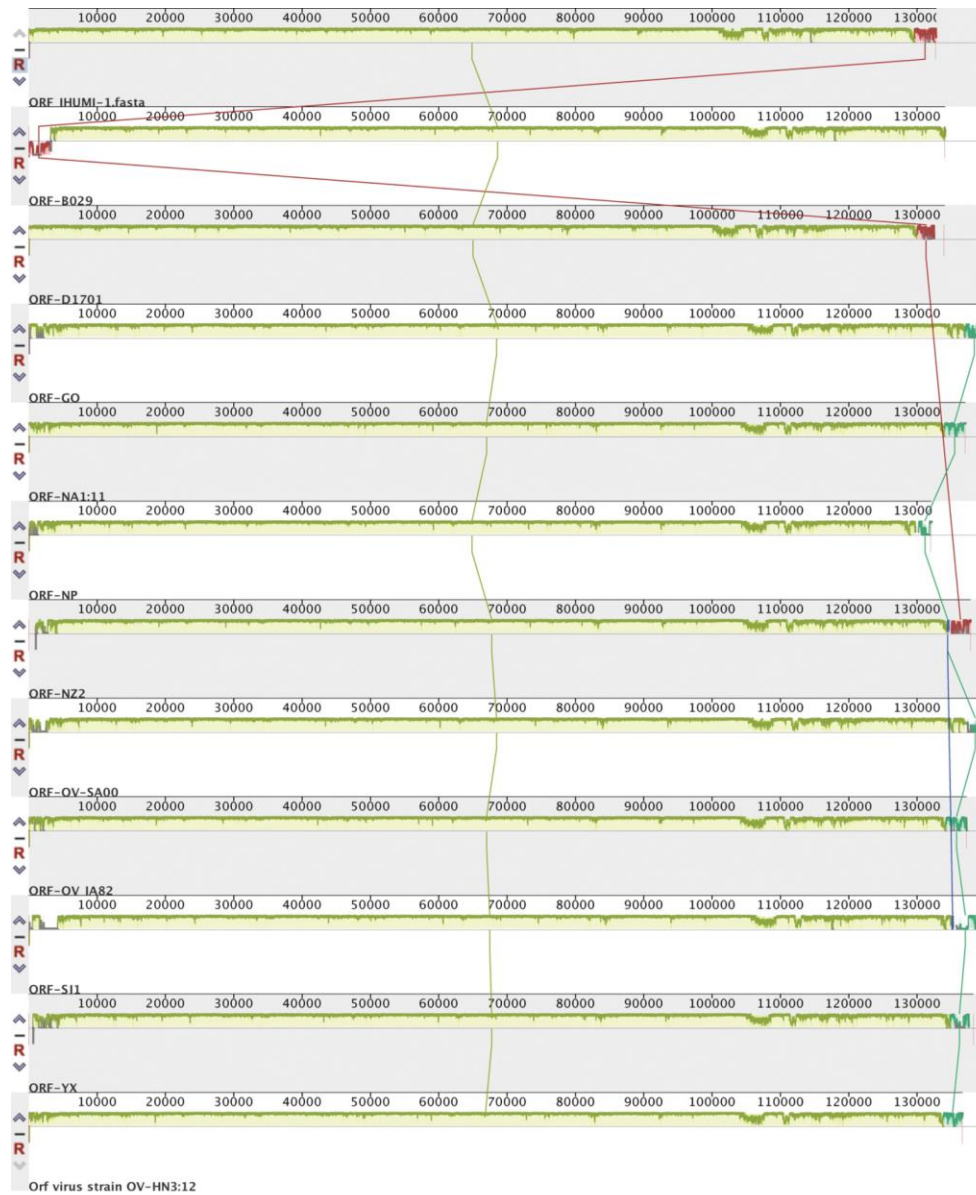
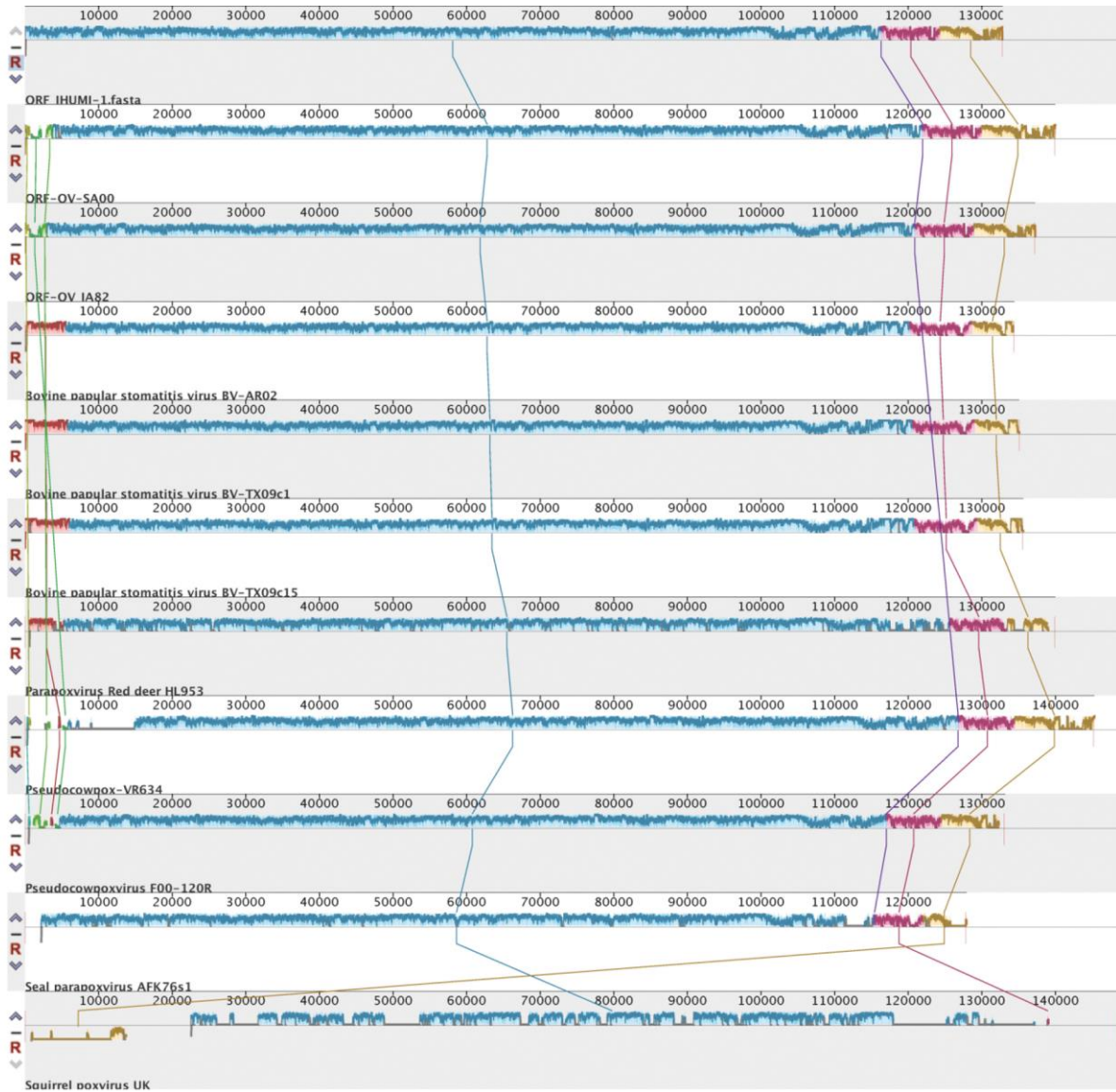


# Human Infection with Orf Virus and Description of Its Whole Genome, France, 2017

## Appendix



**Appendix Figure 1.** Mauve alignment obtained for orf virus genomes, France, 2017.



**Appendix Figure 2.** Mauve alignment obtained for different parapoxvirus genomes, France, 2017.

**Appendix Figure 3 (below).** Alignment of sequences for orf viruses, France, 2017.

# Results for job mview-I20180712-133951-0236-40078163-p1m

Reference sequence (1): Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053  
Identities normalised by aligned length.  
Colored by: identity

	cov	pid		
1 Orf_virus_OV-SA00_NC_005336.1_115015-122053	100.0%	100.0%	1 [	. . . . . : . . . . . 80
2 Orf_virus_D1701	98.3%	88.3%		
3 Orf_virus_NA1-11	97.9%	87.5%		
4 Orf_virus_OV-HN3_12	98.1%	87.2%		
5 Orf_virus_OV-IA82	98.6%	88.5%		
6 Orf_virus_NZ2	98.5%	88.2%		
7 Orf_virus_YX	98.1%	95.5%		
8 Orf_virus_GO	98.8%	96.4%		
9 Orf_virus_B029	91.8%	81.7%		
10 Orf_virus_IHUMI-1	78.5%	70.9%		
11 Orf_virus_SJ1	77.2%	74.2%		
12 Orf_virus_NP	24.1%	23.5%		
consensus/100%				
consensus/90%				
consensus/80%				
consensus/70%				
1 Orf_virus_OV-SA00_NC_005336.1_115015-122053	100.0%	100.0%	81	. . . . . : . . . . . 160
2 Orf_virus_D1701	98.3%	88.3%		
3 Orf_virus_NA1-11	97.9%	87.5%		
4 Orf_virus_OV-HN3_12	98.1%	87.2%		
5 Orf_virus_OV-IA82	98.6%	88.5%		
6 Orf_virus_NZ2	98.5%	88.2%		
7 Orf_virus_YX	98.1%	95.5%		
8 Orf_virus_GO	98.8%	96.4%		
9 Orf_virus_B029	91.8%	81.7%		
10 Orf_virus_IHUMI-1	78.5%	70.9%		
11 Orf_virus_SJ1	77.2%	74.2%		
12 Orf_virus_NP	24.1%	23.5%		
consensus/100%				
consensus/90%				
consensus/80%				
consensus/70%				
1 Orf_virus_OV-SA00_NC_005336.1_115015-122053	100.0%	100.0%	161	. . . . . 2 . . . . . 240
2 Orf_virus_D1701	98.3%	88.3%		
3 Orf_virus_NA1-11	97.9%	87.5%		
4 Orf_virus_OV-HN3_12	98.1%	87.2%		
5 Orf_virus_OV-IA82	98.6%	88.5%		
6 Orf_virus_NZ2	98.5%	88.2%		
7 Orf_virus_YX	98.1%	95.5%		
8 Orf_virus_GO	98.8%	96.4%		
9 Orf_virus_B029	91.8%	81.7%		
10 Orf_virus_IHUMI-1	78.5%	70.9%		
11 Orf_virus_SJ1	77.2%	74.2%		
12 Orf_virus_NP	24.1%	23.5%		
consensus/100%				
consensus/90%				
consensus/80%				
consensus/70%				
1 Orf_virus_OV-SA00_NC_005336.1_115015-122053	100.0%	100.0%	241	. . . . . 3 . . . . . 320
2 Orf_virus_D1701	98.3%	88.3%		
3 Orf_virus_NA1-11	97.9%	87.5%		
4 Orf_virus_OV-HN3_12	98.1%	87.2%		
5 Orf_virus_OV-IA82	98.6%	88.5%		
6 Orf_virus_NZ2	98.5%	88.2%		
7 Orf_virus_YX	98.1%	95.5%		
8 Orf_virus_GO	98.8%	96.4%		
9 Orf_virus_B029	91.8%	81.7%		
10 Orf_virus_IHUMI-1	78.5%	70.9%		
11 Orf_virus_SJ1	77.2%	74.2%		
12 Orf_virus_NP	24.1%	23.5%		
consensus/100%				
consensus/90%				
consensus/80%				
consensus/70%				



4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TGCGCCGCGCGCTGGCGATCGACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TGCGCCGCGCGCTGGCGATCGACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
6 Orf\_virus\_NZ2 98.5% 88.2% TGCGCCGCGCGCTGGCGATCGACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
7 Orf\_virus\_YX 98.1% 95.5% TGCGCCGCGCGCTGGCGATCAACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
8 Orf\_virus\_GO 98.8% 96.4% TGCGCCGCGCGCTGGCGATCAACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
9 Orf\_virus\_B029 91.8% 81.7% TGCGCCGCGCGCTGGCGATCGACCCGCCGTACGAGGCCGTGGCGTACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% TGCGCCGCGCGCTGGCGATCGACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGCCATGGACGTC  
11 Orf\_virus\_SJ1 77.2% 74.2% TGCGCCGCGCGCTGGCGATCAACCCGCCGTACGAGGCCGTGGCGCACCCGCCCGCTGCGTGTACGGCGTTATGGACGTC  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% TGCGCCGCGCuCTGGCGATCuACCCGCCGTACGAuGCCGTGGCGsACCCGCuCCGCTGCGTGTACGGsGsATGGACGTC  
consensus/90% TGCGCCGCGCuCTGGCGATCuACCCGCCGTACGAGGCCGTGGCGCACCCGCuCCGCTGCGTGTACGGCGCsATGGACGTC  
consensus/80% TGCGCCGCGCuCTGGCGATCuACCCGCCGTACGAGGCCGTGGCGCACCCGCuCCGCTGCGTGTACGGCGCCATGGACGTC  
consensus/70% TGCGCCGCGCuCTGGCGATCuACCCGCCGTACGAGGCCGTGGCGCACCCGCuCCGCTGCGTGTACGGCGCCATGGACGTC

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 881 . 9 960  
2 Orf\_virus\_D1701 98.3% 88.3% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
3 Orf\_virus\_NA1-11 97.9% 87.5% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
6 Orf\_virus\_NZ2 98.5% 88.2% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
7 Orf\_virus\_YX 98.1% 95.5% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
8 Orf\_virus\_GO 98.8% 96.4% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
9 Orf\_virus\_B029 91.8% 81.7% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
11 Orf\_virus\_SJ1 77.2% 74.2% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC--GG  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% CGGTGCGCGAACGAGTACCTsGTGTACTGsACCTTCAAuACGGAGCCGuCuCGGCGsAusACGTCTCTGCCGGGsCC .uG  
consensus/90% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGuCuCGGCGCAGCAGTCTCTGCCGGGCC .GG  
consensus/80% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC .GG  
consensus/70% CGGTGCGCGAACGAGTACCTCGTGTACTGCACCTTCAAGACGGAGCCGGCGGGCGGAGCAGTCTCTGCCGGGCC .GG

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 961 . 0 1040  
2 Orf\_virus\_D1701 98.3% 88.3% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
3 Orf\_virus\_NA1-11 97.9% 87.5% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
6 Orf\_virus\_NZ2 98.5% 88.2% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
7 Orf\_virus\_YX 98.1% 95.5% ACGGCCCCCTGTGCGCCGCGACT---TTGATCTCGCAGGCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
8 Orf\_virus\_GO 98.8% 96.4% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACA  
9 Orf\_virus\_B029 91.8% 81.7% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
11 Orf\_virus\_SJ1 77.2% 74.2% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCAGCCCGCGGCCGCGCGCCCGGACGACGCCGAGGAAGTGACC  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% ACUsCCCssTGTGCGCCCGGACT . . TsuusTCGGuGsCCGsGGCsGCGCGCuSCCsACuACGCCsCAGGAAGTGuCs  
consensus/90% ACuGCCCssTGTGCGCCCGGACTCCGTGuACsTCGGuGGCCGsGGCCGCGCGCCCsACGACGCCGAGGAAGTGuCC  
consensus/80% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCuGGCCGCGGCCGCGCGCCCsACGACGCCGAGGAAGTGuCC  
consensus/70% ACGGCCCCCTGTGCGCCGCGACTCCGTGCGCCTCGCuGGCCGCGGCCGCGCGCCCsACGACGCCGAGGAAGTGuCC

