 (2278) TTTAGCTCAAGTAAATGATTAAACCAGATGTATACTGACTGACTCTACTTATGT
 NC_005888 (2269) TTTGGCTAAGTAAATGATTAAACCAAGATGTTGCTCACAGATTCACCTTTGT
 NC_005890 (2302) TTTAGCTAAGCTAATGATTAAACCTAGATGTTTGTATCTGATTCTACTTTTGT
 NC_005950 (2275) TTTAGCTGGATAAATGATTAAACCAGATGTATCTTATCAGACTCCACCTTTGT
 Consensus (2323) TTTAGCTAAG TAAATGATTAAACCCAGATGTAT CT TC GATTCTACTTTTGT

(2377) 2377 2390 2400 2410 2420 2430
 NC_001344 (2332) TTGCCACAAACGTTATCAGACGTTACCA TGGCATTTTGCTATGTTGCCAAACA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (2332) TTGCCATAGGAAATTCTCTAAGCTACCGTGGCATTTTGCTAATGTATGCCAAACA
 NC_005888 (2323) GATCCATAAACGTTATCAGACGTTGCCATGGCATTTTGCTGTGCTAGCCAAACA
 NC_005890 (2356) TTGTCAAAAAGATATCATTTCACCTCCATGGTC TTTTGCTATGTTGCCAAAGCA
 NC_005950 (2329) TTGCCACAAACGATATCAGACATTACCATGGCATTTTGCTATGTATGCTAAACA
 Consensus (2377) TTGCCACAAACGATATCAGACGTTACCATGGCATTTTGCTATGTT GCCAAACA

(2431) 2431 2440 2450 2460 2470 2484
 NC_001344 (2386) ACTGCTATCTCCTATACAATTGTACTTTGTTCCAGTAAATACAATCCTGCTGA
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

NC_001486 (2386) ATTATTAAACAGGCTGACATTGTACTATGTACCAGTAAATATAATCCTGCTGA
 NC_005888 (2377) ACTTATGCAGAACAATACAGTTGTACTTTGTTCCAGTAAATACAATCCTGCTGA
 NC_005890 (2410) ATTGCTTAATCCTATACAATTGTACTTTGTACCAGTAAATACAATCCTGCTGA
 NC_005950 (2383) ATTGCTATCTCCTATACAATTGTACTTTGTTCCAGTAAATACAATCCTGCTGA
 Consensus (2431) ATTGCTA CTCCTATACAATTGTACTTTGT ACCAGTAAATACAATCCTGCTGA

(2485) 2485 2490 2500 2510 2520 2538
 NC_001344 (2440) C **GGCCCA** **TCCAGGCA** **CAGA** **CCGC** **CTGATTGGAC** **GGC** **TCTTACATACACCCCTCT**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

Primer Binding Site(2483..2494): DR2

NC_001486 (2440) **TGGCCCA** **A** **CCAGGCA** **CAA** **CC** **TCTGATTGGAC** **GGC** **CGTTACATACACCCCTCT**
 NC_005888 (2431) **TGGCCCA** **A** **CCAGGCA** **TAAA** **CC** **TCTGATTGGAC** **AGC** **ACTTACATACACCCCTCT**
 NC_005890 (2464) **TGGCCCA** **T** **CCAGGCA** **TAAA** **CC** **CTGATTGGAC** **AGC** **ACTTACATACACCCCTCT**
 NC_005950 (2437) C **GGCCCA** **TCCAGGCA** **CAA** **G** **CC** **TCTGATTGGAC** **AGC** **TCTTACATACACCCCTCT**
 Consensus (2485) TGGCCCATCCAGGCACAAACCGCCTGATTGGACAGC CTTACATACACCCCTCT

(2539) 2539 2550 2560 2570 2580 2592
 NC_001344 (2494) **CTCGAA** **AGCA** **ATATATAT** **TCCACATAGGCTATGTGG** **AACT** **TAAGA** **ATTACACCC**
 Source(1..3027): Source_1
 Gene(20..2536): Gene_3
 CDS(20..2536): CDS Polymerase orf
 Gene(170..2536): Gene_4
 CDS(170..2536): CDS Polymerase protein

