## Supplementary files

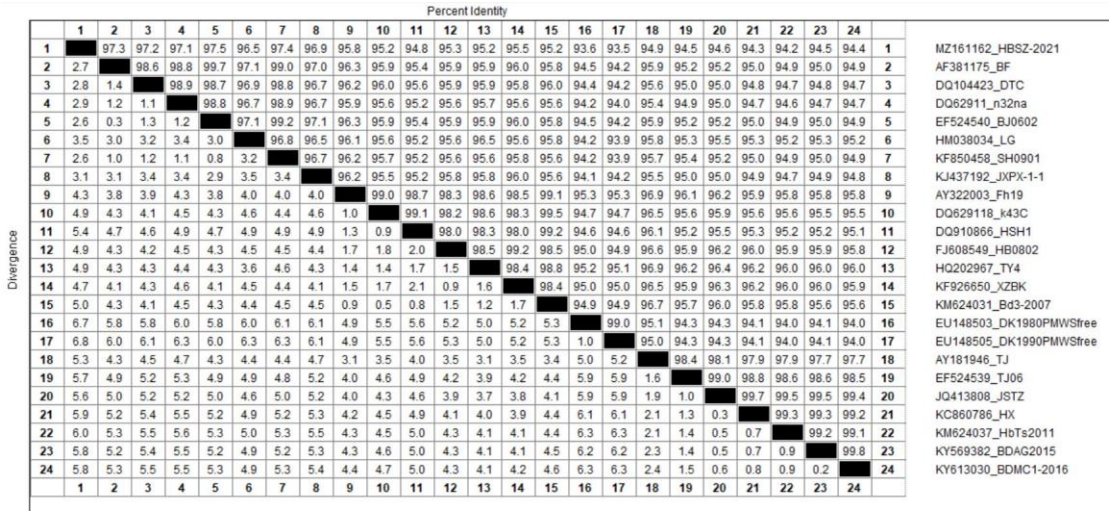


**Figure S1.** Identity analysis of complete genome sequences between PCV2 HBSZ-2021 strain and the reference strains. The data above and below the line of black cells refer to the percent identity and difference between the corresponding two sequences, respectively. The information of PCV2 reference strains is shown in Table 2.

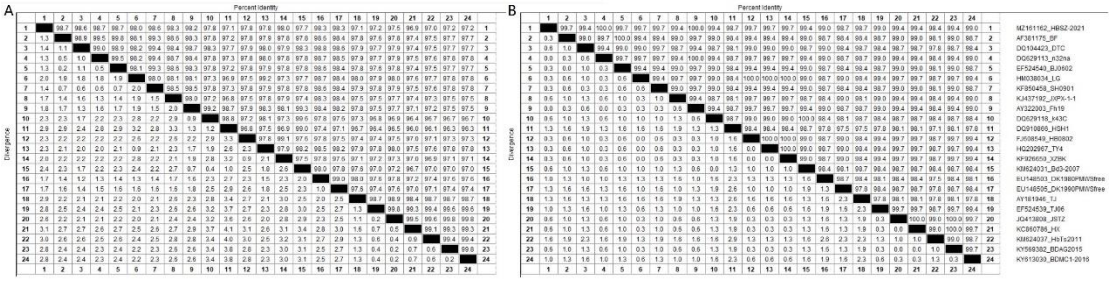


**Figure S2.** Identity analysis of ORF1 between HBSZ-2021 strain and PCV2 reference strains of different genotypes. A. nucleotide sequence; B. amino acid sequence. The data above and below the line of black cells refer to the percent identity and difference between the corresponding two sequences, respectively. The information of PCV2 reference strains is shown in Table 2.