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 1041 . 1 1120  
2 Orf\_virus\_D1701 98.3% 88.3% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACT-TGACC--AAGGA-CCCACCGTCCACT  
3 Orf\_virus\_NA1-11 97.9% 87.5% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACTTGAAGGACCCACCGCCACT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACTTGAAGGACCCACCGCCACT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACTTGAAGGACCCACCGTCCACT  
6 Orf\_virus\_NZ2 98.5% 88.2% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACTTGAAGGACCCACCGTCCACT  
7 Orf\_virus\_YX 98.1% 95.5% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACT-TGACCCAAAGGAC-CCCACCGTCCACT  
8 Orf\_virus\_GO 98.8% 96.4% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACT-----TGACCCAAAGGA-CCCACCGTCCACT  
9 Orf\_virus\_B029 91.8% 81.7% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACTTGAAGGACCCACCGTCCACT  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% TCGCCGACCAGAGCTCGTAGAGACCTGTCTGCGCGACGCCCTCGACTGACTTGAAGGACCCACCGTCCACT  
11 Orf\_virus\_SJ1 77.2% 74.2% TCGCCGACCAGAGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACTGACT-----TGACCCGAGGGA-CCCACCGTCCACT  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% TCGC . . CsACGAuGCTCsTuGAGACCTGsTCGCGCAGCACCCTCGAC . . . . TuACC . . AuGus . CCCsC . ssCACT  
consensus/90% TCGCCuACsACGAuGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGAC . . . . TGACCsuAuGGA . CCCsC . ssCACT  
consensus/80% TCGCCGACCAGAuGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACsGACs . TGACCuAAGGA . CCCsC . ssCACT  
consensus/70% TCGCCGACCAGAuGCTCGTGGAGACCTGTCTGCGCGACGCCCTCGACsGACs . TGACCuAAGGA . CCCsC . ssCACT

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 1121 . 2 1200  
2 Orf\_virus\_D1701 98.3% 88.3% CACATTCACCTGCCAGACAACAGACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
3 Orf\_virus\_NA1-11 97.9% 87.5% CACATTCACCTGCCAGACAACAGACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CACGACCACCTCCAGACGACAGACTCAGGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CACATTCACCTGCCAGAC---AACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
6 Orf\_virus\_NZ2 98.5% 88.2% CACATTCACCTGCCAGAC---AACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
7 Orf\_virus\_YX 98.1% 95.5% CACATTCACCTGCCAGACAACAGACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
8 Orf\_virus\_GO 98.8% 96.4% CACATTCACCTGCCAGACAACAGACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
9 Orf\_virus\_B029 91.8% 81.7% CACGACCACCTGCCAGACAACAGACTCAGGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CACATTCACCTGCCAGAC---AACGCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
11 Orf\_virus\_SJ1 77.2% 74.2% CACGTTCCACTGCCAGACAACAGACTCAAGCTTTTTCTGCATCTACCTCACCAGATAATTGAATTGTTATAGGACAAACAG  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% CACUsCCACsCCAGAC . . . . uACsCAuGCTTTTTsTGATCTACCTCuSuATAATTGAATTGTTATAGsACAAACAG  
consensus/90% CACUsCCACTsCCAGAC . . . . uACsCAuGCTTTTTsTGATCTACCTCuSuATAATTGAATTGTTATAGsACAAACAG  
consensus/80% CACUsCCACTGCCAGAC . . . . uACTCAuGCTTTTTsTGATCTACCTCuSuATAATTGAATTGTTATAGsACAAACAG  
consensus/70% CACUsCCACTGCCAGAC . . . . uACTCAuGCTTTTTsTGATCTACCTCuSuATAATTGAATTGTTATAGsACAAACAG

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 1201 . 3 1280  
2 Orf\_virus\_D1701 98.3% 88.3% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
6 Orf\_virus\_NZ2 98.5% 88.2% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
7 Orf\_virus\_YX 98.1% 95.5% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
8 Orf\_virus\_GO 98.8% 96.4% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
9 Orf\_virus\_B029 91.8% 81.7% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
11 Orf\_virus\_SJ1 77.2% 74.2% GCGCACTCGAGCACAATGGCGTGTCTTATCGAATGGGTGCGACTCCATCTTCAACCGACGCCACCCTAATTTGGGCCGGA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% GsGCACTCuAGCACAATGGCGTGTsTTsTCGAATsGsTsGACTCsATCTTCAACsGACuCCACCCTAATTTsuGGGCCGGA  
consensus/90% GCGCACTCGAGCACAATGGCGTGTsTTsTCGAATsGsTsGACTCCATCTTCAACCGACuCCACCCTAATTTsuGGGCCGGA  
consensus/80% GCGCACTCGAGCACAATGGCGTGTsTTsTCGAATsGsTsGACTCCATCTTCAACCGACuCCACCCTAATTTCuGGGCCGGA  
consensus/70% GCGCACTCGAGCACAATGGCGTGTsTTsTCGAATsGsTsGACTCCATCTTCAACCGACuCCACCCTAATTTCuGGGCCGGA

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 1281 . 3 1360  
2 Orf\_virus\_D1701 98.3% 88.3% AGACATGTACAGGCCCTCCGACCCACCCCGCCCTCCAATCTCGCACTCCCGCACCCCGCA-----CCAACACA  
3 Orf\_virus\_NA1-11 97.9% 87.5% AGACATGTACAGGCCCTCTGACG---CCCGCCCCCAATCTCACAGCCTCGCACTCCCG-----CA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AGACATGTACAGGCCCTCTGACG---CCCGCCCCCAATCTCACAGCCTCGCACTCCCG-----CA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGACATGTACAGGCCCTCTGACG---CCCGCCCCCAATCTCACAGCCTCGCACTCCCG-----CA  
6 Orf\_virus\_NZ2 98.5% 88.2% GGACATGTACAGGCCCTCTGACG---CCCGCCCCCAATCGCACAGCCTCGCACTCCCG-----CA

7 Orf\_virus\_YX 98.1% 95.5% AGACATGTACAGGCCCTCCGACCCACCCCGCCCTCCAATCTCACACTCCCGCACCTTGCA-----CCAACACA  
8 Orf\_virus\_GO 98.8% 96.4% AGACATGTACAGGCCCTCCGACCCACCCCGCCCTCCAATCTCGCACTCCCGCACCTTGCA-----CCAACACA  
9 Orf\_virus\_B029 91.8% 81.7% GGACATGTACAGGCCCTCTGACG---CCCGCCCCCAAATCTCACACGCCTCGCACTCCCG-----CA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GGACATGTACAGGCCCTCTGACG---CCCGCCCCCAAATCTCACACGCCTCGCACTCCCG-----CA  
11 Orf\_virus\_SJ1 77.2% 74.2% AGACATGTACAGGCCCTCCGACCCACCCCGCCCTCCAATCTCGCACTCCCGCACCTTGCA-----CCAACACA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% uGACATGTACAGGCCCTCsGACs . . . CCCC GCCs C s s AAT s s C u C A C s C C s C G C A C s C s s C u . . . . . CA  
consensus/80% uGACATGTACAGGCCCTCsGACs . . . CCCC GCCs CCAAATCTCuCAsCCsCGCACsC s s Cu . . . . . CA  
consensus/70% uGACATGTACAGGCCCTCsGACs . . . CCCC GCCs CCAAATCTCuCAsCCsCGCACsC s s Cu . . . . . CA

cov pid 1361 . . . . . 4 . . . . . 1440  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CCCC GCGGAACCGGTGCTCTGAACGTCCGCGGGACACA AACTCTTCTCCATCTGCGGTGCTTGTGTGGACTCCCTGCCG  
2 Orf\_virus\_D1701 98.3% 88.3% CCCC GCGGAACCGGTGCTCTGAACGTCCGCGGGACACA AACTCTTCTCCATCTGCGGTGCTTATGTGGACTCCCTGCCG  
3 Orf\_virus\_NA1-11 97.9% 87.5% CCCC GCGGACCCAGTGTCCCGGACACCCGCGGGACAAA AACTCTTCTCCATCTACGGTGCTTATGTGGACTCCCTGCCG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CCCC GCGGACCCAGTGTCCCGGACACCCGCGGGACAAA AACTCTTCTCCATCTACGGTGCTTATGTGGACTCCCTGCCG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CCCC GCGGACCCAGTGTCCCGGACACCCGCGGGACAAA AAGTCTCTCCATCTACGGTGCTTATGTGGACTCCCTGCCG  
6 Orf\_virus\_NZ2 98.5% 88.2% CCCC GCGGACCCAGTGTCCCGGACACCCGCGGGACAAA AAGTCTCTCCATCTACGGCGCTTATGTGGACTCCCTGCCG  
7 Orf\_virus\_YX 98.1% 95.5% CCCC GCGGAACCGGTGCTCTGAACGTCCGCGGGACACA AACTCTTCTCCATCTGCGGTGCTTGTGTGGACTCCCTGCCG  
8 Orf\_virus\_GO 98.8% 96.4% CCCC GCGGAACCGGTGCTCTGAACGTCCGCGGGACACA AACTCTTCTCCATCTGCGGTGCTTGTGTGGACTCCCTGCCG  
9 Orf\_virus\_B029 91.8% 81.7% CCCC GCGGACCCAGTGTCCCGGACACCCGCGGGACAAA AAGTCTCTCTCCATCTACGGTGCTTATGTGGACTCCCTGCCG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CCCC GCGGACCCAGTGTCCCGGACACCCGCGGGACACA AACTCTCTCCATCTACGGTGCTTATGTGGACTCCCTGCCG  
11 Orf\_virus\_SJ1 77.2% 74.2% CCCC GCGGAACCGGTGCTCTGAACGTCCGCGGGACACA AACTCTTCTCCATCTGCGGTGCTTGTGTGGACTCCCTGCCG  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% CCCC GCGGAsCCuGTGTsCsGuACusCCGCGGGACAsAuCTCsTCTCCATCTuCGGsGCTTuTGTGGACTCCCTGCCG  
consensus/80% CCCC GCGGAsCCAGTGTsCsGuACusCCGCGGGACAsAuCTCsTCTCCATCTuCGGTGCTTuTGTGGACTCCCTGCCG  
consensus/70% CCCC GCGGAsCCAGTGTCCsGuACusCCGCGGGACAsAuCTCsTCTCCATCTuCGGTGCTTuTGTGGACTCCCTGCCG

cov pid 1441 . . . . . 5 . . . . . 1520  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% AGGAAACAGAAAGCGGTTCCAGCATCGACACAGTTGTCCCGGAGATTACGAGCAGTGTCAACTCTCGGAAACCATCAGCCT  
2 Orf\_virus\_D1701 98.3% 88.3% AGGAAACAGAAAGCGGTTCCAGCATCAACACAGTTGTCCCGGAGATTACGAGCAGTGTCAACTCCCGAACCCATCAGCCT  
3 Orf\_virus\_NA1-11 97.9% 87.5% AGGAAACAGAAAGCGGTTCCAGAATCAACACAGTTGTCCCGGAGATTACGAGCGGTGTCAACTATCGGACCCATCAGCCT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AGGAAACAGAAAGCGGTTCCAGAATCAACACAGTTGTCCCGGAGATTACGAGCGGTGTCAACTATCGGACCCATCAGCCT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% AGGAAACAGAAAGCGGTTCCAGAATCAACACAGTTGTCCCGGAGATTACGAGCGGTGTCAACTCCAGGACATCAGCCT  
6 Orf\_virus\_NZ2 98.5% 88.2% AGGAAACAGAAAGCGGTTCCAGAATCAACACAGTTGTCCCGGAGATTACGAGCGGTGTCAACTCTCGGACCCATCAGCCT  
7 Orf\_virus\_YX 98.1% 95.5% AGGAAACAGAAAGCGGTTCCAGCATCGACACAGTTGTCCCGGAGATTACGAGCAGTGTCAACTCTCGGAAACCATCAGCCT  
8 Orf\_virus\_GO 98.8% 96.4% AGGAAACAGAAAGCGGTTCCAGCATCGACACAGTTGTCCCGGAAATTACGAGCAGTGTCAACTCTCGGAAACCATCAGCCT  
9 Orf\_virus\_B029 91.8% 81.7% AGGAAACAGAAAGCGGTTCCAGAATCAACACAGTTGTCCCGGAGATTACGAGCGGTGTCAACTCTCGGACCCATCAGCCT  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% AGAAACAGAAAGCGGTTCCAGAATCAACACAGTTGTCCCGGAGATTACGAGCGGTGTCAACTCTCGGACCCATCAGCCT  
11 Orf\_virus\_SJ1 77.2% 74.2% AGGAAACAGAAAGCGGTTCCAGCATCGACACAGTTGTCCCGGAGATTACGAGCAGTGTGACTCTCGGAAACCATCAGCCT  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% AGuAACAGAAAGCGGTTCSuGsATCuACACAGTTGTCCCGuuuATTACGAGCuGTGTCuACTssGuAsACsATCAGCCT  
consensus/80% AGGAAACAGAAAGCGGTTCCAGsATCuACACAGTTGTCCCGuuGATTACGAGCuGTGTCAACTssCGGAsACCATCAGCCT  
consensus/70% AGGAAACAGAAAGCGGTTCCAGsATCuACACAGTTGTCCCGGAGATTACGAGCuGTGTCAACTCTCGGAsACCATCAGCCT

cov pid 1521 . . . . . 6 1600  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GGAGGCGACGCTACTCAGGTTACAACGACTTCCATCTCCAGCATCTCCAGCATATACAGCTCTAGTAGCTCAGACTCTA  
2 Orf\_virus\_D1701 98.3% 88.3% GGATGCGACGCTACTCAGGTTACATTGACGTC-----TATCTCCAGCATATCCAGCTCTAGTAGCTCAGACTCTA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GGAGGCGACGCTACTCAGGTTACAGTGACGTCCATCTCCAGCATCTCCAGCATATCCAGCTCTAGTAGCTCAGACTCTA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GGAGGCGACGCTACTCAGGTTACAGTGACGTCCATCTCCAGCATCTCCAGCATATCCAGCTCTAGTAGCTCAGACTCTA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGAGGCGACGCTACTCAGGTTACGTTACGTTTC-----CATCTCCAGCATATCCAGCTCTAGTAGCTCAGACTCTA  
6 Orf\_virus\_NZ2 98.5% 88.2% GGATGCGACGCTACTCAGGTTACAGTGACGTC-----CATCTCCAGCATATCCAGCTCTAGTAGCTCAGACTCTA  
7 Orf\_virus\_YX 98.1% 95.5% GGAGGCGACGCTACTCAGGTTACAACGACTTCCATCTCCAGCATCTCCAGCATATACAGCTCTAGTAGCTCAGACTCTA  
8 Orf\_virus\_GO 98.8% 96.4% GGAGGCGACGCTACTCAGGTTACAACGACTTCTATCTCCAGCATCTCCAGCATATACAGCTCTAGTAGCTCAGACTCTA  
9 Orf\_virus\_B029 91.8% 81.7% GGATGCGACGCTACTCAGGTTACAGTGACGTC-----CATCTCCAGCATATCCAGCTCCAGTAGCTCAGACTCTA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GGATGCGACGCTACTCAGGTTACAGTGACGTC-----CATCTCCAGCATATCCAGCTCTAGTAGCTCAGACTCTA  
11 Orf\_virus\_SJ1 77.2% 74.2% GGAGGCGACGCTACTCAGGTTACAACGACTTCCATCTCCAGCATCTCCAGCATATACAGCTCTAGTAGCTCAGACTCTA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% GGAsGCGACGCTACTCAcUGTTACs s s s GACsTC . . . . . sATCTCCAGCATATsCAGCTCsAGTAGCTCAGACTCTA  
consensus/80% GGAsGCGACGCTACTCAGGTTACAsGACsTC . . . . . CATCTCCAGCATATsCAGCTCTAGTAGCTCAGACTCTA  
consensus/70% GGAsGCGACGCTACTCAGGTTACAusGACsTC . . . . . CATCTCCAGCATATsCAGCTCTAGTAGCTCAGACTCTA

