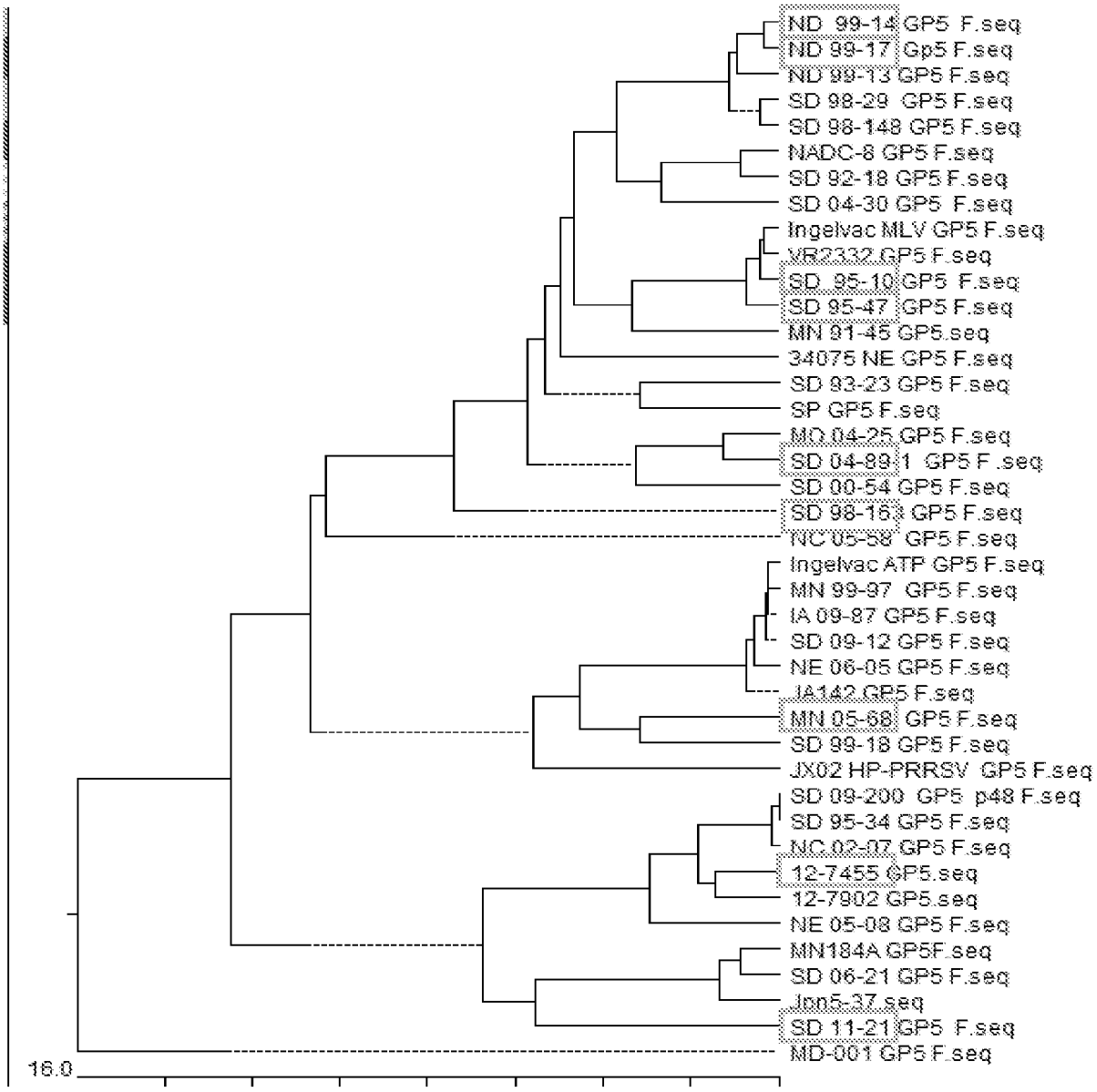


Nucleotide substitutions (x100)

Figure 1.

