VIROLOGICA SINICA

Electronic Supplementary Material

Nsp2 and GP5-M of Porcine Reproductive and Respiratory Syndrome Virus Contribute to Targets for Neutralizing Antibodies

Jia Su[1], Lei Zhou1, Bicheng He[1], Xinhui Zhang[1], Xinna Ge[1], Jun Han[1], Xin Guo[1]✉, Hanchun Yang[1]

1. Key Laboratory of Animal Epidemiology of the Ministry of Agriculture, College of Veterinary Medicine and State Key Laboratory of Agrobiotechnology, China Agricultural University, Beijing 100193, China

Supporting information to DOI: 10.1007/s12250-019-00149-6

Table S1. Primers used for construction of the chimeric viruses in this study

Primer [a]	Position [b]	Sequence (5′-3′)[c]	Usage
RvHJn2			
HJn2-1F	1-27	GCG**ATTTAAAT**ATGACGTATAGGTGTTGGCTCTATGCC (*Swa* I)	Fragment amplification and fusion
HJn2-1R	1314-1378	TAGTCGCACCAGAGCGTGGTTTCCTTGCTCTCTTTCCGGCACCGTACCACTTATGAC TGCCAAAC	Fragment amplification
HJn2-2F	1299-1363	TGAGAAGATTTTCCGGTTTGGCAGTCATAAGTGGTACGGTGCCGGAAAGAGAGCA AGGAAACCAC	Fragment amplification
HJn2-2R	4902-4966	TCGAGCAGGCAACATGCAAGGCAGCAACGAGGTGTGAACCTCCCCCTGAAGGCTT CGAAATTTGC	Fragment amplification
HJn2-3F	4887-4951	TGGACTAAAGATCAGGCAAATTTCGAAGCCTTCAGGGGGAGGTTCACACCTCGTTG CTGCCTTGC	Fragment amplification
HJn2-3R	6033-6058	AGGG**ACGCGT**GACAATGCCTCCTCCT (*Mlu* I)	Fragment amplification and fusion
RvJHn2			
JHn2-1F	1-27	Exactly the same as HJn2-1F	Fragment amplification and fusion
JHn2-1R	1314-1378	TAGTCGCACCAGAGCGTGCTTTCCTTGCTCTCTTTCCAGCACCGTACCACTTATGAC TGCCAAAC	Fragment amplification
JHn2-2F	1299-1363	TGAGAAGATTTTCCGGTTTGGCAGTCATAAGTGGTACGGTGCTGGAAAGAGAGCA AGGAAAGCAC	Fragment amplification
JHn2-2R	4812-4876	TCGAGCAGGCAACATGCAAGGCAGCAATGAGGTGTGGGCCTCCTCCTGAAGGCTT GGAAATTTGC	Fragment amplification
JHn2-3F	4797-4861	TGGACTAAAGATCAGGCAAATTTCGAAGCCTTCAGGGGGAGGTTCACACCTCGTTG CTGCCTTGC	Fragment amplification
JHn2-3R	7592-7617	GGCG**GCTAGC**AGGTTTAAACACTGCT (*Nhe* I)	Fragment amplification and fusion
RvJHn2SP			
JHn2SP-F	11880-11935	TCG**GGCGCGCC**AGAAAGGGAAAATTTATAAAGCTAATGCCACCAGCATGAGGTTT C (*Asc* I)	Fragment amplification and fusion