cov pid 1601 . . . . . 1680  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TCTCTTGGGGCAGTGCAGACTGTCCATGGTGTCTCGGACATCG-----ACCTCCACGACCTTCTCCTCCTCGGAATGA  
2 Orf\_virus\_D1701 98.3% 88.3% GCTCTCTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCG-----ACCTCCACGACCTTCTCCTCCTCGGAATGA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GCTCTCTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCGACCTCCACCTCCACGACCTTCTCCTCCTCGGAATGA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GCTCTCTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCGACCTCCACCTCCACGACCTTCTCCTCCTCGGAATGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GCTCATTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCG-----ACCTCCACGACCTTCTCCTCCTCGGAATGA  
6 Orf\_virus\_NZ2 98.5% 88.2% TCTCTCTGGGGCAGTGCAGACTGTCCATGGTGTCCGCAACATCAACCTCCACCTCCACAACCTTCTCCTCCTCGGAATGA  
7 Orf\_virus\_YX 98.1% 95.5% GCTCTCTGAGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCG-----ACTTCCACGACATTTCTCCTCCTCGGAATGA  
8 Orf\_virus\_GO 98.8% 96.4% GCTCTCTGAGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCG-----ACCTCCACGACATTTCTCCTCCTCGGAATGA  
9 Orf\_virus\_B029 91.8% 81.7% TCTCTCTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCGACCTCCACCTCCACGACCTTCTCCTCCTCGGAATGA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% TCTCTCTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCGACCTCCACCTCCACGACCTTCTCCTCCTCGGAATGA  
11 Orf\_virus\_SJ1 77.2% 74.2% TCTCTTGGGGCAGTGCAGACTGTCCATGGTGTCTCGGACATCG-----ACTTCCACGACATTTCTCCTCCTCGGAATGA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% sCTCs sTGuGGCAGTGCAGACTGTCCATsGTGTCSGuACATCu . . . . . ACsTCCACuACssTsTCCTsTCussTGAs  
consensus/80% sCTCTsTGuGGCAGTGCAGACTGTCCATGGTGTCSGCGACATCG . . . . . ACsTCCACGACsTTsTCCTCCTCGGAATGA  
consensus/70% sCTCTsTGGGGCAGTGCAGACTGTCCATGGTGTCCGCGACATCG . . . . . ACCTCCACGACsTTsTCCTCCTCGGAATGA

cov pid 1681 . . . . . 7 . . . . . 1760  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% ACGCTACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
2 Orf\_virus\_D1701 98.3% 88.3% GCACCACACTTATTTTTGTATA--AGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GCGCCACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GCGCCACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GCGCCACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
6 Orf\_virus\_NZ2 98.5% 88.2% GCGCCACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
7 Orf\_virus\_YX 98.1% 95.5% ACGCTACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGATACATCTACAAAATAGTTAGGAAGCATGAGTAGTTCA  
8 Orf\_virus\_GO 98.8% 96.4% ACGCTACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGATACATCTACAAAATAGTTAGGAAGCATGAGTAGTTCA  
9 Orf\_virus\_B029 91.8% 81.7% GCACCACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GCGCCACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAGACATCCAAAATAGTTAGGAAGCATGAGTAGTTCA  
11 Orf\_virus\_SJ1 77.2% 74.2% ACGCTACGCTTATTTTTGTATAATAGTTTGTATTGAACCTTAGATACATCTACAAAATAGTTAGGAAGCATGAGTAGTTCA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% uCuCsACuCTTATTTTTGTATA . . AGTTTGTATTGAACCTTAGAsACATCsACAAAATAGTTAuGAAGCATGAGTAGTTCA  
consensus/80% uCuCsACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAsACATCsACAAAATAGTTAGGAAGCATGAGTAGTTCA  
consensus/70% uCGCsACACTTATTTTTGTATAATAGTTTGTATTGAACCTTAGAsACATCsACAAAATAGTTAGGAAGCATGAGTAGTTCA

cov pid 1761 . . . . . 8 . . . . . 1840  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% AGTAACGAGCCAC-----CCCTAAGCCAAAGCCCTGCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTAGAGAA  
2 Orf\_virus\_D1701 98.3% 88.3% AGTAGCGAAACCACACCTAAGCCAAAGCCCTATCCCTGCTCCCCCATGACTCAGGAGGAGTTTAAACAGAGAAGTAGAGAA  
3 Orf\_virus\_NA1-11 97.9% 87.5% AGTAGCGAGACCAC-----GCCCAAGCCTATCCCTGCTCCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTAGAGAA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AGTAGCGAGACCAC-----GCCCAAGCCTATCCCTGCTCCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTAGAGAA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% AGTAGCGAGACCACCCCTAAGCCAAAGCCCTATCCCTGCTCCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTAGAGAA  
6 Orf\_virus\_NZ2 98.5% 88.2% AGTAGCGAGACCACCCCTAAGCCAAAGCCCTATCCCTGCTCCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTAGAGAA  
7 Orf\_virus\_YX 98.1% 95.5% AGTAACGAGACCAC-----CCCTAAGCCC---CCTGCTCCTCCCATGACCAGGATGAGTTTAAACAAAGAAGTAGAGAA  
8 Orf\_virus\_GO 98.8% 96.4% AGTAACGAGACCAC-----CCCTAAGCCC-----CCTTCTCCCATGACCAGGAGGAGTTTAAACAAAGAAGTAGAGAA  
9 Orf\_virus\_B029 91.8% 81.7% AGTAGCGAGACTAC-----GCCCAAGCCTATCCCTGCTCCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTAGAGAA

10 Orf\_virus\_IHUMI-1 78.5% 70.9% AGTAGCGAGACTAC-----GCCCAAGCCATCCTCTCTCCCATGACTCAGGAGGAGTTTAAACAAAGAAGTGAAGAA

11 Orf\_virus\_SJ1 77.2% 74.2% AGTAACGAGACCAC-----CCCTAAGCCC---CCTGCTCTCCCATGACCAGGATGAGTTTAAACAAAGAAGTAGAGAA

12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 1841 : . . . . . 9 . . . . . 1920  
2 Orf\_virus\_D1701 98.3% 88.3% ACGAAGAGAACA...AGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTGTCTGCCGACGGAACAG  
3 Orf\_virus\_NA1-11 97.9% 87.5% ATGGGAAGAAAAGAAAAGGAAAAATCTAGAAATCGTTGAACGTGAGGCGGAAACCGTAACTGTGTCTGCCGACGGAACAG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACGGGAAGAAAAGAAAAGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTATCTTCCGACGGATCAG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACGGGAAGAAAAGAAAAGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTATCTTCCGACGGATCAG  
6 Orf\_virus\_NZ2 98.5% 88.2% ACGAAAAGAACA...AGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTATCTTCCGACGGATCAG  
7 Orf\_virus\_YX 98.1% 95.5% ACGGGAAGAAAAGAAAAGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTGTCTGGTGACGGAACAG  
8 Orf\_virus\_GO 98.8% 96.4% ACGGGAAGAAAAGAAAAGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTGTCTGGTGACGGAACAG  
9 Orf\_virus\_B029 91.8% 81.7% ACGGGAAGAAAAGAAAAGGAAAAATCTAGAACCGTTGAACGTGAGTTAGAAAACCGTAACTGTGTCTGCCGACGGAACAG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% ACGAAAAGAACA...AGGAAAAATCTAGAACCGTTGAACGTGAGTTAGAAAACCGTAACTGTATCTGCCAACGGAACAG  
11 Orf\_virus\_SJ1 77.2% 74.2% ACGAAGAGAACA...AGGAAAAATCTAGAACCGTTGAACGTGAGTCAGAAAACCGTAACTGTGTCTGGCGACGGAACAG  
12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 1921 : . . . . . 0 2000  
2 Orf\_virus\_D1701 98.3% 88.3% AGAAAACAAGGACCTACGAGCGCGAGTCTGTGAAAACAACCGAATCAGAAAAGAACAACAATCCGTCAACC---AATGAT  
3 Orf\_virus\_NA1-11 97.9% 87.5% AGATAAAAAAGACTTACGAGCGCGAGTCTGAGAGAAGAACCAGAACAGAAAAGAACAAC---ACGTCAACC---GATGAT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AGATAAAAAAGACTTACGAGCGCGAGTCTGAGAGAAGAACCAGAACAGAAAAGAACAAC---ACGTCAACC---GATGAT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% AGATAAAAAAGACTTACGAGCGCGAGTCTGAGAGAACAACCAGAACAGAAAAGAACAAC---ACGTCAACC---GATGAT  
6 Orf\_virus\_NZ2 98.5% 88.2% AGATAAAAAAGACTTACGAGCGCGAGTCTGAGAGAACAACCAGAACAGAAAAGAACAAC---ACGTCAACC---GATGAT  
7 Orf\_virus\_YX 98.1% 95.5% AGAAAACAAGGACCTACGAGCGCGAGTCTGAGAAAACAACCGAACAGAAAAGAACAACAATCCGTCAACC---AATGAT  
8 Orf\_virus\_GO 98.8% 96.4% AGAAAACAAGGACCTACGAGCGCGAGTCTGAGAAAACAACCGAACAGAAAAGAACAACAATCCGTCAACC---AATGAT  
9 Orf\_virus\_B029 91.8% 81.7% AGAGAACAAGGATCTACGAGCGCGATTCTGAAAAGAACAACCAGAACAGAAAAGAACAAC---ACGTCAACC---AAT  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% AGATAAAAAAGACTTACGAGCGCGAGTCTGAGAGAACAACCAGAACAGAAAAGAACAAC---ACGTCAACC---GATGAT  
11 Orf\_virus\_SJ1 77.2% 74.2% AGAAAACAAGGATCTACGAGCGCGAGTCTGAGAGAACAACCAGAACAGAAAAGAACAAC---ACGTCAACC---AATGAT  
12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 2001 : . . . . . 2080  
2 Orf\_virus\_D1701 98.3% 88.3% AATAAGGACAAAGTGACCGACAATCAGCCAAAAGAAGACGATAAGAACTTGAGGAACTCCCAAGGACAGTGAGAAGCC  
3 Orf\_virus\_NA1-11 97.9% 87.5% AATAAGCAGAACACCCCTGTAGAGAAACCAGAGGAAACC-----AAGCCTGCTTCTACTCCTGAAG---GTGAGAAG--  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AATAAGCAGAACACCCCTGTAGAGAAACCAGAGGAAACC-----AAGCCTGCTTCTACTCCTGAAG---GTGAGAAG--  
5 Orf\_virus\_OV-IA82 98.6% 88.5% AATAAGCAGAACACCCCTGTAGAGAAACCAGAGGAAACC-----AAGCCTGCTTCTACTCCTGAAG---GTGAGAAG--  
6 Orf\_virus\_NZ2 98.5% 88.2% AATAAGCAGAACACCCCTGTAGAGAAACCAGAGGAAACC-----AAGCCTGCTTCTACTCCTGAAG---GTGAGAAG--  
7 Orf\_virus\_YX 98.1% 95.5% AATAAGGACAAAGTGACCGACAACCAGCCAAAAGAAGACGATAAAAACCTTGAGGAACT---AAGGACAGTGAGAAGCC  
8 Orf\_virus\_GO 98.8% 96.4% AATAAGGACAAAGTGACCGACAATCAGCCAAAAGAAGACGATAAGAAACCTTGAGGAACT---AAGGACAGTGAGAAGCC  
9 Orf\_virus\_B029 91.8% 81.7% GATAAGCAGAACACCCCTGTAGAGAAACCAGAGGAAACC-----AAGCCTGCTTCTACTCCTGAAG---GTGATAAG--  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% AATAAGCAGAACTACTCCTGTAGAGAAACCAGAGAAACC-----AATCTGCTTCTACTCCTAAAG---GTGAGAAG--  
11 Orf\_virus\_SJ1 77.2% 74.2% AATAAGGACAAAGTGACCGACAATCAGCCAAAAGAAGACGATAAGAACTTGAGGAACTCCTAAGGACCGTGAGAAGCC  
12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 2081 : . . . . . 1 . . . . . 2160  
2 Orf\_virus\_D1701 98.3% 88.3% TACACCAACTGAAAAGCCCGCAACACCTCTTCTGGTGA-----TAATAAGAAAGAGGGGGAAGAAGCAACCCCTTG  
3 Orf\_virus\_NA1-11 97.9% 87.5% ----CCAGCCGAAACTCCTG-----CCCGACTACTGACCCCAACCCACTACACAACCACCCGAGAAATCAAACCTCTG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ----CCAGCCGAAACTCCTG-----CCCGACTACTGACCCCAACCCACTACACAACCACCCGAGAAATCAAACCTCTG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ----CCAGCTGAAACTCCTG-----CCCGACTACTGACCCCAACCCACTACACAACCACCCGAGAAATCAAACCTCTG  
6 Orf\_virus\_NZ2 98.5% 88.2% ----CCAGCCGAGACTCCTG-----CCCGACTACTGACCCCAACCTACTACACAACCACCCGAGAAATCAAACCTCTG  
7 Orf\_virus\_YX 98.1% 95.5% TACACCAACTGAAAAGCCCGCAGACACCTCTTCTGGTGA-----TAATAAGAAAGAGGGGGAAGAAGCAACCCCTTA  
8 Orf\_virus\_GO 98.8% 96.4% TACGCCAACTGAAAAGCCCGCAGACACCTCTTCTGGTGA-----TAATAAGAAAGAGGGGGAAGAAGCAACCCCTTG  
9 Orf\_virus\_B029 91.8% 81.7% ----CCAGCCGAAACTCCTG-----CCCGACTACTAACCCCAACCCACTACACAACCACCCGAGAAATCAAACCTCTG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% ----CCAGCCGAGACTCCTG-----CCCGACTACTGACCCCAACCCACTACACAACCACCCGAGAAATCAAACCTCTG  
11 Orf\_virus\_SJ1 77.2% 74.2% TACACCAACTGAAAAGCCCGCAGACACCTCTTCTGGTGA-----TAATAAGAAAGAGGGGGAAGAAGCAACCCCTTG  
12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 2161 : . . . . . 2 . . . . . 2240  
2 Orf\_virus\_D1701 98.3% 88.3% AGAGTCAACCCACGCTGCACC-TACTCAGCCATCAAACAGCGA-----AGCAC-----  
3 Orf\_virus\_NA1-11 97.9% 87.5% GAAGTCAACCCACACCTGCTCCAGAACAACCCCGCACCTGAACCTACTCCGGCTCCAGAGCTACACCTGCATCAAAA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GAAGTCAACCCACACCTGCTCCAGAACAACCCCGCACCTGAACCTACTCCGGCTCCAGAGCTACACCTGCATCAGAG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GAAGTCAACCCACACCTGTTCCAGAACAACCCCGCACCT-----GAGCCTGCACCCG-----AA  
6 Orf\_virus\_NZ2 98.5% 88.2% GAAGTCAACCCGACCTGCTTCCAGAACAACCCCGCACCT-----GAGCCTGCACCCGAAAC-----  
7 Orf\_virus\_YX 98.1% 95.5% AAAGTCAACCCACGCTGCACC-TACTCAACCATCAAACAGCGA-----AGCAC-----  
8 Orf\_virus\_GO 98.8% 96.4% AGAGTCAACCCACGCTGCACC-TACTCAGCCATCAAACAGCGA-----AGCAC-----  
9 Orf\_virus\_B029 91.8% 81.7% GAAGTCAACCCACACCTGCTTCCAGAACAACCCCGCACCT-----GAGCCTGCACCCG-----AA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GAAGTCAACCCACACCTGCTTCCAGAACAACCCCGCACCT-----GAGCCTGCATCAGTAACTCAA  
11 Orf\_virus\_SJ1 77.2% 74.2% AGAGTCAACCCACGCTGTACC-TACTCAGCCATCAAACAGCGA-----AGCACCCACTCAACCTCAAAGC  
12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 2241 : . . . . . 3 . . . . . 2320  
2 Orf\_virus\_D1701 98.3% 88.3% -----CCTACTCAACCTCCAAGCAGTGAGACTCCACCCACT-CAACCTCCAAGC---AG--TACACCT-----  
3 Orf\_virus\_NA1-11 97.9% 87.5% CCCACTCCTGCCACTGAGCCCGC---AGC---AACCAGAACCCACTTCCAGAACCAGC---CAAG---TTCTGTCCCTGAGC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CCCACTCCTGCCACTCAGCCTGC-ATCAGT--AACTCAACCCGCTCCAACACCAGAGC---CAAG---TCCAGCCCTGAGC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CCCACTCCTGCCACTCAGCCTGC-ATCAGT--AACTCAACCCGCTCCAACACCAGAGC---CAAG---TCCAGCCCTGAAA  
6 Orf\_virus\_NZ2 98.5% 88.2% -----CCTACTCAGCCTGC-ATCAGT--AACTCAACCCGCTCCAACACCAGAGC---CAAG---TCCAGCCCTAAGC  
7 Orf\_virus\_YX 98.1% 95.5% -----CCTACTCAACCTCCAAGCAGTGAGACTCCATCCACT-CAACCCCAAGC---AGTGAG-----  
8 Orf\_virus\_GO 98.8% 96.4% -----CCTACTCAACCTCCAAGCAGTGAGACTCCATCCACT-CAACCTCCGAGC---AG-----  
9 Orf\_virus\_B029 91.8% 81.7% CCCACTCCTGCCACTCAGCCTGC-ATCAGT--AACTCAACCCGCTCCAACACCAGAGC---CAAC---CCCGCACCTGAGC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CCTGCTCCTGCCACTCAGCCTGC-ATCAGT--AACCAGAACCCACTCCAACACCAGAGC---CAAG---TCCAGCCCTAAGC  
11 Orf\_virus\_SJ1 77.2% 74.2% AGTACACCATCCACTCAACCTCCAAGCAGTGAGACTCCACCCACT-CAACCTCCAAGCAGTGAGACTCCATCCACTCAAC  
12 Orf\_virus\_NP 24.1% 23.5% -----