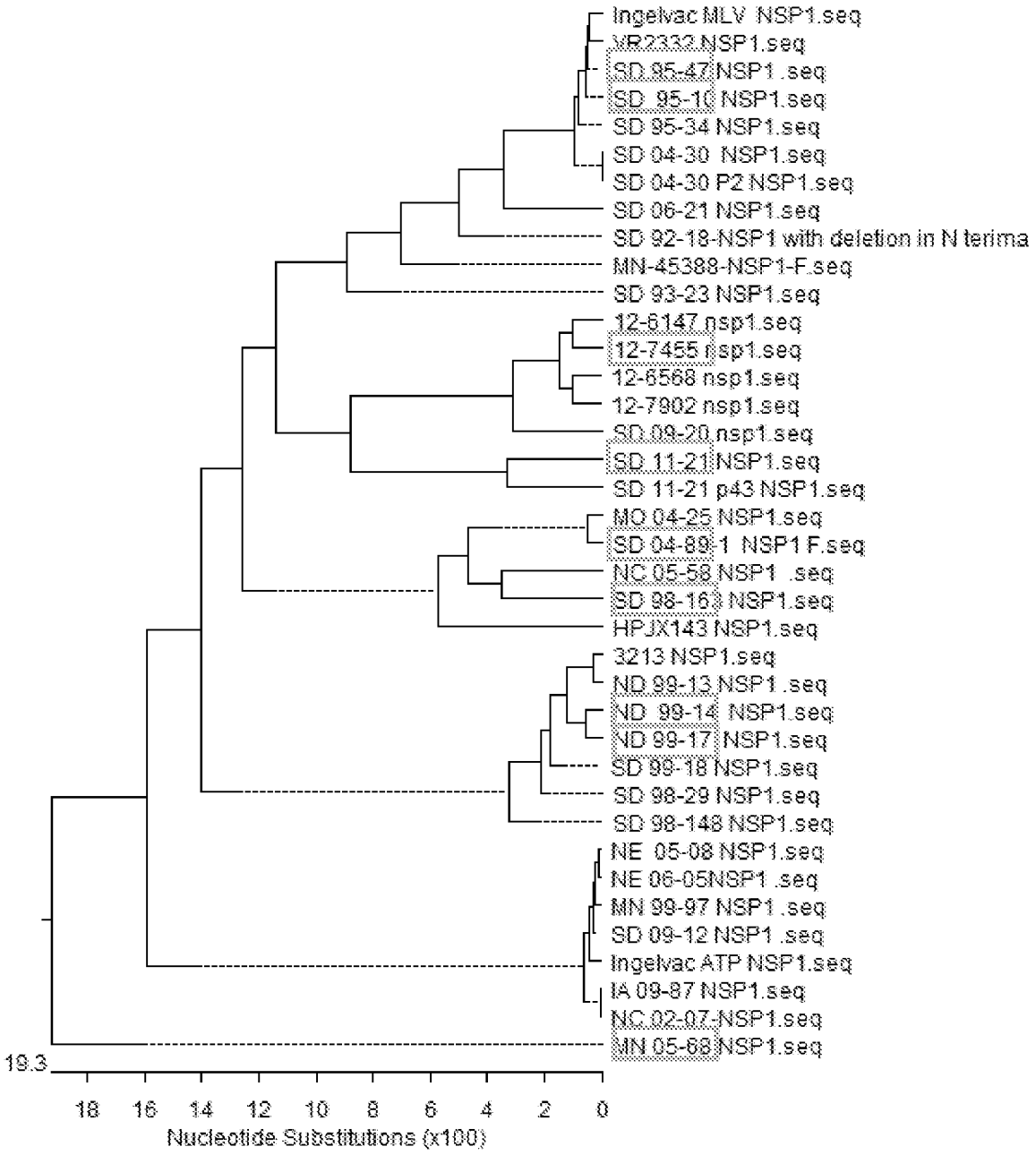

Ingelvac MLV NSP1.seq
VR2332 NSP1.seq
SD 95-47 NSP1 .seq
SD 95-10 NSP1.seq
SD 95-34 NSP1.seq
SD 04-30 NSP1.seq
SD 04-30 P2 NSP1.seq
SD 06-21 NSP1.seq
SD 92-18-NSP1 with deletion in N terima
MN-45388-NSP1-F.seq
SD 93-23 NSP1.seq
12-6147 nsp1.seq
12-7455 nsp1.seq
12-6568 nsp1.seq
12-7902 nsp1.seq
SD 09-20 nsp1.seq
SD 11-21 NSP1.seq
SD 11-21 p43 NSP1.seq
MO 04-25 NSP1.seq
SD 04-89-1 NSP1 F.seq
NC 05-58 NSP1 .seq
SD 98-16 NSP1.seq
HPJX143 NSP1.seq
3213 NSP1.seq
ND 99-13 NSP1 .seq
ND 99-14 NSP1.seq
ND 99-17 NSP1.seq
SD 99-18 NSP1.seq
SD 98-29 NSP1.seq
SD 98-148 NSP1.seq
NE 05-08 NSP1.seq
NE 06-05NSP1 .seq
MN 99-97 NSP1 .seq
SD 09-12 NSP1 .seq
Ingelvac ATP NSP1.seq
IA 09-87 NSP1.seq
NC 02-07 NSP1.seq
MN 05-68 NSP1.seq
19.3
18 16 14 12 10 8 6 4 2 0
Nucleotide Substitutions (x100)

Figure 2.