Primer Binding Site(2541..2552): DR1

Primer Binding Site(2483..2494): DR2
 TATA Signal(2505..2511): TATA

CDS(2524..414): Pre C/C (core) orf

NC_001486 (2494) **CTCGAA** **GCAT** **ATATATAT** **A** **CCACATAGGCTATGTGG** **TCTC** **TAAGA** **-TTACACCC**
 NC_005888 (2485) **CTCGAA** **AGCA** **ATATATAT** **C** **CCACATAGGCTATGTGG** **ACT** **TAAGA** **-TTACACCC**
 NC_005890 (2518) **CTCGAA** **CGT** **ATATATAT** **T** **CCACATAGGCTATGTGG** **AACT** **TAAGA** **ATTACACCC**
 NC_005950 (2491) **CTCGAA** **AGCA** **ATATATAT** **T** **CCACATAGGCTATGTGG** **AACT** **TAAGA** **ATTACACCC**
 Consensus (2539) CTCGAAAGCAATATATATTTCCACATAGGCTATGTGGAACCTTAAGAATTACACCC

(2593) 2593 2600 2610 2620 2630 2646
 NC_001344 (2548) CTCTCC - TTCGGAGCTGC TGCCAAGGTAT CTTTACGTC TACATTGCTGTTGTC

Primer Binding Site(2541..2552): DR1
 Source(1..3027): Source_1
 Misc. Feature(2566..2622): epsilon element

CDS(2524..414): Pre C/C (core) orf

NC_001486 (2547) CTCTCC A TTCGGAGCTGC G TGCCAAGGTAT CTTTACGTC GACC TC GCTGTTGTT
 NC_005888 (2538) CTCTCC A TTCGGAGCTGC T TGCCAAGGTAT TTTTACGTC GTCTTTGCTGTTGTT
 NC_005890 (2572) CTCTCC - TTCGGAGCTGC T TGCCAAGGTAT CTTTACGTC TACATTGCTGTTGTT
 NC_005950 (2545) CTCTCC - TTCGGAGCTGC T TGCCAAGGTAT A TTTTACGTC TACATTGCTGTTGTT
 Consensus (2593) CTCTCC TTCGGAGCTGC TTGCCAAGGTAT CTTTACGTC TACATTGCTGTTGTT

(2647) 2647 2660 2670 2680 2690 2700
 NC_001344 (2601) AGCCT TGACTGTACCTTTGGTATGTACCATT GTTTATGATT CTTGCTTATATAT

Source(1..3027): Source_1
 Misc. Feature(2566..2622): epsilon element

CDS(2524..414): Pre C/C (core) orf

CDS(2653..414): CDS nucleocapsid

NC_001486 (2601) CCTTGTGACTGTACCTTTGGTATGTACCATT GTTTATGATT CTTGCTTATATAT
 NC_005888 (2592) CCTTGTGACTGTACCTTTGGTATGTACCATT GTTTATGATT CTTGCTTATATAT
 NC_005890 (2625) CCTTGTGACTGTACCTTTGGTATGTACCATT GTTTATGATT TCCTGCTTATATAT
 NC_005950 (2598) ATGTTT GACTGTACCTTTGGTATGTACCATT GTTTATGATT CCTGCTTATATAT
 Consensus (2647) C T TGTGACTGTACCTTTGGTATGTACCATT GTTTATGATT CTTGCTTATATAT

(2701) 2701 2710 2720 2730 2740 2754
 NC_001344 (2655) GGATATCAATGCTTC TAGAGC TTAGC CAATGTATATGATCTGCCAGATGATTT
 Source(1..3027): Source_1

CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (2655) GGATGTC AATGCTTCAAGAGCTTTAGCA AATGTATATGATCTGCCAGATGATTT
 NC_005888 (2646) GGATATCAACGCTTCAAGAGCTTTAGCTAATGTATATGATTTGCCAGATGATTT
 NC_005890 (2679) GGATGTC AATGCTTCTAGAGC TTAGCTAATGTGTATGATCTGCCAGATGATTT
 NC_005950 (2652) GGATGTTAATGCTTCTAGAGCTTTAGC CAATGTGTATGATCTGCCAGATGATTT
 Consensus (2701) GGATGTC AATGCTTCTAGAGC TTAGC AATGTATATGATCTGCCAGATGATTT