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 2321  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0%  
2 Orf\_virus\_D1701 98.3% 88.3%  
3 Orf\_virus\_NA1-11 97.9% 87.5%  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2%  
5 Orf\_virus\_OV-IA82 98.6% 88.5%  
6 Orf\_virus\_NZ2 98.5% 88.2%  
7 Orf\_virus\_YX 98.1% 95.5%  
8 Orf\_virus\_GO 98.8% 96.4%  
9 Orf\_virus\_B029 91.8% 81.7%  
10 Orf\_virus\_IHUMI-1 78.5% 70.9%  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

. . . . .  
.....CCACTsAuCCssC...AGs..uACsssAsCCuCT.CAussCsAuAGC...ss.....  
.....CCACTCAuCCTsC.AsCAGT..uACsssAsCCuCT.CAACssCsAuAGC...AG.....  
.....CCACTCAuCCTsC.AsCAGT..uACTCsACCCuCT.CAACssCsAuAGC..suAG..ssCsssss.....  
-----CCACTCAACCTCCAAGCAGTACACCATCCACTGAAC-----  
CTACTCCGGCTCTGATCCAACCCCTGCA-----CCAGAACTTACACCAGCCGAGAAC-----  
CTACTCCGGCTCCTGAACCAACCCCTGCACCAGAACCCTCCCGCTCCAGAACCTACACCATCCACAGAACCAGACTCCT  
CTACTCCGGCTCCTGAACCAACCCCTGCACCAGAACCCTCCCGCTCCAGAACCTACACCATCCACAGAACCAGACTCCT  
CTACTCCGGCTTCCGAACCAACCCCTGCACCAGAACCCTCCCGCTCCAAACCTACACCAGCCACAGAACCAGACTCCT  
CTACTCCGGCTTCTGAACCAACCCAGCATCTGAGCTACTTCTGCTCCAGAACCTACACCATCCGAGAACCAACTCCT  
-----ACTCCATCCACTCAAC-----  
-----TACACCATCCACTCAAC-----  
CTACTCCGGCTTCCGAAC-----CCACTCCTGCTCCAGAACCTACACCAGCCGAGAACCCGAGTCTCT  
CTACTCCGGCTTCTGAACCAACCCAGCATCTGAGCTACTTCTGCTCCAGAACCTACACCATCCGAGAACCAACTCCT  
CTCCATCCACTCAACCTCCATCCACTCAACCTCCATCCACTC-----AACCT---CCATCCACTCAACCT-----  
.....  
.....CCAsCCuCsAAAC.....  
.....TACsCCAsCCuCsAAAC.....  
.....ussstACACCAsCCuCsAAAC.....

cov pid 2401  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0%  
2 Orf\_virus\_D1701 98.3% 88.3%  
3 Orf\_virus\_NA1-11 97.9% 87.5%  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2%  
5 Orf\_virus\_OV-IA82 98.6% 88.5%  
6 Orf\_virus\_NZ2 98.5% 88.2%  
7 Orf\_virus\_YX 98.1% 95.5%  
8 Orf\_virus\_GO 98.8% 96.4%  
9 Orf\_virus\_B029 91.8% 81.7%  
10 Orf\_virus\_IHUMI-1 78.5% 70.9%  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

. . . . . 2480  
-----CTACTCCAGAGCCAGCTCCTTCTACCGAACCAACAACCAACGCCAACGG  
----CAACTGTAGAAGCACCACC-----TGCTACAGCACCAACTTCCGAAACCAACAGCCACCAACAGCAATCC  
CAACCAACCGTAGAAACACCACC-----ATCTGCTACAGCACCAACTACCGAAGCCAGCCA---ACCAA---CAATCC  
CAACCAACCGTAGAAACACCACC-----ATCTGCTACAGCACCAACTACCGAAGCCAGCCA---ACCAA---CAATCC  
CAACCAACCGTAGAAACACCACC-----ATCTGCTCCAGCACCAACTCCCGAGGCCAACCCCGCCAA---CAATCC  
CAACCAACTGTAGAACACCACC-----ATCTGCTCCAGCACCAACTCCCGAGGCCAACCCCGCCAACAGCAATCC  
-----CTACTCCAGAGCCAGCTCCTTCTACCGAACCAACAACCAACGCCAACGG  
-----CTACTCCAGAGCCAGCTCCTTCTACCGAACCAACAACCAACGCCAACGG  
CAACCAACCGTAGAAACACCACC-----ATCTGCACCAGCACCAACTACCGAAGCCAGCCA---ACCAA---CAATCC  
CAACCAACTGTAGAACACCACC-----ATCTGCTCCAGCACCAACTCCCGAGGCCAACCCCGCCAACAGCAATCC  
---CCAAGCAGTGAGACTCCATCCACTGAACCTACTCCAGAGCCAGCTCCTTCCACCGAACCAACAACCAACGCCAACGG  
.....  
.....TuCsCAGsuCCAuCTsCsSSsuCCsAuCCA...uCAA...CAAsss  
.....CTuTsCAGsuCCAuCTsCsSSsuCCsAuCCA...uCAA...CAAsss  
.....CTuTsCAGsuCCAuCTsCsSSsuCCsAuCCA...uCAA...CAAsss

cov pid 2481  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0%  
2 Orf\_virus\_D1701 98.3% 88.3%  
3 Orf\_virus\_NA1-11 97.9% 87.5%  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2%  
5 Orf\_virus\_OV-IA82 98.6% 88.5%  
6 Orf\_virus\_NZ2 98.5% 88.2%  
7 Orf\_virus\_YX 98.1% 95.5%  
8 Orf\_virus\_GO 98.8% 96.4%  
9 Orf\_virus\_B029 91.8% 81.7%  
10 Orf\_virus\_IHUMI-1 78.5% 70.9%  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

. . . . . 2560  
TACACCTGCCGCCACTACTTCAGAAACCCTGCCTAAATGAGTCCGTAAGCATTTCAGAGTAACGTACACTAGTAAGCGA  
CGCTACCAGAA---ACCAGCTGGTGCCAGCACCTCCTAAATAGTCCGTAAGCATTTCAGAGTAACGTACACTAGTAAGCGC  
CACTACTGAAACCACCAGCTGGTACCAGCACCTTCTAAATGAGACC--TAAGCATTTCAGAGTAAC---CGTAGTAAGCGA  
CACTACTGAAACCACCAGCTGGTACCAGCACCTTCTAAATGAGACC--TAAGCATTTCAGAGTAAC---CGTAGTAAGCGA  
CACTACTGAAACTACCAGCTGGTACCAGCACCTCCTAAGTGAGTACGTAAGCATTTCGGAGTAACGT--CGTAGCAAGCGC  
TACACCTGCCGCCACTACTTCAGAAACCCTGCCTAAATGAGTCCGTAAGCATTTCAGAGTAACGT--CGTAGCAAGCGC  
TACACCTGCCGCCACTACTTCAGAAACCCTGCCTAAATGAGTCCGTAAGCATTTCAGAGTAACGT--CGTAGCAAGCGC  
CACTACTGAAACTACCAGCTGGTACCAGCACCTTCTAAGTGAGTCCGTAAGCATTTCAGAGTAACGT--CGTAGCAAGCGC  
CACTACTGAAACTACCAGCTGGTACCAGCACCTCCTAAGTGAGTACGTAAGCATTTCAGAGTAACGT--CGTAGCAAGCGC  
TACACCTGCCGCCACTACTTCAGAAACCCTGCCTAAATGAGTCTGTAAGCATTTCAGAGTAACGT--ACTAGTAAGCGA  
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.....  
suCsCsGss...ACsACTsssussAsCACssCsTAAuTsAGsss.sAAGCATTTCu...TAAC...ssTAGsAAGCGs  
sACssCTGssuCsACsACTsssussAsCACssCsTAAuTGAGssC.sAAGCATTTCu...TAAC...ssTAGsAAGCGs  
sACssCTGssuCsACsACTsssussAsCACssCsTAAuTGAGTsCGTAAGCATTTCAGAGTAACGT..CsTAGsAAGCGs

cov pid 2561  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0%  
2 Orf\_virus\_D1701 98.3% 88.3%  
3 Orf\_virus\_NA1-11 97.9% 87.5%  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2%  
5 Orf\_virus\_OV-IA82 98.6% 88.5%  
6 Orf\_virus\_NZ2 98.5% 88.2%  
7 Orf\_virus\_YX 98.1% 95.5%  
8 Orf\_virus\_GO 98.8% 96.4%  
9 Orf\_virus\_B029 91.8% 81.7%  
10 Orf\_virus\_IHUMI-1 78.5% 70.9%  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

. . . . . 2640  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAGTTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTGCGGGCGGTGTACGCTTT  
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.....  
TAGTCCGCCGCGAGCGGTTCTsGCAAG.TTTTTTCGGGTAAAAAGCGTACACCGTCGCCTsGTsGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAG.TTTTTTCGGGTAAAAAGCGTACACCGTCGCCTsGTsGCGGGCGGTGTACGCTTT  
TAGTCCGCCGCGAGCGGTTCTCGCAAG.TTTTTTCGGGTAAAAAGCGTACACCGTCGCCTTGTsGCGGGCGGTGTACGCTTT

cov pid 2641  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0%  
2 Orf\_virus\_D1701 98.3% 88.3%  
3 Orf\_virus\_NA1-11 97.9% 87.5%  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2%  
5 Orf\_virus\_OV-IA82 98.6% 88.5%  
6 Orf\_virus\_NZ2 98.5% 88.2%  
7 Orf\_virus\_YX 98.1% 95.5%  
8 Orf\_virus\_GO 98.8% 96.4%  
9 Orf\_virus\_B029 91.8% 81.7%  
10 Orf\_virus\_IHUMI-1 78.5% 70.9%  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

. . . . . 2720  
TTTTACGCCCTTTTTGTC-AAATTTAAATTGTACCTGCGCTGGCTCTAGGAGAGATGGCGTGCCTCCGGGTGTTCTGGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCCGGCTCTAGGAGAGATGGCGTGCCTCAGAGTGTTTTTGGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCCGGCTCTAGGAAAGATGGCGTGCCTCAGAGTGTTCCTGGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCCGGCTCTAGGAAAGATGGCGTGCCTCAGAGTGTTCCTGGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCCGGCTCTAGGAAAGATGGCGTGCCTCAGAGTGTTCCTGGCG  
TTTTACGCCCTTTTTGTC-AAATTTAAATTGTACCTGCGCTGGCTCTAAGAGAGATGGCGTGCATCCGGGTGTTCTGGCG  
TTTTACGCCCTTTTTGTC-AAATTTAAATTGTACCTGCGCTGGCTCTAGGAGAGATGGCGTGCCTCCGGGTGTTCTTAGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCCGGCTATAGGAAAGATGGCGTGTCTCAGGGTGTTCCTGGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCCGGCTCTAGGAGAGATGGCGTGCCTCAGAGTGTTCCTGGCG  
TTTTACGCCCTTTTTGTCAAAATTTAAATTGTACCCGCGCTGGCTCTAAGAGAGATGGCGTGCCTCCGGGTGTTCTGGCG  
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.....  
TTTTACGCCCTTTTTGTC.AAATTTAAATTGTACCsGCGCsGGCTsTAuGAuAGATGGCGTGCCTsGuGTGTTsTuGCG  
TTTTACGCCCTTTTTGTC.AAATTTAAATTGTACCsGCGCsGGCTCTAuGAuAGATGGCGTGCCTsGuGTGTTsTuGCG  
TTTTACGCCCTTTTTGTC.AAATTTAAATTGTACCsGCGCsGGCTCTAGGAuAGATGGCGTGCCTsGuGTGTTCTGGCG

cov pid 2721  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0%  
2 Orf\_virus\_D1701 98.3% 88.3%  
3 Orf\_virus\_NA1-11 97.9% 87.5%  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2%  
5 Orf\_virus\_OV-IA82 98.6% 88.5%  
6 Orf\_virus\_NZ2 98.5% 88.2%  
7 Orf\_virus\_YX 98.1% 95.5%  
8 Orf\_virus\_GO 98.8% 96.4%  
9 Orf\_virus\_B029 91.8% 81.7%  
10 Orf\_virus\_IHUMI-1 78.5% 70.9%  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%  
consensus/90%  
consensus/80%