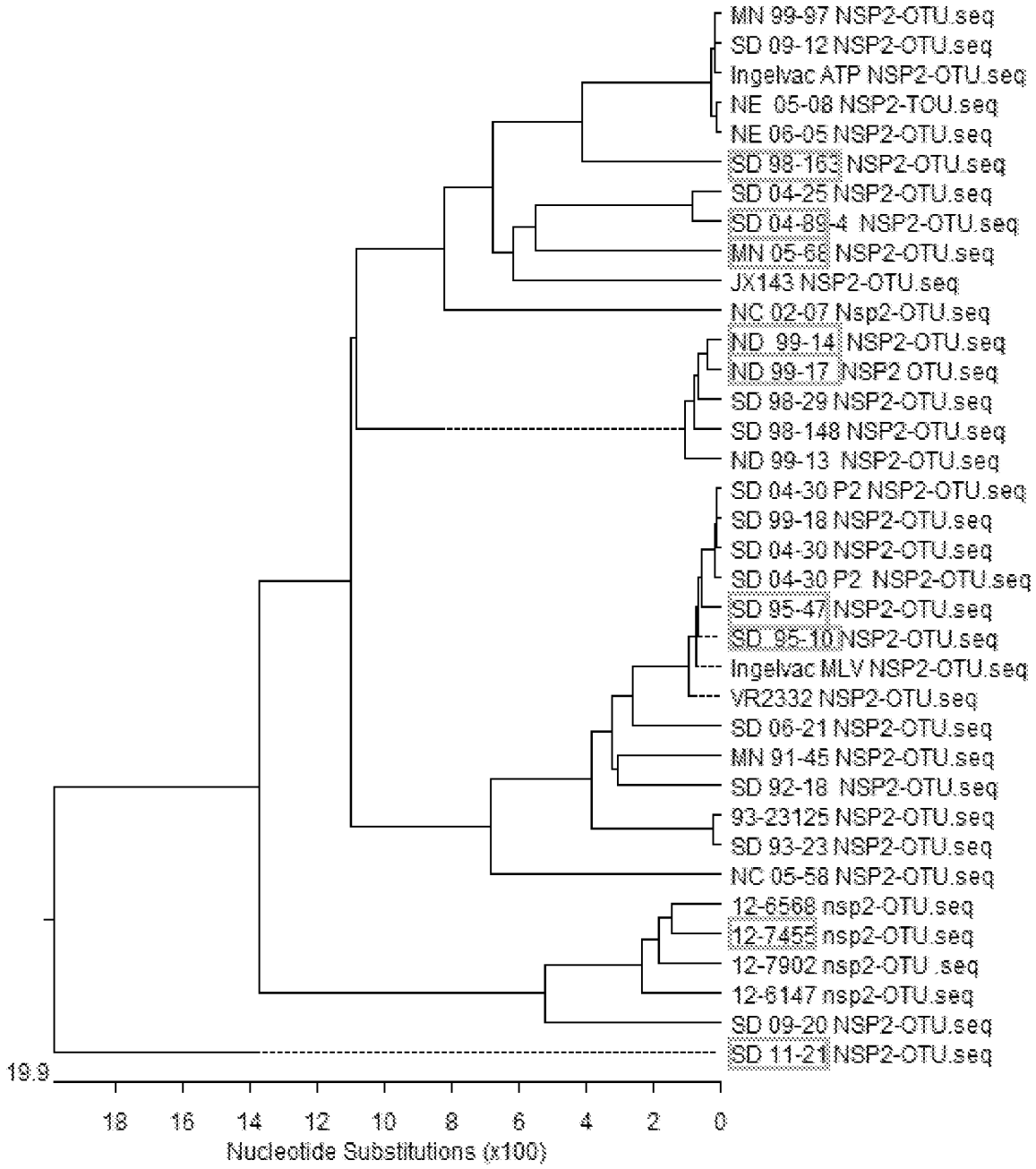

MN 99-97 NSP2-OTU.seq
SD 09-12 NSP2-OTU.seq
Ingelvac ATP NSP2-OTU.seq
NE 05-08 NSP2-TOU.seq
NE 06-05 NSP2-OTU.seq
SD 98-163 NSP2-OTU.seq
SD 04-25 NSP2-OTU.seq
SD 04-89-4 NSP2-OTU.seq
MN 05-68 NSP2-OTU.seq
JX143 NSP2-OTU.seq
NC 02-07 Nsp2-OTU.seq
ND 99-14 NSP2-OTU.seq
ND 99-17 NSP2 OTU.seq
SD 98-29 NSP2-OTU.seq
SD 98-148 NSP2-OTU.seq
ND 99-13 NSP2-OTU.seq
SD 04-30 P2 NSP2-OTU.seq
SD 99-18 NSP2-OTU.seq
SD 04-30 NSP2-OTU.seq
SD 04-30 P2 NSP2-OTU.seq
SD 95-47 NSP2-OTU.seq
SD 95-10 NSP2-OTU.seq
Ingelvac MLV NSP2-OTU.seq
VR2332 NSP2-OTU.seq
SD 06-21 NSP2-OTU.seq
MN 91-45 NSP2-OTU.seq
SD 92-18 NSP2-OTU.seq
93-23125 NSP2-OTU.seq
SD 93-23 NSP2-OTU.seq
NC 05-58 NSP2-OTU.seq
12-6568 nsp2-OTU.seq
12-7455 nsp2-OTU.seq
12-7902 nsp2-OTU .seq
12-6147 nsp2-OTU.seq
SD 09-20 NSP2-OTU.seq
SD 11-21 NSP2-OTU.seq
19.9
18
16
14
12
10
8
6
4
2
0
Nucleotide Substitutions (x100)

Figure 3.