(2755) 2755 2760 2770 2780 2790 2808
 NC_001344 (2709) CTTTCCAAAATTGATGATCTTGTAGAGATGCTAAAGATGCTTTAGAACCTTA
 Source(1..3027): Source_1

CDS(2524..414): Pre C/C (core) orf
 CDS(2653..414): CDS nucleocapsid protein

NC_001486 (2709) CTTTCC TCA GATTGATGATCTTGTAGAGATGCTAAAGATGCTTTAGAACCTTA
 NC_005888 (2700) CTTTCC AAA GATTGATGATTTAGTTAGAGATGCTAAAGATGCTTTAGAGCCTTA
 NC_005890 (2733) CTTTCC AAAAATTGATGATTTAGTTAGAGATGCTAAAGATGCTTTGGAACCTTA
 NC_005950 (2706) CTTTCC AAAAATTGAGGATCTTGTAGAGATGCTAAAGATGCTTTGGAACCTTA
 Consensus (2755) CTTTCCAAAATTGATGATCTTGTAGAGATGCTAAAGATGCTTTAGAACCTTA

(2809) 2809 2820 2830 2840 2850 2862
 NC_001344 (2763) C TGGAAATCTGAT TCAATAAAGAAACATGTTT TGGATTGCAACTCACTTTGTGGA

Source(1..3027): Source_1

PolyA Signal(2776..2783): Poly A signal

CDS(2524..414): Pre C/C (core) orf

CDS(2653..414): CDS nucleocapsid protein

NC_001486 (2763) T TGGAAAGCCGAAACAATAAAGAAACATGTTT TTAATTGCTACTCACTTTGTGGA
 NC_005888 (2754) T TGGAGAAATGAT TCAATAAAGAAACATGTTT TTAATTGCAACTCACTTTGTGGA
 NC_005890 (2787) T TGGAGATCTGAA TCAATAAAGAAACATGTT TTAATCGCAACTCACTTTGTGGA
 NC_005950 (2760) T TGGAAATCTGACTCAATAAAGAAACATGTA TTAATCGCTACTCACTTTGTGGA
 Consensus (2809) TTGGAAATCTGA TCAATAAAGAAACATGTTT TTAATTGCAACTCACTTTGTGGA

(2863) 2863 2870 2880 2890 2900 2916
 NC_001344 (2817) TCTTATTGAGACTTCTGGCAGACTACTCAGGGTATGCATGAAATTGC TGAATC

Source(1..3027): Source_1

CDS(2524..414): Pre C/C (core) orf

CDS(2653..414): CDS nucleocapsid protein

NC_001486 (2817) TTTGATTGAGGACTTCTGGCAGACC ACTCAGGGTATGAGCCAAATTGCAGACGC
 NC_005888 (2808) TCTCATTGAGGATTTCTGGCAAACC ACTCAGGGTATGCATGAAATAGCAGAGGC
 NC_005890 (2841) TTTGATTGAAGACTTTTGGCAGACTACA CAGGGTATGCATGAAATTGCAGAGGC
 NC_005950 (2814) TCTTATTGAGGATTTTGGCAGACTACA CAGGGTATGCATGAAATCGCTGAAGC
 Consensus (2863) TCT ATTGAGGACTTCTGGCAGACTACTCAGGGTATGCATGAAATTGCAGA GC

(3025) 3025 3030 3040 3050 3060 3073
 NC_001344 (2979) AGAAAGGATAGTTAGTTTTCAACCTGACTATCCATTACAGCAGAATT
 Source(1..3027): Source_1

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 CDS(2524..414): Pre C/C (core) orf . . .
 CDS(2653..414): CDS nucleocapsid protein . . .

NC_001486 (2979) GGAGAGGATAGTCAATTTCAACCTGACTATCCATTACAGCTAGAATT
 NC_005888 (2970) AGAAAGACTAACTAACTTTCAACCTGACTATCCAGTTACCGCCAGAATT
 NC_005890 (3003) AGAAAGGATAGTTAGTTTTCAACCTGACTATCCATTACTGCAAGAATT
 NC_005950 (2976) GGAAAGGATAGTTAGTTTTCAACCTGACTATCCATTACAGCGAGAATT
 Consensus (3025) AGAAAGGATAGTTAGTTTTCAACCTGACTATCC ATTACAGC AGAATT