

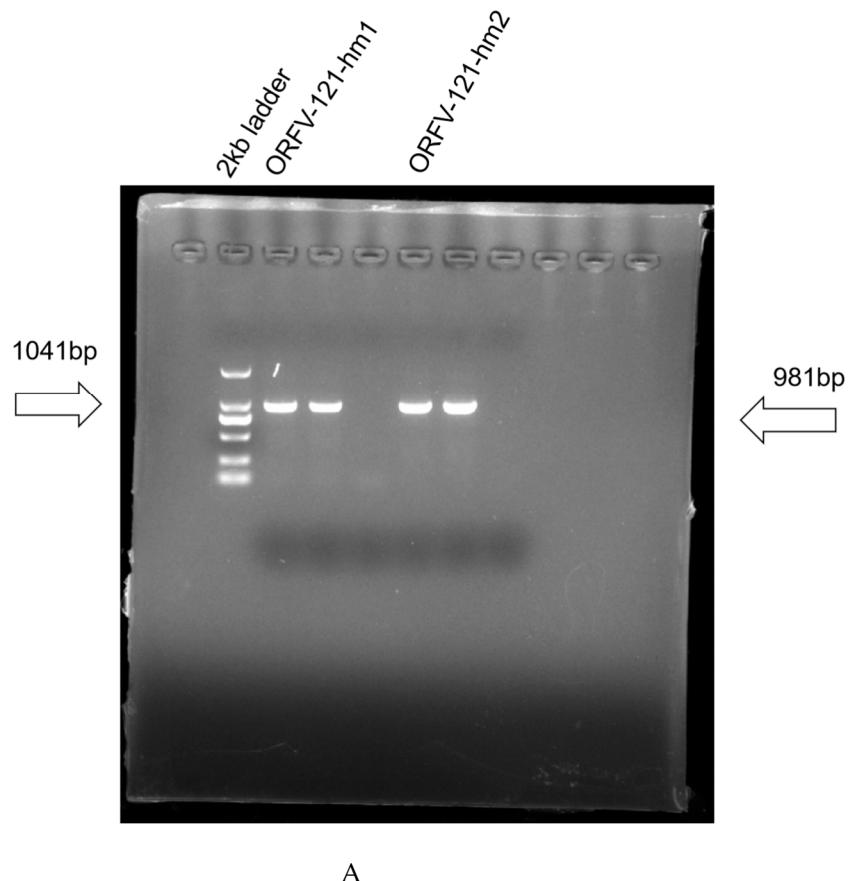
## Supplementary materials

**Table S1.** Primers used to generate and identify the recombinant viruses.

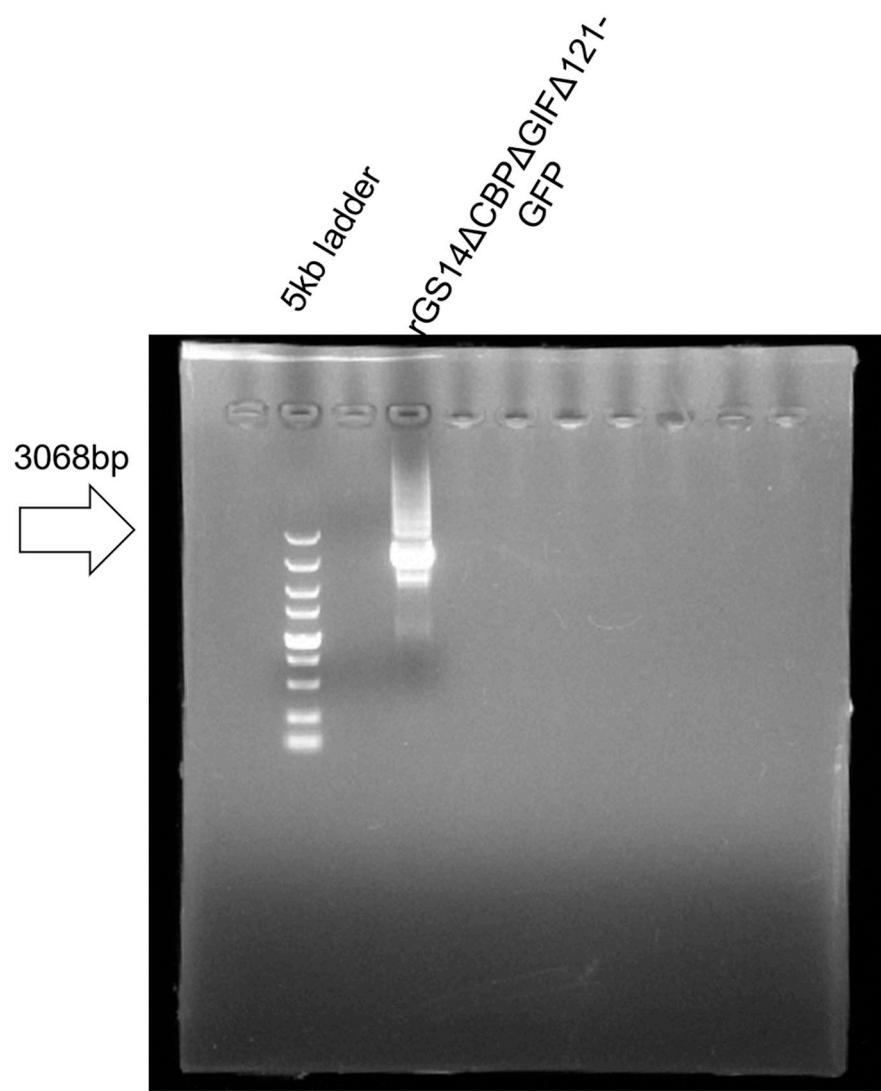
Primers	Sequence (5'-3')	Descriptions
121-hm1 F	CGACATCGCACACAAATGAAGGACA	
121-hm1 R	ACGTAGAAGACCAGGAAACAG GGTTGTGTGGGCCACAGAGTTGAGT	Used to amplify the left arm of rGS14ΔCBPΔGIFΔ121-EGFP
121-hm2 F	ACTCATCAATGTATCTTAAGGCGTGAAAGTCGCTTTCTGTAAT GTGA	Used to amplify the right arm of rGS14ΔCBPΔGIFΔ121-
121-hm2 R	CGTAGCAGAACAGCGACAGC	EGFP
121-EGFP F	ACTCAACTCTGTGGCCCACACAACC CTGTTTCCTGGTCTTCTACGT	