JHn2SP-R	15297-15372	GGCC**TTAATTAA**TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAATTACGGC CGCATGGTTCTCGCCA (*Pac* I)	Fragment amplification
RvHJn2SP			
HJn2SP-F	11966-12021	TCG**GGCGCGCC**AGAAAGGGAAAATTTATAAAGCTACTGCCACCAGCATGAAGTTT C (*Asc* I)	Fragment amplification
HJn2SP-R	15383-15457	GGCC**TTAATTAA**TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAATTGCGGC CGCATGGTTCTCGCCA (*Pac* I)	Fragment amplification and fusion
RvJHn2GP234			
JHn2GP234-1F	11868-11931	CAATGATGCGTTTCG**GGCGCGCC**AGAAAGGGAAAATTTATAAAGCTAATGCCACC AGCATGAGG (*Asc* I)	Fragment amplification and fusion
JHn2GP234-1R	13661-13728	ACAGCACGCGGTCAAGCACTTCCCCAACATACTTAAACATTCAAATTGCCAGTAGG ATGGCAAAAAGA	Fragment amplification
JHn2GP234-2F	13649-13713	CGTTTTAGCCTGTCTTTTTGCCATCCTACTGGCAATTTGAATGTTTAAGTATGTTGG GGAAGTGC	Fragment amplification
JHn2GP234-2R	15312-15392	GAGGAGGCTGGGACCATGCCGGCC**TTAATTAA**TTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTAATTACGGCC (*Pac* I)	Fragment amplification and fusion
RvHJn2GP234			
HJn2GP234-1F	11954-12017	CAATGATGCGTTTCG**GGCGCGCC**AGAAAGGGAAAATTTATAAAGCTACTGCCACC AGCATGAAG (*Asc* I)	Fragment amplification and fusion
HJn2GP234-1R	13747-13814	ACAGCCCGCGGTCAAGCATTTCCCCAACATACTTGAACATTCAAATTGCCAGTAGG ATGGCAAAAAGA	Fragment amplification
HJn2GP234-2F	13735-13799	CGTTTTAGCCTGTCTTTTTGCCATCCTACTGGCAATTTGAATGTTCAAGTATGTTGG GGAAATGC	Fragment amplification
HJn2GP234-2R	15398-15477	GAGGAGGCTGGGACCATGCCGGCC**TTAATTAA**TTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTAATTGCGGCC (*Pac* I)	Fragment amplification and fusion
RvJHn2GP5M			
JHn2GP5M-1F	11868-11914	CAATGATGCGTTTCG**GGCGCGCC**AGAAAGGGAAAATTTATAAAGCTA (*Asc* I)	Fragment amplification and fusion
JHn2GP5M-1R	13672-13738	ATCGCGAGCAACAGCCCGCGGTCAAGCATTTCCCCAACATACTTAAACATTCAAAT TGCCAGTAGGA	Fragment amplification

JHn2GP5M-2F	13658-13723	CTGTCTTTTTGCCATCCTACTGGCAATTTGAATGTTTAAGTATGTTGGGGAAATGCTTGACCGCGG	Fragment amplification
JHn2GP5M-2R	14784-14850	CTGGCCATTCCCCTTCTTTTTCTTTTGCTGCTTGCCGTTGTTATTTGGCATATTTAACAAGGTTTAC	Fragment amplification
JHn2GP5M-3F	14771-14836	TAAGCAGGGAGTGGTAAACCTTGTTAAATATGCCAAATAACAACGGCAAGCAGCAAAAGAAAAAGA	Fragment amplification
JHn2GP5M-3R	15312-15392	Exactly the same as JHn2GP234-2R	Fragment amplification and fusion
RvHJn2GP5M			
HJn2GP5M-1F	11954-12000	Exactly the same as JHn2GP5M-1F	Fragment amplification and fusion
HJn2GP5M-1R	13758-13824	ATCGCGAGCAACAGCACGCGGTCAAGCACTTCCCCAACATACTTGAACATTCAAATTGCCAGTAGGA	Fragment amplification
HJn2GP5M-2F	13744-13809	CTGTCTTTTTGCCATCCTACTGGCAATTTGAATGTTCAAGTATGTTGGGGAAGTGCTTGACCGCGT	Fragment amplification
HJn2GP5M-2R	14870-14936	CTGGCCATTCCCCTTCTTTCTCTTTTGCTGCTTGCCGTCGTTATTTGGCATATTTAACAAGGTTTAC	Fragment amplification
HJn2GP5M-3F	14857-14922	TAAGCAGGGAGTGGTAAACCTTGTTAAATATGCCAAATAACGACGGCAAGCAGCAAAAGAGAAAGA	Fragment amplification
HJn2GP5M-3R	15398-15477	Exactly the same as HJn2GP234-2R	Fragment amplification and fusion

[a] F denotes a forward PCR primer; R denotes reverse transcription or a reverse PCR primer.
[b] Numbers refer to nucleotide positions within the genome of JXwn06 (GenBank accession no: EF641008) or HB-1/3.9 (GenBank accession no: EU360130), as indicated.
[c] Restriction sites introduced by PCR are shown in boldface and specified in parentheses at the end of the sequence.