. . . . . 8 2800  
GTGTTTCGCGCTGTGCGGAAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCGATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
GTGTTTCGCGCTGTGCGGGAGCGTGCCTCGCGCAATGGATCGGGCAGCGCGACTTCTGCATGGCCACCGCGCAGGACGT  
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.....  
GTGsTCGCGCTGTGCGGuAGCGTGCCTCGCGCuATGGATCGGGCAGCGCGACTTsTCAsGGCCACCGCuCAGGACGT  
GTGsTCGCGCTGTGCGGuAGCGTGCCTCGCGCuATGGATCGGGCAGCGCGACTTsTCAsGGCCACCGCuCAGGACGT



consensus/70% cov pid 2801  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
2 Orf\_virus\_D1701 98.3% 88.3% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
3 Orf\_virus\_NA1-11 97.9% 87.5% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
6 Orf\_virus\_NZ2 98.5% 88.2% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
7 Orf\_virus\_YX 98.1% 95.5% ATTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACTGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
8 Orf\_virus\_GO 98.8% 96.4% ATTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACTGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
9 Orf\_virus\_B029 91.8% 81.7% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
11 Orf\_virus\_SJ1 77.2% 74.2% CTTTCGCGCGGCTGCAAGTGTGGATGCGCATCGACCGGAACGTGACCGCTGGGATAAACACTCGGCCTGTGCGCTGGCGA  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 2881  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TAGAGACGCCGCCAAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
2 Orf\_virus\_D1701 98.3% 88.3% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
3 Orf\_virus\_NA1-11 97.9% 87.5% TAGAAACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TAGAAACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
6 Orf\_virus\_NZ2 98.5% 88.2% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
7 Orf\_virus\_YX 98.1% 95.5% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
8 Orf\_virus\_GO 98.8% 96.4% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
9 Orf\_virus\_B029 91.8% 81.7% TAGAAACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
11 Orf\_virus\_SJ1 77.2% 74.2% TAGAGACGCCGCCGAGCAACTTCGACCGGACGTCTACGTGCGCCGGCCGGCATAAACCTCAGCGTGTCCGCGATCAAC  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 2961  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACACCTG  
2 Orf\_virus\_D1701 98.3% 88.3% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACACCTG  
3 Orf\_virus\_NA1-11 97.9% 87.5% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACACCTG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACACCTG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACTCTTG  
6 Orf\_virus\_NZ2 98.5% 88.2% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACTCTTG  
7 Orf\_virus\_YX 98.1% 95.5% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACACCTG  
8 Orf\_virus\_GO 98.8% 96.4% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACACCTG  
9 Orf\_virus\_B029 91.8% 81.7% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACTCTTG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACTCTTG  
11 Orf\_virus\_SJ1 77.2% 74.2% TGCGGCTTCTTCAACATGCGCCAGGTAGAGACAACGTACGACACGGCAGCCGGCAGATGTACGTGTACATGGACTCTTG  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 3041  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GGACCCCTGGGTGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
2 Orf\_virus\_D1701 98.3% 88.3% GGACCCCTGGGTGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
3 Orf\_virus\_NA1-11 97.9% 87.5% GGACCCCTGGGTGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GGACCCCTGGGTGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGACCCCTGGATGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
6 Orf\_virus\_NZ2 98.5% 88.2% GGACCCCTGGGTGATCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTTCCGTACCTGCTGGAGG  
7 Orf\_virus\_YX 98.1% 95.5% GGACCCCTGGGTGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
8 Orf\_virus\_GO 98.8% 96.4% GGACCCCTGGGTGCTCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
9 Orf\_virus\_B029 91.8% 81.7% GGACCCCTGGGTGATCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GGACCCCTGGGTGATCGACGACCCCCAGCCGCTCTTTCAGCCAGGAGTACGAAAACGAAACGCTGCCGTACCTGCTGGAGG  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 3121  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
2 Orf\_virus\_D1701 98.3% 88.3% TTCTAGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
3 Orf\_virus\_NA1-11 97.9% 87.5% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
6 Orf\_virus\_NZ2 98.5% 88.2% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
7 Orf\_virus\_YX 98.1% 95.5% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
8 Orf\_virus\_GO 98.8% 96.4% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
9 Orf\_virus\_B029 91.8% 81.7% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% TTCTGGAGCTAGCGAGGCTGTACATTCGCGTGGGCTGCACGGTGCCCGGAGAGCAGCCCTTTGAGGTGATCAGGGGGATC  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 3201  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
2 Orf\_virus\_D1701 98.3% 88.3% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
3 Orf\_virus\_NA1-11 97.9% 87.5% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GACTACCCCAACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
6 Orf\_virus\_NZ2 98.5% 88.2% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
7 Orf\_virus\_YX 98.1% 95.5% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
8 Orf\_virus\_GO 98.8% 96.4% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
9 Orf\_virus\_B029 91.8% 81.7% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GACTACCCTCACACCAGCATGGAGTTTCTCCAGCACGTTCTACGGCCAAACCGCCGGTTGCTCCAGCGAAGTGCACAT  
11 Orf\_virus\_SJ1 77.2% 74.2%  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 3281  
3  
3360



4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTACAACCCGCGACCGCTCCGCCGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTACAACCCGCGACCGCTCCGCCGA  
6 Orf\_virus\_NZ2 98.5% 88.2% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTACAACCCGCGACCGCTCCGCCGA  
7 Orf\_virus\_YX 98.1% 95.5% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTACAACCCGCGACCGCTCCGCCGA  
8 Orf\_virus\_GO 98.8% 96.4% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTACAACCCGCGACCGCTCCGCCGA  
9 Orf\_virus\_B029 91.8% 81.7% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTANNNNNNNNNNNNNNNNNNNNN  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GGGCAACCGGAGCATCCAGCCTGCGATGTCCGAGGCGTTGCGAGAATGATTTTCAGCTACAACCCGCGACCGCTCCGCCGA  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% .....  
consensus/80% GGGCAACCGGAGCATCCuGCCsGCGATGTCCGAuGCGsTGCGAGAAsGAsTTCAGCTAssssssssssssssssssssss  
consensus/70% GGGCAACCGGAGCATCCuGCCGCGATGTCCGAGGCGsTGCGAGAAsGAsTTCAGCTACAACCCGCGuCCGCTCCGCCGA

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 3841 GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAGCCAGCAGCTCCAAG 3920  
2 Orf\_virus\_D1701 98.3% 88.3% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTCGAGGCTAAGCCTAGCAGCTCCAAG  
3 Orf\_virus\_NA1-11 97.9% 87.5% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTCGAGGCTAAGCCTAGCAGCTCCAAG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAGCCAGCAGCTCCAAG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAGCCAGCAGCTCCAAG  
6 Orf\_virus\_NZ2 98.5% 88.2% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAGCCAGCAGCTCCAAG  
7 Orf\_virus\_YX 98.1% 95.5% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAGCCAGCAGCTCCAAG  
8 Orf\_virus\_GO 98.8% 96.4% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAGCCAGCAGCTCCAAG  
9 Orf\_virus\_B029 91.8% 81.7% NNGA-  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATTTAGGCCAAAG-----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% .....  
consensus/80% sss  
consensus/70% GCGCAGAAGAGATTGACTTCTTTCGCGTGGACATGCGCAAAGTACTGATGGAATsGAGGCSAAGssssssssssssuA.

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 3921 TACCCCGATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC 4000  
2 Orf\_virus\_D1701 98.3% 88.3% TACCCCGATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
3 Orf\_virus\_NA1-11 97.9% 87.5% TACCCCGATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TACCCCGATTTCATCCACCTGGTTGACAGCAGCCTGCCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TACCCCAATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
6 Orf\_virus\_NZ2 98.5% 88.2% TACCCCGATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
7 Orf\_virus\_YX 98.1% 95.5% TACCCCGATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
8 Orf\_virus\_GO 98.8% 96.4% TACCCCGATTTCATCCACCCGGTTGACAGCAGCCCGCGTGCACGCCGCGCGCAAGCGCAACGGCTCCGGCCGAAGGC  
9 Orf\_virus\_B029 91.8% 81.7% -----CGGACGATCCTGTGCG-----GCAAAGACTTCAACATAGTGGC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% .....  
consensus/80% .....CGsuCussCCsGsGCG....GCAAsGuCTsCuuCsssusGGs  
consensus/70% .....

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 4001 ACCGAACAAGACCCCGGTGCCGAGCATGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACAC----- 4080  
2 Orf\_virus\_D1701 98.3% 88.3% ACTGAACAAGACCCCGGTGCCGAGCAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACACACTA  
3 Orf\_virus\_NA1-11 97.9% 87.5% ACCGATCAAAACCCCGGTGCCGAAACAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACAC-----  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACCGATCAAAACCCCGGTGCCGAAACAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACAC-----  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACTGAACAAGACCCCGGTGCCGAGCAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACAC-----  
6 Orf\_virus\_NZ2 98.5% 88.2% ACTGAACAACCCAGGTGCCGAGCAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACAC-----  
7 Orf\_virus\_YX 98.1% 95.5% ACCGAACAAGACCCCGGTGCCGAGCAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTCACAC-----  
8 Orf\_virus\_GO 98.8% 96.4% ACCGAACAAGACCCCGGTGCCGAGCAGGCCAAGCGTGACGGCTACTCCCGTAATGCAGTCCACACACTTC-----  
9 Orf\_virus\_B029 91.8% 81.7% GCCG-----  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% .....  
consensus/80% .....  
consensus/70% uCSG.....

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 4081 ACCACA-CAGCACTCAAGCCCAGCATCATCACAAATGAAGCAGCCGAGCCACAGCCCGCGTGCAGCAGCACATAAA 4160  
2 Orf\_virus\_D1701 98.3% 88.3% ACTACATCAGCACTCAAGCTCACAATCATCGCACATGAAGCTAGCCAA-----CAGTGCCAAGCACACACATAAA  
3 Orf\_virus\_NA1-11 97.9% 87.5% ACTACATCAGCACTCAAGCTTATAATCACCACAAATGAATCAGCCCA-----CCAGTGCCAAGCACACACATAAA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACTACATCAGCACTCAAGCTTATAATCACCACAAATGAATCAGCCCA-----CCAGTGCCAAGCACACACATAAA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACTACATCAGCACTCAAGCTTATAATCACCACAAATGAATCAGCCCA--GCCACACACAGTGCAGCAAGCA--CACATAAA  
6 Orf\_virus\_NZ2 98.5% 88.2% ACTACATCAGCACTCAAGCTTATAATCACCACAAATGAATCAGCCCA-----CCAGTGCCAAGCACACACATAAA  
7 Orf\_virus\_YX 98.1% 95.5% ACCACA-CAGCACTCAAGCTCAGCATCATCACAAATGAAGCAGCCGAGCCACAGCCCGCGTGCAGCAGCACATAAA  
8 Orf\_virus\_GO 98.8% 96.4% ACCACA-CAGCACTCAAGCTCAGCATCATCACAAATGAAGCAGCCGAGCCACAGCCCGCGTGCAGCAGCACATAAA  
9 Orf\_virus\_B029 91.8% 81.7% -----  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% .....  
consensus/80% .....  
consensus/70% .....

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 4161 ATCGCCACAGTCTTGATCATTCTTAATTGTTCCCAATFACTCCCAATCA-CCCTGCCTTACACACAGCAGCTTATCAC 4240  
2 Orf\_virus\_D1701 98.3% 88.3% ATCACCCAC-----TGTCCTGATCGTTCCCAATFACTCCCAATCA-CCCTGCCTTACACACAGCAGCTTATCAC  
3 Orf\_virus\_NA1-11 97.9% 87.5% ATCACCCAC-----TTGTCTGATCGTTCCCAATFACTCCCAATCACCCGTCCTTACACGACGTTAATCACCTT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ATCACCCAC-----TTGTCTGATCGTTCCCAATFACTCCCAATCACCCGTCCTTACACGACGTTAATCACCTT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ATCACCCAC-----CTGTCTGATCGTTCCCAATFACTCCCAATCACCCGTCCTTACACGACGTTAATCACCTT  
6 Orf\_virus\_NZ2 98.5% 88.2% ATCACCCAC-----CTGTCTGATCGTTCCCAATFACTCCCAATCA-CCCTGCCTTACACGACGTTAATCACCTT  
7 Orf\_virus\_YX 98.1% 95.5% ATCACCCACAGTCTTGATCGTTCTTAATTGTTCCCAATFACTCCCAATCA-CCCTGCCTTACACACAGCAGCTTATCAC  
8 Orf\_virus\_GO 98.8% 96.4% ATCACCCACAGTCTTGATCGTTCTTAATTGTTCCCAATFACTCCCAATCA-CCCTGCCTTACACACAGCAGCTTATCAC  
9 Orf\_virus\_B029 91.8% 81.7% -----  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100% .....  
consensus/90% .....  
consensus/80% .....  
consensus/70% .....

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% 4241 CCGCCTTCCT-----TCTTCGTCCTAATTACACATACA-CCCCGTAATTTGTACTTTTGTACTTTT 4320  
2 Orf\_virus\_D1701 98.3% 88.3% TTCCTTCCTT-----CCTCCCTTAATTACACATACACCCCGTAATGTTGTACTTTTGTACTTTT  
3 Orf\_virus\_NA1-11 97.9% 87.5% CTCCTTCCTTTCATGTCGTTCTGATCGCTCCTCCTCCTAATCACACA-----CCCCGTAATTTGTACTTTTGTACTTTT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTCCTTCCTTTCATGTCGTTCTGATCGCTCCTCCTCCTAATCACACA-----CCCCGTAATTTGTACTTTTGTACTTTT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CTCCTTCCTT-----CCTGATCGCTCCTCCTCCTAATCACACATACA-CCCCGTAATTTGTACTTTTGTACTTTT  
6 Orf\_virus\_NZ2 98.5% 88.2% TTCCTTCCTTTCATG-CGTTCTGATCGTTCTCCTCCTAATCACACACACA-CCCCGTAATTTGTACTTTTGTACTTTT

7 Orf\_virus\_YX 98.1% 95.5% CCGCCTTCCT-----TCTTCCTCCAATTACACATACA-CCCCGTAATTTTGTACTTTTGTACTTT  
8 Orf\_virus\_GO 98.8% 96.4% CCGCCTTCCT-----TCTTCCTCCAATTACACATACA-CCCCGTAATTTTGTACTTTTGTACTTT  
9 Orf\_virus\_B029 91.8% 81.7% -----  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 4321  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% AATTTTGTACTTTT-TACTACTGA-----CCTTGTACTTTATTTTTGTACCAGAAATTGGACAATAATTAT-TTT  
2 Orf\_virus\_D1701 98.3% 88.3% AATTTTGTACTTTT-TACTACTGA-----CCTTGTACTTTATTTTTGTACCAGAAATTGGACGATAGTTAT-TTT  
3 Orf\_virus\_NA1-11 97.9% 87.5% AA-TTTGTACTTTTACACTGA-----CCTTGTACTTTATTTTTGTACTGAAATTGGACGAT--TTATCTTT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AA-TTTGTACTTTTACACTGA-----CCTTGTACTTTATTTTTGTACTGAAATTGGACGAT--TTATCTTT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% AA-TTTGTACTTTTACACTGACTTTGTACTGCCTTTGTACTTTATTTTTGTACTGAAATTGGACGATACTTATCTTT  
6 Orf\_virus\_NZ2 98.5% 88.2% AA-TTTGTACTTTTACACTGACTTTGTACTGCCTTTGTACTTTATTTTTGTACTGAAATTGGACGATACTTATCTTT  
7 Orf\_virus\_YX 98.1% 95.5% AATTTTGTACTTTT-TACTACTGA-----CCTTGTACTTTATTTTTGTACCAGAAATTGGACAATAATTAT-TTT  
8 Orf\_virus\_GO 98.8% 96.4% AATTTTGTACTTTT-TACTACTGA-----CCTTGTACTTTATTTTTGTACCAGAAATTGGACAATAATTAT-TTT  
9 Orf\_virus\_B029 91.8% 81.7% -----  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 4401  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GTATCCACATCCAATTTTGCGAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
2 Orf\_virus\_D1701 98.3% 88.3% GTATTCACATCAAATTTGCAAAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
3 Orf\_virus\_NA1-11 97.9% 87.5% GTATTCACATCAAATTTGCAAAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GTATTCACATCAAATTTGCAAAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GTATTCACATCAAAGTTTTCGCAAAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
6 Orf\_virus\_NZ2 98.5% 88.2% GTATTCACATCAAAGTTTTCGCAAAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
7 Orf\_virus\_YX 98.1% 95.5% GTATCCACATCCAATTTTGCGAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
8 Orf\_virus\_GO 98.8% 96.4% GTATCCACATCCAATTTTGCGAATTCACACGCCAGTTGCGAAAAATGAAATAGTACCAGTTTATAGGCTTCAAT-CCCC  
9 Orf\_virus\_B029 91.8% 81.7% -----TCGGGGTT-----  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 4481  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
2 Orf\_virus\_D1701 98.3% 88.3% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
3 Orf\_virus\_NA1-11 97.9% 87.5% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
6 Orf\_virus\_NZ2 98.5% 88.2% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
7 Orf\_virus\_YX 98.1% 95.5% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
8 Orf\_virus\_GO 98.8% 96.4% TCCCGCGGAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGA  
9 Orf\_virus\_B029 91.8% 81.7% -----CAAAGACTCACCAGCATGGACTCTCGTCGGCTCGCCCTTGCCGTCGCCTTCGGAGGGCTCCTCGCCAGCATGG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 4561  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CGCAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
2 Orf\_virus\_D1701 98.3% 88.3% CACAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
3 Orf\_virus\_NA1-11 97.9% 87.5% CACAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CACAGCGCTGCCGCTGGCTTTCTTATTGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CACAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
6 Orf\_virus\_NZ2 98.5% 88.2% CACAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
7 Orf\_virus\_YX 98.1% 95.5% CGCAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
8 Orf\_virus\_GO 98.8% 96.4% CGCAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
9 Orf\_virus\_B029 91.8% 81.7% CACAGCGCCGCGCCTGGCTTCTCTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----CTCATCGCCAGCATCGGCCAACGGCTGATGGGCGGCGACGGCATGCGTTCGCGTCCGC  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 4640  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GTTCGGTTGATCGACCAGCTCATGGCCGGACCTCCGGACATCGACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
2 Orf\_virus\_D1701 98.3% 88.3% GTTCGGTTGATCGACCAGCTCATGGCCGGACCTCCGGACATCGACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
3 Orf\_virus\_NA1-11 97.9% 87.5% GTTCGGTTGATCGACCAGCTCATGGCCGGACCTCCGGACATCGACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GTTTGGTTGATTGATGACTCATGGCCGGACCTCCGGACATCAACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GTTCGGTTGATCGACCAGCTCATGGCCGGACCTCCGGACATCAACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
6 Orf\_virus\_NZ2 98.5% 88.2% GTTCGGTTGATCGACCAGCTCATGGCCGGACCTCCGGACATCAACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
7 Orf\_virus\_YX 98.1% 95.5% GTTCGGCTGATCGACCAGCTCATGGCCGGACCTCCGGACATCGACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
8 Orf\_virus\_GO 98.8% 96.4% GTTCGGCTGATCGACCAGCTCATGGCCGGACCTCCGGACATCGACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
9 Orf\_virus\_B029 91.8% 81.7% GTTCGGTTGATCGACCAGCTCATGGCCGGACCTCCGGACATCAACGACGAGGCTTCCAGCGCGAGATCCGCGTGGGCGT  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% -----GTTsGGsTGATsGACsAGCTCATGGCCGGACsCCGGACATCuACGACGAuGCCTTC  
12 Orf\_virus\_NP 24.1% 23.5% -----GTTcGGsTGATsGACsAGCTCATGGCCGGACsCCGGACATCuACGACGAuGCCTTC  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 4721  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GGGCGAGCTCTCCAGGCGCTCCACCGCGTGGTCGAGCAGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
2 Orf\_virus\_D1701 98.3% 88.3% AGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
6 Orf\_virus\_NZ2 98.5% 88.2% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
7 Orf\_virus\_YX 98.1% 95.5% -----CAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
8 Orf\_virus\_GO 98.8% 96.4% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
9 Orf\_virus\_B029 91.8% 81.7% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA

cov pid 4721  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
2 Orf\_virus\_D1701 98.3% 88.3% AGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
6 Orf\_virus\_NZ2 98.5% 88.2% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
7 Orf\_virus\_YX 98.1% 95.5% -----CAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
8 Orf\_virus\_GO 98.8% 96.4% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA  
9 Orf\_virus\_B029 91.8% 81.7% GGGCGAGCTCTTCCAGGCGCTCCACCGCGTGGTCGAGCAGGACACGCCGAGAGAAGTACTTCGAGGTTTGTGGCGCCAGCA

10 Orf\_virus\_IHUMI-1 78.5% 70.9% GGGCGAGCTCTCCAGGCGCTCCACCGCGTGGTCGAGCAGGCACGCCGAGAGAAGTACTTTCGAGGTTTGGCGGCCAGCA

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

cov pid 4801

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% ACGACGCCGACGACCCCGTTCGCGGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCTGCGCCCCCTGGCGATCACG

2 Orf\_virus\_D1701 98.3% 88.3% ACGCGCCGACG---CCGTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCTGCGCCCTTTGTGATCACG

3 Orf\_virus\_NA1-11 97.9% 87.5% ACGCGCCGACGCGCCCGTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACGCGCCGACGCGCCCGTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

5 Orf\_virus\_OV-IA82 98.6% 88.5% ACGACGCCGACGCGCCCGTTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

6 Orf\_virus\_NZ2 98.5% 88.2% ACGACGCCGACGCGCCCGTTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

7 Orf\_virus\_YX 98.1% 95.5% ACGACGCCGACGCGCCCGTTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

8 Orf\_virus\_GO 98.8% 96.4% ACGACGCCGACGCGCCCGTTCGTCGAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

9 Orf\_virus\_B029 91.8% 81.7% ACGACGCCGACGCGCCCGTTCGTCGAGATGGACACTGCGGCCGACCCCGCAGCCCCAGCCCGCCCTTCGTTGTCACG

10 Orf\_virus\_IHUMI-1 78.5% 70.9%

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

ACGuCGCCGACG...CCGTCuSAGATGGACACsGCGGCCGACsCCCGCAGCCCCAGCCsGCGCCsTsGssuTsACG

ACGuCGCCGACGuCCCCTCGsAGATGGACACCGCGGCCGACCCCGCAGCCCCAGCCsGCGCCsTsGssuTsACG

cov pid 4881

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CCACAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

2 Orf\_virus\_D1701 98.3% 88.3% CCGCAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

3 Orf\_virus\_NA1-11 97.9% 87.5% CCGCAGAACGCGTTCGTTGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CCGCAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

5 Orf\_virus\_OV-IA82 98.6% 88.5% CCGCAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

6 Orf\_virus\_NZ2 98.5% 88.2% CCGCAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

7 Orf\_virus\_YX 98.1% 95.5% CCACAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

8 Orf\_virus\_GO 98.8% 96.4% CCGCAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

9 Orf\_virus\_B029 91.8% 81.7% CCGCAGAACGCGTTCATGTTTCGTCGCCGAAAGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

10 Orf\_virus\_IHUMI-1 78.5% 70.9%

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

CCuCAGAACGCGTTCuTGTTsGTGCGCAAuuCAGCCACGTGCAsGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

CCuCAGAACGCGTTCuTGTTTCGTCGCCGAAuGCAGCCACGTGCACGTGGACGAGAGCGTGGACCCGTTCTTCGGCATGAG

cov pid 4961

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CCCCTCCATCTTCGGGCGCGACATCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

2 Orf\_virus\_D1701 98.3% 88.3% CCCCTCCATCTTCGGGCGCGACCTCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

3 Orf\_virus\_NA1-11 97.9% 87.5% CCCCTCCATCTTCGGGCGCGACCTCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CCCCTCCATCTTCGGGCGCGACCTCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

5 Orf\_virus\_OV-IA82 98.6% 88.5% CCCCTCCATCTTCGGGCGCGACCTCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

6 Orf\_virus\_NZ2 98.5% 88.2% CCCCTCCATCTTCGGGCGCGACCTCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

7 Orf\_virus\_YX 98.1% 95.5% CCCCTCCATCTTCGGGCGCGACATCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

8 Orf\_virus\_GO 98.8% 96.4% CCCCTCCATCTTCGGGCGCGACATCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

9 Orf\_virus\_B029 91.8% 81.7% CCCCTCCATCTTCGGGCGCGACCTCCCCCTTCAGCCGCCGAGGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

10 Orf\_virus\_IHUMI-1 78.5% 70.9%

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

CCCCTCCATCTTCGGGCGCGACsTCCCCsTsAGCCGCCsGAuGAGCTGCTGAGCGACsACGACCCGCTCATGAGCCAGG

CCCCTCCATCTTCGGGCGCGACsTCCCCsTsAGCCGCCsGAuGAGCTGCTGAGCGACTACGACCCGCTCATGAGCCAGG

cov pid 5041

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCAACGACAGCGACAGCGAT

2 Orf\_virus\_D1701 98.3% 88.3% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

3 Orf\_virus\_NA1-11 97.9% 87.5% CCGGCGAACC CGGAGTCCGCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTGGCGAAGTCCGAGTCCGCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

5 Orf\_virus\_OV-IA82 98.6% 88.5% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

6 Orf\_virus\_NZ2 98.5% 88.2% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

7 Orf\_virus\_YX 98.1% 95.5% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

8 Orf\_virus\_GO 98.8% 96.4% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

9 Orf\_virus\_B029 91.8% 81.7% CCGGCGAGCCCGGAGCCCGGTCGCCCTGCGAGGCCGACCTCTGGTGCCTTCGAGACGCTCGGGACAGCGACAGCGAT

10 Orf\_virus\_IHUMI-1 78.5% 70.9%

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

CsGGCGAuCsGCCGAGsCCGCGGTCsCCCTGCGAGGssGACCTsTGGTGCCTsGAGACGCTC....AuCGACAGCGAT

CCGGCGAuCCGCCGAGsCCGCGGTCGCCCTGCGAGGCSGACCTCTGGTGCCTTCGAGACGCTC....AuCGACAGCGAT

cov pid 5121

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TGAGCCTCGCACCTCACCCAC---ACCCTTACCTTACCCCCACCCACCCAAACAC-----CTCAAC

2 Orf\_virus\_D1701 98.3% 88.3% TGAGCC-TGC-CCCCACCCAC-----ACTCTACCTACCTTACCCCAACAC-----CCC AAC

3 Orf\_virus\_NA1-11 97.9% 87.5% TGAGCC-CGCACCACACCCACCTCACC-----ACACCCCAA

4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TGAGCC-CGCACCACACCCACCTCACC-----ACACCCCAA

5 Orf\_virus\_OV-IA82 98.6% 88.5% TGAGCC-CGCACCACACCCACCTCACCACCCACACTCCACCTCACCTCACCTAACACCAACCCCTAACACCCAAAC

6 Orf\_virus\_NZ2 98.5% 88.2% TGAGAC-CGCACCACACCTTACCTCACCCACCCACACTCCACCTCACCTCACCTAACAC-----CCAACACCCAAAC

7 Orf\_virus\_YX 98.1% 95.5% TGAGCCTCGCACCTCACACCA-----AC

8 Orf\_virus\_GO 98.8% 96.4% TGAGCCTCGCACCTCACACCAACCTTACCTCACCCACACCCACCCACA-----CC AAC

9 Orf\_virus\_B029 91.8% 81.7% TGAGCC-CGCACCACACCCAC-----ACTCCACCTCACCTCACCTAAC-----CCAACACCCAAAC

10 Orf\_virus\_IHUMI-1 78.5% 70.9%

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

TGAGCC.sGC.CCsCAsCsA.....As

TGAGCC.CGCACCsCACCCAC.....sCsAs

cov pid 5201

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% ACCTCGACCCGACAATGAAGGAGTCCACATTTCACT---GGACGCGGATGAAGCCGCACATCTCCCACATGAAGGATCG

2 Orf\_virus\_D1701 98.3% 88.3% ACCCCAGCCGGACAATGAAGGAGTCCACATTTCACTGAAGGACGCGGATGAAGCCGCACATCCCCACATGAAGGATTG

3 Orf\_virus\_NA1-11 97.9% 87.5% ACCTCAACCCGACAATGAAGGAGTCCACATTTCA---AAGGACGCGGATG-AGCCGCACAT---CCCACATGAAGGATTG

4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACCTCAACCCGACAATGAAGGAGTCCACATTTCA---AAGGACGCGGATG-AGCCGCACAT---CCCACATGAAGGATTG

5 Orf\_virus\_OV-IA82 98.6% 88.5% ACCTCAACCCGACAATGAAGGAGTCCACATTTCACTGAAGGACGCGGATGAAGCCGCACAT-CCCCACATGAAGGATTG

6 Orf\_virus\_NZ2 98.5% 88.2% ACCTCAACCCGACAATGAAGGAGTCCACATTTCACTGAAGGACGCGGATGAAGCCGCAC-TCCCCACATGAAGGATTG

7 Orf\_virus\_YX 98.1% 95.5% ACCTCAACCCGACAATGAAGGAGTCCACATTTCA---AAGGACGCGGATGAAGCCGCACATCTCCCACATGAAGGATCG

8 Orf\_virus\_GO 98.8% 96.4% ACCTCAACCCGACAATGAAGGAGTCCACATTTCA---AAGGACGCGGATGAAGCCGCACATCTCCCACATGAAGGATCG

9 Orf\_virus\_B029 91.8% 81.7% ACCTCAACCCGACAATGAAGGAGTCCACATTTCACT-AAGGACGCGGATGAAGCCGCACAT-CCCCACATGAAGGATTG

10 Orf\_virus\_IHUMI-1 78.5% 70.9%

11 Orf\_virus\_SJ1 77.2% 74.2%

12 Orf\_virus\_NP 24.1% 23.5%

consensus/100%

consensus/90%

consensus/80%

consensus/70%

ACCTCAACCCGACAATGAAGGAGTCCACATTTCACT---GGACGCGGATGAAGCCGCACATCTCCCACATGAAGGATCG

consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5281 3 5360  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GCCAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCGGATTGGCTTGCACCGACATCGCACAC--A  
2 Orf\_virus\_D1701 98.3% 88.3% G-CAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCGCAATTGGCTTGCACCGACATCGCACACAAA  
3 Orf\_virus\_NA1-11 97.9% 87.5% G-CAACGGTCAAACATTTACCTGCAAAATGAAGGACGATGCGCGGTGCGGATTGGCTTGCACCGACATCGCACACAAA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% G-CAACGGTCAAACATTTACCTGCAAAATGAAGGACGATGCGCGGTGCGGATTGGCTTGCACCGACATCGCACACAAA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% G-CAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCG-ATTGGCTTGCACCGACATCGCACAC--A  
6 Orf\_virus\_NZ2 98.5% 88.2% G-CAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCG-ATTGGCTTGCACCGACATCGCACAC--A  
7 Orf\_virus\_YX 98.1% 95.5% G--CACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCGATTGGCTTGCACCGACATCGCACAC--A  
8 Orf\_virus\_GO 98.8% 96.4% G-CAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCGATTGGCTTGCACCGACATCGCACAC--A  
9 Orf\_virus\_B029 91.8% 81.7% G-CAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCG-ATTGGCTTGCACCGACATCGCTCAC--A  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----  
11 Orf\_virus\_SJ1 77.2% 74.2% G-CAACGGTCAAACATTTACCTGC--AATGAAGGACGATGCGCGGTGCGATTGGCTTGCACCGACATCGCACAC--A  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5361 4 5440  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
2 Orf\_virus\_D1701 98.3% 88.3% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGG-CAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
3 Orf\_virus\_NA1-11 97.9% 87.5% TGAAGGACACAATTTGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% TGAAGGACACAATTTGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATTA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGG-ACACAATCA  
6 Orf\_virus\_NZ2 98.5% 88.2% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTAGAACAATCA  
7 Orf\_virus\_YX 98.1% 95.5% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
8 Orf\_virus\_GO 98.8% 96.4% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
9 Orf\_virus\_B029 91.8% 81.7% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% -----TTTTGTTAAATCAGGACAATTAGAACAATCA  
11 Orf\_virus\_SJ1 77.2% 74.2% TGAAGGACACAATTGGTTTGTAAATCCGGACAATGAAGGACAAATGTTTTTGTAAATCAGGACAATTGGAACACAATCA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5441 5 5520  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% AATTAT-TTTTTGTGCGGTCTATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
2 Orf\_virus\_D1701 98.3% 88.3% GATTAA-TTTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GATTAA-TTTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAACTAAATCTCCGGGGA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GATTAA-TTTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GATTAA-TTTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
6 Orf\_virus\_NZ2 98.5% 88.2% AA----TTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
7 Orf\_virus\_YX 98.1% 95.5% AATTAT-TTTTTGTGCGGTCTATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
8 Orf\_virus\_GO 98.8% 96.4% AATTAA-TTTTTGTGCGGTCTATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
9 Orf\_virus\_B029 91.8% 81.7% AATTAA-TTTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% AATTAA-TTTTTGTACGATCATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
11 Orf\_virus\_SJ1 77.2% 74.2% AATTAA-TTTTTGTGCGGTCTATAAATCGATATTTGATGCACATATATTAGTAAGTATATTAGACTAAATCTCCGGGGA  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5521 6 5600  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGG--CCCCCTCCCCACCCCCACG  
2 Orf\_virus\_D1701 98.3% 88.3% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGTCCCCCTCCCCACCCCCACG  
3 Orf\_virus\_NA1-11 97.9% 87.5% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGTCCCCCTCCCCACCCCCACG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGTCCCCCTCCCCACCCCCACG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGTCCCCCTCCCCACCCCCACG  
6 Orf\_virus\_NZ2 98.5% 88.2% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGTCCCCCTCCCCACCCCCACG  
7 Orf\_virus\_YX 98.1% 95.5% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGG--CCCCCTCCCCACCCCCACG  
8 Orf\_virus\_GO 98.8% 96.4% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGG--CCCCCTCCCCACCCCCACG  
9 Orf\_virus\_B029 91.8% 81.7% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGTCCCCCTCCCCACCCCCACG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGGT-CCCCCTCCCCACCCCCACG  
11 Orf\_virus\_SJ1 77.2% 74.2% GGCAAGCAGTTGGATACGGCGGGGCGGGGCACGACGTGCACGGAGAATTCGGGCGGG-CCCCCTCCCCACCCCCACG  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5601 7 5680  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
2 Orf\_virus\_D1701 98.3% 88.3% CACCACGATGCGTCTAATCTTAGCGCTTGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
3 Orf\_virus\_NA1-11 97.9% 87.5% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
6 Orf\_virus\_NZ2 98.5% 88.2% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
7 Orf\_virus\_YX 98.1% 95.5% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
8 Orf\_virus\_GO 98.8% 96.4% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
9 Orf\_virus\_B029 91.8% 81.7% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
11 Orf\_virus\_SJ1 77.2% 74.2% CACCACGATGCGTCTAATCTTAGCGCTCGTGGCCTGCTTGTGGCGGCGCCGATGCCGTTATCGGGTCTGTCGACAAGCA  
12 Orf\_virus\_NP 24.1% 23.5% -----CGACTAGC-  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5681 7 5760  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CCCCAAACACA---CCGTCCGACTCGGCTCGACGAGTGCACCAAGCTCGGAAGACGCTGCGGCTTCGAGCACAACG  
2 Orf\_virus\_D1701 98.3% 88.3% CTCCAAACACGTCCCCCTCCGTACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
3 Orf\_virus\_NA1-11 97.9% 87.5% CTCCAAACACGTCCCCCTCCGTACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTCCAAACACGTCCCCCTCCGACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CCCCAAACACA---CAGTCCGACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
6 Orf\_virus\_NZ2 98.5% 88.2% CTCCAAACACGTCCCCCTCCGACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
7 Orf\_virus\_YX 98.1% 95.5% CCCCAAATTTA---CAGTCCGACTCGGCTCGACGAGTTCGGCACAAAGCTCGAAGACGAGTGTCTTCGAGCACAACG  
8 Orf\_virus\_GO 98.8% 96.4% CCCCAAACACA---CCGTCCGACTCGGCTCGACGAGTTCGGCACAAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
9 Orf\_virus\_B029 91.8% 81.7% CTCCAAACACGTCCCCCTCCGACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CTCCAAACACGTCCCCCTCCGACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
11 Orf\_virus\_SJ1 77.2% 74.2% CCCCAAATTTA---CAGTCCGACTCGGCTCGACGAGTTCGGAACCAAGCTCGGAAGACGCTGTGGCTTCGAGCACAACG  
12 Orf\_virus\_NP 24.1% 23.5% -----  
consensus/100%  
consensus/90%  
consensus/80%