121-EGFP R	TCACATTACAGAAAAACGCACHTTCACGCCTTAAGATACATTGAT GAGT	Used to amplify the EGFP marker gene
121-hm1-hm2 F	ACTCTGTGGCCCACACAACCGAAAGTCGCTTTCTGTAAT	Used to amplify the right arm of rGS14ΔCBPΔGIFΔ121
121-hm2-hm1 R	TTACAGAAAAACGCACHTTCACGGTTGTGGGCCACAGA	Used to amplify the left arm of rGS14ΔCBPΔGIFΔ121
121 F	TAGGTGCGTTCAGAGGCG	Used to identify the 121 gene
121 R	CGTAGCAGAACAGCGACAGC	in ORFV

**Table S2.** Clinical scoring sheet.

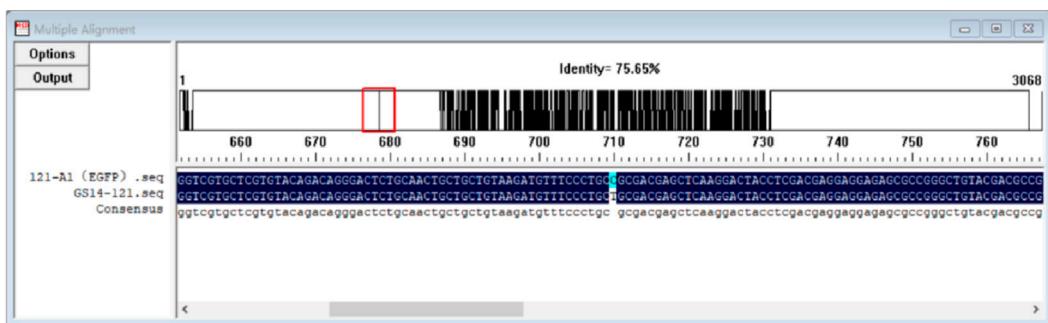
	absence (0')	mild or small number (1')	moderate or medium number (2')	severe or high number (3')
hyperemia				
vesicles and/or pustules				
scabs				
exudation and/or bleeding				