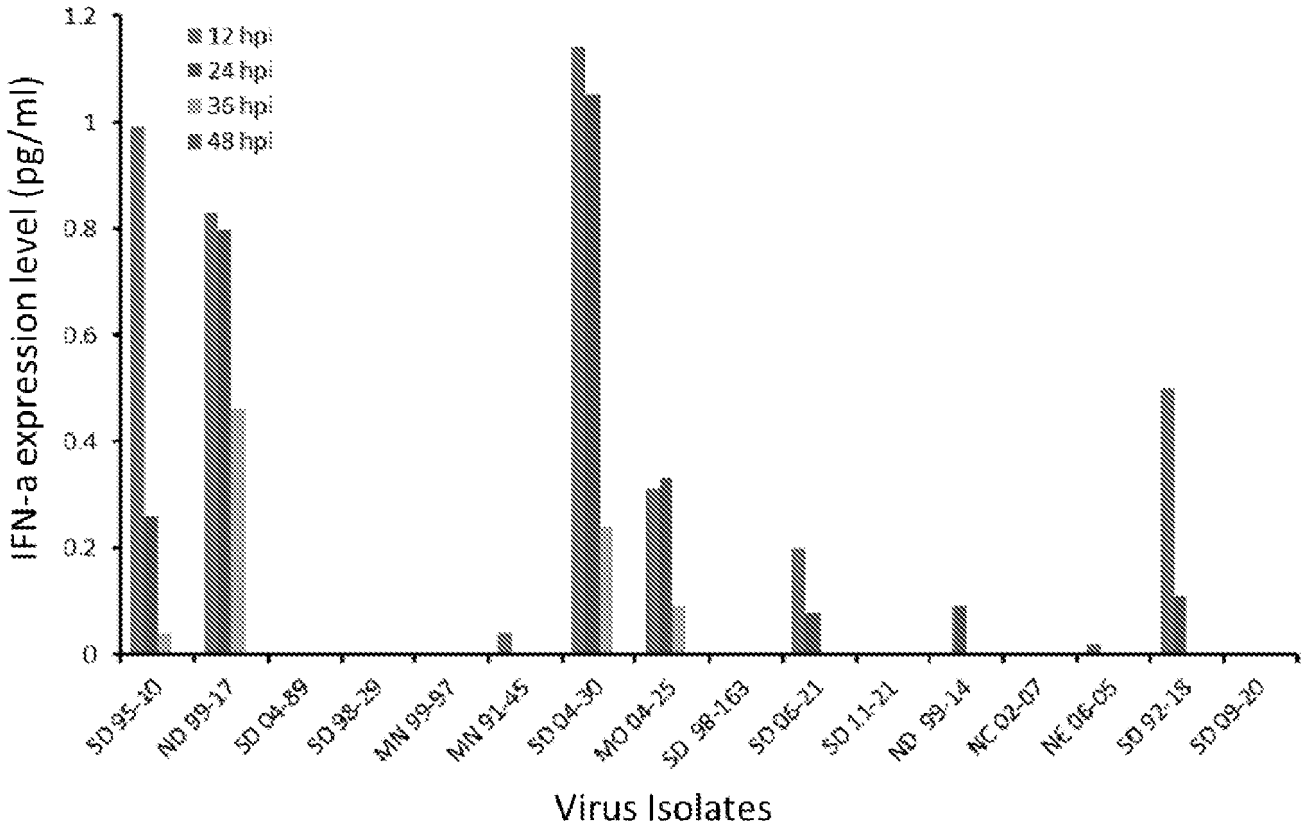

IFN-a expression level (pg/ml)
12 hpi
24 hpi
36 hpi
48 hpi
1.2
1
0.8
0.6
0.4
0.2
0
SD 95-10
ND 99-17
SD 04-69
SD 98-29
MN 99-97
MN 91-45
SD 04-30
MO 04-15
SD 98-163
SD 06-21
SD 11-21
ND 99-14