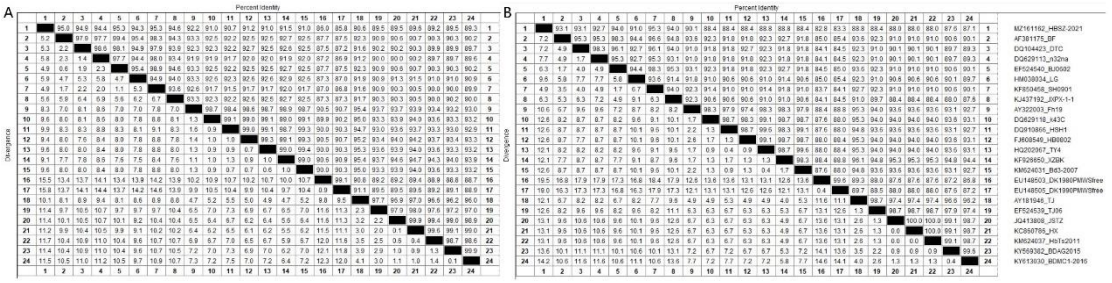


**Figure S3.** Homology analysis of ORF2 between HBSZ-2021 and PCV2 reference strains of different genotypes. A. nucleotide sequence; B. amino acid sequence. The data above and below the line of black cells refer to the percent identity and difference between the corresponding two sequences, respectively. The information of PCV2 reference strains is shown in Table 2.

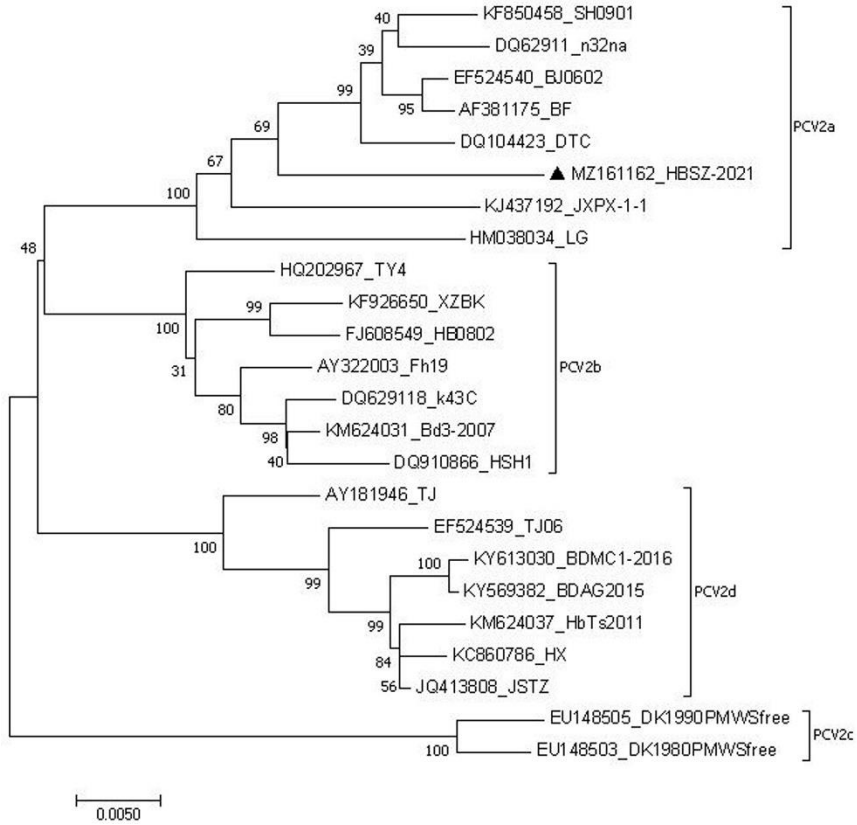


**Figure S4.** Phylogenetic trees of PCV2 HBSZ-2021 strain and the reference strains based on the genome sequences. The information of PCV2 reference strains is shown in Table 2. ▲The detected strain HBSZ-2021.

**Figure S5.** Culture characteristics of the bacterial isolate. A. 5% FBS nutrient agar; B. 5% rabbit blood nutrient agar.