consensus/70% cov pid 5761 8 5840  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% ACAAGCAC-----TACAAGCACACTCACTTCGTTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACGAC  
2 Orf\_virus\_D1701 98.3% 88.3% ACAAGCAC-----TACAAGCACACTCACTTCGTTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACAAAC  
3 Orf\_virus\_NA1-11 97.9% 87.5% ACAAGCACACT-----CACTCTGTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACAAAC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACAAGCACACTCACAAGCACTACAAGCACACGCACTCTGTCCACAAGTGTGGACACCCTACTACTA---CGGGCGCTACAAAC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACAAGCACACTCACAAGCACTACAAGCACACTCACTATGTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACGAC  
6 Orf\_virus\_NZ2 98.5% 88.2% ACAAGCACACTCACAAGCACTACAAGCACACTCACTATGTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACAAAC  
7 Orf\_virus\_YX 98.1% 95.5% ACAAGCACACT-----CACTTTGTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACGAC  
8 Orf\_virus\_GO 98.8% 96.4% ACAAGCACACT-----CACTTTGCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACGAC  
9 Orf\_virus\_B029 91.8% 81.7% ACAAGCACACT-----CACTATGTCCACAAGTGTGGACACCCTACTACTCCTGCGCTACAAAC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% ACAATCAC-----TACAAGCACACTCACTTCGTTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACAAAC  
11 Orf\_virus\_SJ1 77.2% 74.2% ACAAGCACACT-----CACTTCGTTCCACAAGTGTGGACACCCTACTACTCCTCGGGCGCTACGAC  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5841 9 5920  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GTCCA---A---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACATCCGCAACCCTGAGGCATCGACGGCACCAACGA  
2 Orf\_virus\_D1701 98.3% 88.3% GTCCACAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCACAACCCTGAGGCATCAACCACCAACAA  
3 Orf\_virus\_NA1-11 97.9% 87.5% GTCCACAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCAACCACCAACAA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GTCCGAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GTCCACAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
6 Orf\_virus\_NZ2 98.5% 88.2% GTCCGAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
7 Orf\_virus\_YX 98.1% 95.5% GTCCA---A---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
8 Orf\_virus\_GO 98.8% 96.4% GTCCA---A---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
9 Orf\_virus\_B029 91.8% 81.7% GTCCGAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GTCCACAAA---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
11 Orf\_virus\_SJ1 77.2% 74.2% GTCCACACG---CAGCACTTCTGCAGCAAGTGTGAGCTCTTCCACACCCGCAACCCTGAGGCATCGACGGCACCAACGA  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 5921 0 6000  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CGCCGT-----TGACCCGACGAC-----AGTGAAGGTAACGAATGGCAAAGAAAAC---AAGGCGTCTGCCTAC  
2 Orf\_virus\_D1701 98.3% 88.3% CGCCGTCAACCGTGCACACCGCGACAC-----AGTGAAGGTAACAAAACAG---AGGACACGAAGGCGTCTGCCTAC  
3 Orf\_virus\_NA1-11 97.9% 87.5% CGCCGT-----CGACGCAACGAC-----AGTGAAGGTAACGAAGACA---AAGACACGAAGGCGTCTGCCTAC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% --CCGT-----CGACCCGACGAC-----AGTGAAGGTAACGAAGGCAAGGAAGACACGAAGGCGTCTGCCTAC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CGCCGT-----CGACGACAGCAGAC-----AGTGAAGGTAACGAAGACA---AAGACACGAAGGCGTCTGCCTAC  
6 Orf\_virus\_NZ2 98.5% 88.2% CGCCGT-----CGACCCGACGAC-----AGTGAAGGTAACGAAGGCAAGGAAGACACGAAGGCGTCTGCCTAC  
7 Orf\_virus\_YX 98.1% 95.5% CGCTGT-----TGACGCAACGAC-----AGTGAAGGTAACGAATGGCAAAGAAAACACGAAGGCGTCTGCCTAC  
8 Orf\_virus\_GO 98.8% 96.4% CGCCGT-----TGACCCGACGAC-----AGTGAAGGTAACGAATGGCAAAGAAAACACGAAGGCGTCTGCCTAC  
9 Orf\_virus\_B029 91.8% 81.7% CGCCGT-----CGACCCGACGAC-----AGTGAAGGTAACGAAGGCAAGGAAGACACGAAGGCGTCTGCCTAC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CGCCGT-----CGACGACAGCAGCAGTGAAGGTAACGAAGACA---AAGACACGAAGGCGTCTGCCTAC  
11 Orf\_virus\_SJ1 77.2% 74.2% CGCTGT-----TGACCCGACGAC-----AGTGAAGGTAACGAATGGCAAAGAAAAC---AAGGCGTCTGCCTAC  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 6001 6080  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CTCGCTGTACCAGTTATGTTTCATGACCATGACAACCGTTCGCGATGGTTCGTTGCTCGTGGTTCGTGCTCATGTACAAACAGGG  
2 Orf\_virus\_D1701 98.3% 88.3% CTTTGTGTACTAATTAATTTTCATGGTTCATGACCACCGTTGTAATGGTTCGTTTCATGGTTCGTTGCTCGTGTACAAACAGGG  
3 Orf\_virus\_NA1-11 97.9% 87.5% CTCGTTTTTACTAATCACGTTTCATGGTTCATGACCACCGTTCGTTGATGGTTCGTTGCTGGTTCGTTGCTGTACAAACAGGG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTCGTTTTTACTAATAACGTTTCATGGTTCATGACCACCGTTCGTTGATGGTTCGTTGCTGGTTCGTTGCTGTACAAACAGGG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CTCGTTTTTACTAATCACGTTTCATGGTTCATGACAACCGTTCGTTGATGGTTCGTTGCTGGTTCGTTGCTGTACAAACAGGG  
6 Orf\_virus\_NZ2 98.5% 88.2% CTCGTTTTTACTAATCACGTTTCATGGTTCATGACCACCGTTCGTTGATGGTTCGTTGCTGGTTCGTTGCTGTACAAACAGGG  
7 Orf\_virus\_YX 98.1% 95.5% CTCGCTGTACCAGTTATGTTTCATGACCATGACCACCGTTCGCGATGGTTCGTTGCTGGTTCGTTGCTCATGTACAAACAGGG  
8 Orf\_virus\_GO 98.8% 96.4% CTCGCTGTACCAGTTATGTTTCATGACCATGACCACCGTTCGCGATGGTTCGTTGCTGGTTCGTTGCTCATGTACAAACAGGG  
9 Orf\_virus\_B029 91.8% 81.7% CTCGTTTTTACTAATCACGTTTCATGGTTCATGACCACCGTTCGTTGATGGTTCGTTGCTGGTTCGTTGCTGTACAAACAGGG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CTCGTTTTTACTAATCACGTTTCATGGTTCATGACCACCGTTCGTTGATGGTTCGTTGCTGGTTCGTTGCTCATGTACAAACAGGG  
11 Orf\_virus\_SJ1 77.2% 74.2% CTCGCTGTACCAGTTATGTTTCATGACCATGACCACCGTTCGCGATGGTTCGTTGCTGGTTCGTTGCTCATGTACAAACAGGG  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 6081 1 6160  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% ACTCTGCAACTGCTTCTG---TAAGATGTTTCCCTGCTGCAAAGAACTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
2 Orf\_virus\_D1701 98.3% 88.3% ACTCTGCAACTGCTGCTGTTAACAATGTTTCCCTGCTGCAAAGAACTCAAGGACTACCTCCACAAGGAGGAGAGCGCCGGG  
3 Orf\_virus\_NA1-11 97.9% 87.5% ACTCTGTAACGCTGCTG---TAGGATGTTTCCCTGCTGCAAAGAGATCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACTCTGTAACGCTGCTG---TAGGATGTTTCCCTGCTGCAAAGAGATCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACTTTGTGACTGCTGCTG---TAAGATGTTTCCCTGCTGCAAAGAGATCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
6 Orf\_virus\_NZ2 98.5% 88.2% ACTCTGTAACGCTGCTG---TAA---GTTTCCCTGCTGCAAAGAGCTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
7 Orf\_virus\_YX 98.1% 95.5% ACTCTGTAACGCTTCTG---TAAGATGTTTCCCTGCTGCAAAGAACTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
8 Orf\_virus\_GO 98.8% 96.4% ACTCTGCAACTGCTTCTG---TAAGATGTTTCCCTGCTGCAAAGAACTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
9 Orf\_virus\_B029 91.8% 81.7% ACTCTGCAACTGCTGCTG---TAAGATGTTTCCCTGCTGCAAAGAGCTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% ACTCTGTGACTGCTGCTG---TAA---GTTTCCCTGCTGCAAAGAGCTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
11 Orf\_virus\_SJ1 77.2% 74.2% ACTCTGCAACTGCTTCTG---TAAGATGTTTCCCTGCTGCAAAGAACTCAAGGACTACCTCGACGAGGAGGAGAGCGCCGGG  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 6161 2 6240  
1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CTGTACGACGCGCTGACGTTGGAGCCACTCGAACCCCGGCTTCCGGCTCGTACGCGCACAGACCCAGATGATGAAGATC  
2 Orf\_virus\_D1701 98.3% 88.3% CTGTACGACGCGCTGACGTTGGAGCCACTCGAACCCCGGCTTCCGGCTTGTCAACGCGCGGACCCAGATGATGAGGATC  
3 Orf\_virus\_NA1-11 97.9% 87.5% CTGTACGACTCCTTGCAGTGGAGCCCTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTGTACGACTCCTTGCAGTGGAGCCCTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CTGTACGACGCTTGCAGTGGAGCCCTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
6 Orf\_virus\_NZ2 98.5% 88.2% CTGTACGACGCTTGCAGTGGAGCCACTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
7 Orf\_virus\_YX 98.1% 95.5% CTGTACGACGCGCTGACGTTGGAGCCACTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
8 Orf\_virus\_GO 98.8% 96.4% CTGTACGACGCGCTGACGTTGGAGCCACTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
9 Orf\_virus\_B029 91.8% 81.7% CTGTACGACGCTTGCAGTGGAGCCACTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CTGTACGACGCTTGCAGTGGAGCCCTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
11 Orf\_virus\_SJ1 77.2% 74.2% CTGTACGACGCGCTGACGTTGGAGCCACTCGAACCCCGGCTTCCGGCTCGTCTGCGCGGAGACCCAGATGATGAGGATC  
12 Orf\_virus\_NP 24.1% 23.5%  
consensus/100%  
consensus/90%  
consensus/80%  
consensus/70%

cov pid 6241 3 6320

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-12 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6321. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-12 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6401. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-12 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6480. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-12 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6481. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-12 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6560. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-12 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6640. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-3 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6720. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.

Table with 4 columns: ID, Description, Cov, Pid. Rows 1-3 show Orf\_virus sequences with various IDs and coverage percentages.

Genomic sequence alignment for PID 6800. Shows a long stretch of nucleotide sequence (A, C, G, T) with a period above every 10th position.



4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CACCCGTCGCGCAGGAACCGCAACTACGAGCGGGGAAAGACTACAGAGACACCCCTCACAAACCCACCCA---GCCCCCGC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CACCCGTCGCGCAGGAACCGCAACTACGAGCGGGGCGGACTACAGAGACATCCCTCACAGACCCACCCAGAGCCCCCGC  
6 Orf\_virus\_NZ2 98.5% 88.2% CACCCGTCGCGCAGGAACCGCAACTACGAGCGGGGCGGACTACAGAGACACCCCTCACAAACCCACCCAGACGCCCCCGC  
7 Orf\_virus\_YX 98.1% 95.5% CACCCGTCGCGCAAGAACCGCAACTACGAGCGGGGAGACTACAGGGACACCCCTCACAAACCCACCCAGACGCCCCCGC  
8 Orf\_virus\_GO 98.8% 96.4% CACCCGTCGCGCAAGAACCGCAACTACGAGCGGGGCGGACTACAGGGACACCCCTCACAAACCCACCCAGAGCCCCCGC  
9 Orf\_virus\_B029 91.8% 81.7% CACTCGACGCGCAGGAACCGCAACTACGAGCGGGGCGGACTACAGAAACATCCCTCACAGACCCACCCAGAGCCCCCGC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CACC---CGCGCAGGAACCGCAACTACGAGCGGGTAGACTACAGAGACATCCCTCACAGACCCGCCAGAGCCCCCGC  
11 Orf\_virus\_SJ1 77.2% 74.2% CACCCGTCGCGCAAGAACCGCGACTACGAGCGGGGCGGACTACAGGGATACCCCTCACAAACCCACCCAGAGCCCCCGC  
12 Orf\_virus\_NP 24.1% 23.5% CACCCGTCGCGCAAGAACCGCAACTACGAGCGGGGCGGACTACAGGGACACCCCTCACAAACCCACCCAGACGCCCCCGC  
consensus/100% CACs . . CGCGCAuGAACCGCuAsACGAGCGGGsuGACTACCAuuuAsAsCCCTCsAuAsCCuCCCA . . GCCCCCGC  
consensus/90% CACCCGsCGCGCAuGAACCGCuACTACGAGCGGGsuGACTACCAuGAsAsCCCTCACAAACCCCA . . GCCCCCGC  
consensus/80% CACCCGTCGCGCAuGAACCGCAACTACGAGCGGGsuGACTACAGuGACAsCCCTCACAuACCCACCCAGAsGCCCCCGC  
consensus/70% CACCCGTCGCGCAuGAACCGCAACTACGAGCGGGGCGGACTACAGuGACACCCCTCACAAACCCACCCAGAsGCCCCCGC