NC 02-07
NC 06-05
SD 92-15
SD 09-20
Virus Isolates

Figure 4.

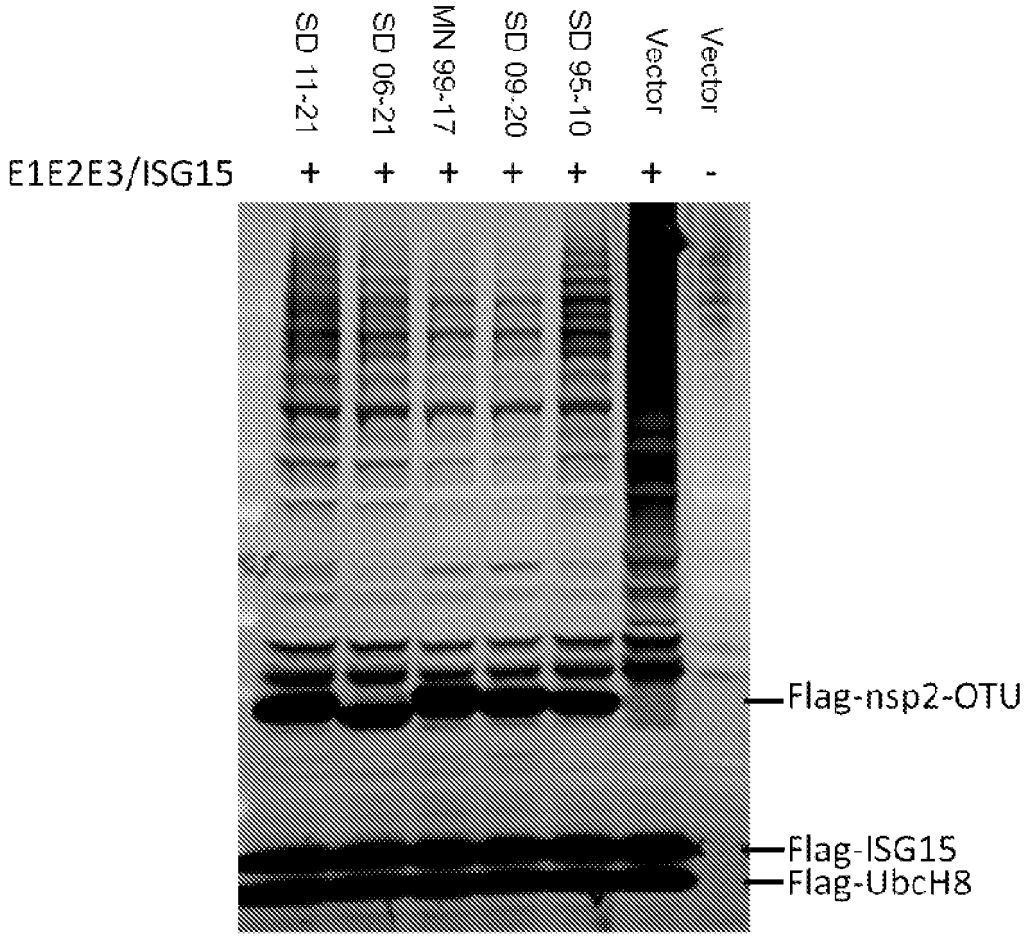

SD 11-21
SD 06-21
MN 99-17
SD 09-20
SD 95-10
Vector
Vector
E1E2E3/ISG15
+
+
+
+
+
+
-
Flag-nsp2-OTU
Flag-ISG15
Flag-UbcH8

Figure 5.