Percent Identity

Divergence

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | | 99.9 | 99.7 | 99.7 | 99.7 | 99.7 | 99.4 | 95.3 | 99.4 | 97.6 | 97.5 | 93.5 | 92.5 | 94.3 | 94.5 | **1** | OK236057-Pm-Swine-China |
| **2** | 0.1 | | 99.8 | 99.8 | 99.8 | 99.8 | 99.5 | 95.4 | 99.5 | 97.7 | 97.6 | 93.6 | 92.6 | 94.4 | 94.6 | **2** | CP013291-Pm-Bovine-China |
| **3** | 0.3 | 0.2 | | 100.0 | 99.7 | 99.7 | 99.3 | 95.4 | 99.5 | 97.6 | 97.4 | 93.6 | 92.7 | 94.3 | 94.7 | **3** | CP072655-Pm-Yak-China |
| **4** | 0.3 | 0.2 | 0.0 | | 99.7 | 99.7 | 99.3 | 95.4 | 99.5 | 97.6 | 97.4 | 93.6 | 92.7 | 94.3 | 94.7 | **4** | CP066223-Pm-Yak-China |
| **5** | 0.3 | 0.2 | 0.3 | 0.3 | | 99.7 | 99.3 | 95.2 | 99.3 | 97.6 | 97.4 | 93.5 | 92.5 | 94.3 | 94.6 | **5** | FJ405342-Pm-Native |
| **6** | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | | 99.6 | 95.2 | 99.3 | 97.6 | 97.4 | 93.4 | 92.5 | 94.3 | 94.5 | **6** | FJ405341-Pm-Swine-SouthKorea |
| **7** | 0.6 | 0.5 | 0.7 | 0.7 | 0.7 | 0.4 | | 94.9 | 99.1 | 97.5 | 97.2 | 93.2 | 92.2 | 93.9 | 94.1 | **7** | FJ463827-Pm-Chicken-SouthKorea |
| **8** | 2.8 | 2.8 | 2.8 | 2.8 | 3.0 | 3.0 | 3.3 | | 96.3 | 94.5 | 94.9 | 93.3 | 92.1 | 93.4 | 94.3 | **8** | NR_118749-Pm-USA |
| **9** | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.7 | 1.0 | 3.1 | | 97.1 | 98.1 | 93.0 | 92.4 | 93.9 | 94.0 | **9** | MN080875-Pm-Moschusberezovskii-China |
| **10** | 2.5 | 2.3 | 2.5 | 2.5 | 2.4 | 2.4 | 2.6 | 5.0 | 3.0 | | 96.2 | 91.4 | 90.8 | 92.3 | 92.3 | **10** | E05329-Pm-Japan |
| **11** | 2.5 | 2.5 | 2.6 | 2.6 | 2.7 | 2.6 | 2.9 | 3.2 | 1.9 | 3.9 | | 94.3 | 93.4 | 94.7 | 95.2 | **11** | LC619668-Pm-Oryctolaguscuniculus-Japan |
| **12** | 6.8 | 6.7 | 6.7 | 6.7 | 6.8 | 6.9 | 7.2 | 6.3 | 7.3 | 9.2 | 5.9 | | 96.4 | 96.6 | 97.4 | **12** | U57072-Ph-Bovine-USA |
| **13** | 7.9 | 7.8 | 7.6 | 7.6 | 7.9 | 7.9 | 8.3 | 6.9 | 8.0 | 9.8 | 6.9 | 3.7 | | 95.4 | 95.9 | **13** | U57066-Ph-Sheep-USA |
| **14** | 5.7 | 5.6 | 5.7 | 5.7 | 5.7 | 5.7 | 6.0 | 5.3 | 6.1 | 7.8 | 5.2 | 3.2 | 4.5 | | 98.1 | **14** | U57070-Ph-Bovine-USA |
| **15** | 5.7 | 5.6 | 5.5 | 5.5 | 5.7 | 5.7 | 6.1 | 5.3 | 6.3 | 8.1 | 4.9 | 2.7 | 4.3 | 1.6 | | **15** | AF224287-Ph-USA |
| | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | | |

**Figure S6.** Homology analysis of the bacterial isolate and the reference strains based on 16S rDNA sequence. The data above and below the line of black cells refer to the percent identity and difference between the corresponding two sequences, respectively. The information of the reference strains is shown in Table 3.