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCTGACC 6801  
2 Orf\_virus\_D1701 98.3% 88.3% GCAGACCTCGACGCTCAAAGTACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
3 Orf\_virus\_NA1-11 97.9% 87.5% GCAGACTTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% GCAGACTTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
6 Orf\_virus\_NZ2 98.5% 88.2% GCAGACCTCGACGCTCAAGGTGACCTCCCTAAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
7 Orf\_virus\_YX 98.1% 95.5% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACACCCACTACGAGACCCCGACC  
8 Orf\_virus\_GO 98.8% 96.4% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACACAsCACTACGAGACCCCGACC  
9 Orf\_virus\_B029 91.8% 81.7% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
11 Orf\_virus\_SJ1 77.2% 74.2% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
12 Orf\_virus\_NP 24.1% 23.5% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
consensus/100% GCAGAsTTCGACGCTCAAuGTGACCTCCCTsAGCACsAGTGCAGCACCCGTGCCsAACAsCACTACGAGACCCCsGACC  
consensus/90% GCAGACsTCGACGCTCAAuGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACAsCACTACGAGACCCCGACC  
consensus/80% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC  
consensus/70% GCAGACCTCGACGCTCAAGGTGACCTCCCTCAGCACCAGTGCAGCACCCGTGCCAACATCACTACGAGACCCCGACC

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% ACGTCTACGACGCTCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG 6881  
2 Orf\_virus\_D1701 98.3% 88.3% ACATCTACGACGCTCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
3 Orf\_virus\_NA1-11 97.9% 87.5% ACATCTACGACATCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% ACATCTACGACATCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% ACATCTACGACATCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
6 Orf\_virus\_NZ2 98.5% 88.2% ACATCTACGACATCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
7 Orf\_virus\_YX 98.1% 95.5% ACGTCTACGACGCTCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
8 Orf\_virus\_GO 98.8% 96.4% ACATCTACGACGCTCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
9 Orf\_virus\_B029 91.8% 81.7% ACATCTACGACATCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% ACATCTACGACATCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
11 Orf\_virus\_SJ1 77.2% 74.2% CCGTCTACGACGCTCCCGGAAGACAGTCGCGGGGCGTCCCTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
12 Orf\_virus\_NP 24.1% 23.5% ACGTCTACGACGCTCCCGGAAGACAGTCGCGGGGCGTCCCGCTTGGCGGGACCTTGGCGTCCCCCGCTCGCCATG  
consensus/100% sCuTCTACGACuTCCCGGAAGACuGTGCGGGGCGTsGssCCCsTsGCGGGGACCTTsGCGTsCCCCCGCTCGCCATG  
consensus/90% ACuTCTACGACuTCCCGGAAGACAGTCGCGGGGCGTsGssCCCsTsGCGGGGACCTTsGCGTsCCCCCGCTCGCCATG  
consensus/80% ACuTCTACGACuTCCCGGAAGACAGTCGCGGGGCGTsGssCCCGCTTsGCGGGGACCTTsGCGTCCCCCGCTCGCCATG  
consensus/70% ACuTCTACGACuTCCCGGAAGACAGTCGCGGGGCGTsGssCCCGCTTsGCGGGGACCTTsGCGTCCCCCGCTCGCCATG

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CCCAACTCCAAGCCCTCGCGCCGATGCGCCCGGCGTCCATGAGCGACTTCCCAATGAAGCACTGTGGCGCCAGCAAACC 7040  
2 Orf\_virus\_D1701 98.3% 88.3% CCCAACTCCAAGCCCTCGCGCCGCTGCGCCCGGCGTCCATGAACGACTGCCGATAAAGCACTGCGGGCGCCAGCAGACC  
3 Orf\_virus\_NA1-11 97.9% 87.5% CCAAAATCCAAGCACCCGCGCCGATGCGCCCGGCTTCCATGAACGACTGCCTGATGACGCACCGGCGCCGGCAAACC  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CCAAAATCCAAGCACCCGCGCCGATGCGCCCGGCTTCCATGAACGACTGCCTGATGACGCACCGGCGCCGGCAAACC  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CCCAAATCCAAG---CCGCGCCGACGCGCCCGGCGTCCATGAACGACTGCCTGATGAAGCACTGCGGGCGCCGGCAGACC  
6 Orf\_virus\_NZ2 98.5% 88.2% CCCAAATCCAAG---CCGCGTCGACGCGCCCGGCGTCCATGAACGACTGCCTGATGAAGCACTGCGGGCGCCGGCAGACC  
7 Orf\_virus\_YX 98.1% 95.5% CCCAACTCCAAGCCCTCGCGCCGATGCGCCCGGCGTCCATGAGCGACTTCCCAATGAAGCACTGCGGGCGCCAGCAAACC  
8 Orf\_virus\_GO 98.8% 96.4% CCCAACTCCAAGCCCTCGCGCCGATGCGCCCGGCGTCCATGAGCGACTTCCCAATGAAGCACTGCGGGCGCCAGCAAACC  
9 Orf\_virus\_B029 91.8% 81.7% CCCAAATCCAAG---CCGCGCCGATGCGCCCGGCGTCCATGAACGACTGCCTGATGAAGCACTGCGGGCGCCGGCAGACC  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CCCAAATCCAAG---CCGCGCCGACGCGCCCGGCGTCCATGAACGACTGCCTGATGAAGCACTGCGGGCGCCGGCAGACC  
11 Orf\_virus\_SJ1 77.2% 74.2% CCCAACTCCAAGCCCTCGCGCCGATGCGCCCGGCGTCCATGAGCGACTTCCCAATGAAGCACTGTGGTGCCAGCAAACC  
12 Orf\_virus\_NP 24.1% 23.5% CCCAACTCCAAGCCCTCGCGCCGATGCGCCCGGCGTCCATGAGCGACTTCCCAATGAAGCACTGCGGGCGCCAGCAAACC  
consensus/100% CCsAASTCsAAG . . sCGGCSGCGCuSgCGCCCuGCSGCCATGAuCGACTsCCsuATuAsGCACsGsGGsGCCuGCAuACC  
consensus/90% CCsAASTCCAAG . . sCGGCGCGCAsGCGCCCGGCGTsCCATGAuCGACTsCCsuATGAsGCACsGsGGCGCCuGCAuACC  
consensus/80% CCCAASTCCAAG . . sCGGCGCGCAsGCGCCCGGCGTCCATGAuCGACTsCCsuATGAAGCACTGCGGGCGCCuGCAuACC  
consensus/70% CCCAASTCCAAG . . sCGGCGCGCAGTGCAGCCCGGCGTCCATGAuCGACTsCCsuATGAAGCACTGCGGGCGCCuGCAuACC

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CAACCTCCAAGACGACATATGCACACTATGCACTGATATAGAGACACAACCTGAGTGCCTAGAGAAGTCTCTGGAGTCAG 7041  
2 Orf\_virus\_D1701 98.3% 88.3% CAACCTCCAAGACGACATATGCACACTATGCACTGATATAGAGACACAGCTGAGTGCCTAGAGAAGTCTCTGGAGTCAG  
3 Orf\_virus\_NA1-11 97.9% 87.5% CAACCTCCAAGACGATATATGCACACTATGCACTGATATAGAGACACAGCTGAGCGCACTAGAGAAGTCTCTGGAGTCAG  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CAACCTCCAAGACGATATATGCACACTATGCACTGATATAGAGACACAGCTGAGCGCACTAGAGAAGTCTCTGGAGTCAG  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGCGCACTAGAGAAGTCTCTGGAGTCAG  
6 Orf\_virus\_NZ2 98.5% 88.2% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGCGCACTAGAGAAGTCTCTGGAGTCAG  
7 Orf\_virus\_YX 98.1% 95.5% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGTGCCTAGAGAAGTCTCTGGAGTCAG  
8 Orf\_virus\_GO 98.8% 96.4% CAACCTCCAAGACGACATATGCACACTATGCACTGATATAGAGACACAGCTGAGTGCCTAGAGAAGTCTCTGGAGTCAG  
9 Orf\_virus\_B029 91.8% 81.7% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGCGCACTAGAGAAGTCTCTGGAGTCAG  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGCGCACTAGAGAAGTCTCTGGAGTCAG  
11 Orf\_virus\_SJ1 77.2% 74.2% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGTGCCTAGAGAAGTCTCTGGAGTCAG  
12 Orf\_virus\_NP 24.1% 23.5% CAACCTCCAAGACGACATATGCACACTATGTACTGATATAGAGACACAGCTGAGTGCCTAGAGAAGTCTCTGGAGTCAG  
consensus/100% CAACCTCCAuuCGAsATATGCACACTuTsACTGATATAGAGACACuTGAGsGCACTAGAGAAGTCTCTGGAGTCAG  
consensus/90% CAACCTCCAAGACGsATATGCACACTATGsACTGATATAGAGACACAGCTGAGsGCACTAGAGAAGTCTCTGGAGTCAG  
consensus/80% CAACCTCCAAGACGACATATGCACACTATGsACTGATATAGAGACACAGCTGAGsGCACTAGAGAAGTCTCTGGAGTCAG  
consensus/70% CAACCTCCAAGACGACATATGCACACTATGsACTGATATAGAGACACAGCTGAGsGCACTAGAGAAGTCTCTGGAGTCAG

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACACTACTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT 7120  
2 Orf\_virus\_D1701 98.3% 88.3% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACATTGCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
3 Orf\_virus\_NA1-11 97.9% 87.5% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACATTGCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACATTGCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
5 Orf\_virus\_OV-IA82 98.6% 88.5% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACCTTGTCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
6 Orf\_virus\_NZ2 98.5% 88.2% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACATTGCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
7 Orf\_virus\_YX 98.1% 95.5% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACACTACTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
8 Orf\_virus\_GO 98.8% 96.4% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACACTACTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
9 Orf\_virus\_B029 91.8% 81.7% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACATTGCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
10 Orf\_virus\_IHUMI-1 78.5% 70.9% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACATTGCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
11 Orf\_virus\_SJ1 77.2% 74.2% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACACTACTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
12 Orf\_virus\_NP 24.1% 23.5% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACAsTuCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
consensus/100% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACAsTuCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
consensus/90% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACAsTuCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
consensus/80% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACAsTuCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT  
consensus/70% AGTCAACTTCTATCGTCGCTACATACAAGACACTAAGACAsTuCTCGCCACGCGAGCAGCAAACATCGGCAGCAAAGCT

1 Orf\_virus\_OV-SA00\_NC\_005336.1\_115015-122053 100.0% 100.0% CTGATCTACACCAACGACTACAACAACAGTGGCAACGTCGGCGAAGAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGA 7201  
2 Orf\_virus\_D1701 98.3% 88.3% CTGATCTACACCAACGACTACAACGACAGTGGCAACGTCGTGAAAAGGAGCACTGCTCGGAGGAGTGCTGCAAGTGGA  
3 Orf\_virus\_NA1-11 97.9% 87.5% CTGATCTACACCGACGACTACAACGACAGTGGCAACGTCGGCGAAGGGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGA  
4 Orf\_virus\_OV-HN3\_12 98.1% 87.2% CTGATCTACACCGACGACTACAACGACAGTGGCAACGTCGGCGAAGGGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGA  
5 Orf\_virus\_OV-IA82 98.6% 88.5% CTGATCTACACCGACGACTACAACGGCAGTGGCAACGTCGGCGAAGGGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGA  
6 Orf\_virus\_NZ2 98.5% 88.2% CTGATCTACACCGACGACTACAACGGCAGTGGCGAGCTGGCGAAGAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGA

Accession	Cov	Pid	Sequence
7 Orf_virus_YX	98.1%	95.5%	CTGATCTACACCAACGACTACAACAACAGTGGCAACGTCGGCGAAGAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
8 Orf_virus_GO	98.8%	96.4%	CTGATCTACACCAACGACTACAACAACAGTGGCAACGTCGGCGAAGAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
9 Orf_virus_B029	91.8%	81.7%	CTGATCTACACCGACGACTACAACGGCAGTGGCAACGTCGGCGAAGAGGAGCACTGCTCAGAGGAGTGCTGCAAAGTGGAA
10 Orf_virus_IHUMI-1	78.5%	70.9%	CTGATCTACACCGACGACTACAACGGCAGTGGCGACGTCGGCGAAAAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
11 Orf_virus_SJ1	77.2%	74.2%	CTGATCTACACCAACGACTACAACAACAGTGGCAACGTCGGCGAAGAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
12 Orf_virus_NP	24.1%	23.5%	CTGATCTACACCAACGACTACAACAACAGTGGCAACGTCGGCGAAGAGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
consensus/100%			CTGATCTACACCuACGACTACAACuuCAGTGGCuACGTCsGsGAAuuGGAGCACTGCTCuGAGGAGTGCTGCAuAGTGGAA
consensus/90%			CTGATCTACACCuACGACTACAACuuCAGTGGCuACGTCGGCGAAuuGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
consensus/80%			CTGATCTACACCuACGACTACAACuuCAGTGGCAACGTCGGCGAAuuGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
consensus/70%			CTGATCTACACCuACGACTACAACuuCAGTGGCAACGTCGGCGAAGuGGAGCACTGCTCGGAGGAGTGCTGCAAAGTGGAA
			. . . . . : ] 7351
1 Orf_virus_OV-SA00_NC_005336.1_115015-122053	100.0%	100.0%	GGAAGTTCTGTGAGAAAGCGTGTCTTTCTGTAATGTGAAATAAGAA--GCCTTATGTGTGCACAGACATGG
2 Orf_virus_D1701	98.3%	88.3%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATAGGCCCTTATGTGTGCACAAACATGG
3 Orf_virus_NA1-11	97.9%	87.5%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATA--GCCTTATGTGTGCACAGACATGG
4 Orf_virus_OV-HN3_12	98.1%	87.2%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATA--GCCTTATGTGTGCACAGACATGG
5 Orf_virus_OV-IA82	98.6%	88.5%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATA--GCCTTATGTGTGCACAGACATGG
6 Orf_virus_NZ2	98.5%	88.2%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATA--GCCTTATGTGTGCACAGACATGG
7 Orf_virus_YX	98.1%	95.5%	GGAAGTTCTGTGAGAAAGCGCGTCTTTCTGTAATGTGAAATAAGAA--GCCTTATGTGTGCACAGACATGG
8 Orf_virus_GO	98.8%	96.4%	GGAAGTTCTGTGAGAAAGCGCGTCTTTCTGTAATGTGAAATAAGAA--GCCTTATGTGTGCACAGACATGG
9 Orf_virus_B029	91.8%	81.7%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATA--GCCTTATGTGTGCACAGACATGG
10 Orf_virus_IHUMI-1	78.5%	70.9%	GGAAGTTCTGTGAGAAAGTGCCTTTTCTGTAATGTGAAATAAGATA--GCCTTATGTGTGCACAGACATGG
11 Orf_virus_SJ1	77.2%	74.2%	GGAAGTTCTGTGAGAAAGCGCGTCTTTCTGTAATGTGAAATAAGAA--GCCTTATGTGTGAACAGACATGG
12 Orf_virus_NP	24.1%	23.5%	GGAAGTTCTGTGAGAAAGCGCGTCTTTCTGTAATGTGAAATAAGAA--GCCTTATGTGTGCACAGACATGG
consensus/100%			GGAAGTTCTGTGAGAAAGsGsGTTTTCTGTAATGTGAAATAAGAs . . GCCTTATGTGTGsACAuACATGG
consensus/90%			GGAAGTTCTGTGAGAAAGsGCGTTTTCTGTAATGTGAAATAAGAs . . GCCTTATGTGTGCACAGACATGG
consensus/80%			GGAAGTTCTGTGAGAAAGsGCGTTTTCTGTAATGTGAAATAAGAs . . GCCTTATGTGTGCACAGACATGG
consensus/70%			GGAAGTTCTGTGAGAAAGsGCGTTTTCTGTAATGTGAAATAAGAs . . GCCTTATGTGTGCACAGACATGG