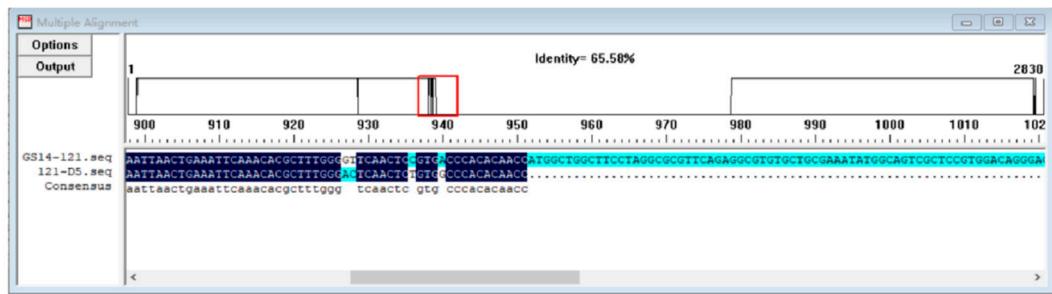
A



B

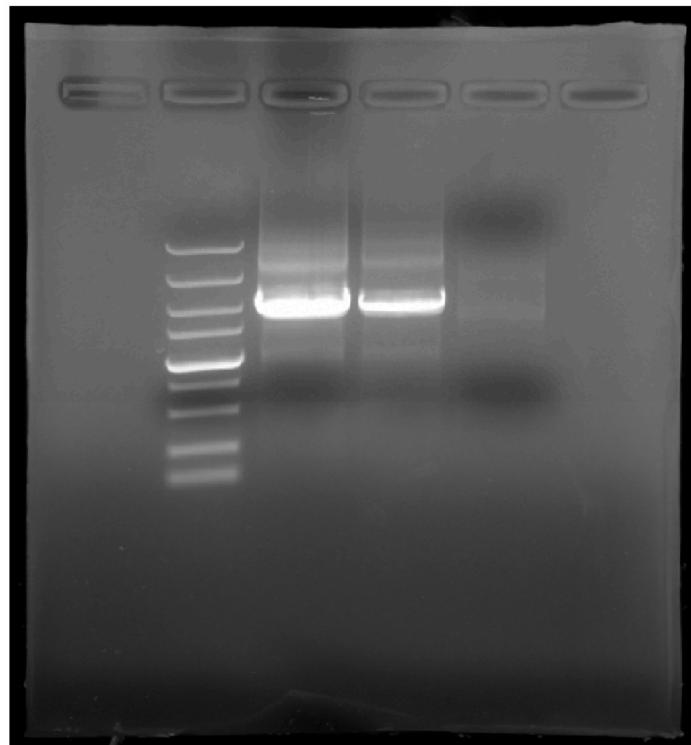


C



D

5kb ladder  
rGS14ΔCBPΔGIFΔ121



E

**Figure S1.** Partial identification results of recombinant virus rGS14ΔCBPΔGIFΔ121 construct. A: Bands showed the rGS14ΔCBPΔGIF containing 121 left homology arm and right homology arm.; B: The band showed the generation of rGS14ΔCBPΔGIFΔ121-GFP. C: Sequencing result of rGS14ΔCBPΔGIFΔ121-GFP compared with 121 gene of GS14. D: Sequencing result of rGS14ΔCBPΔGIFΔ121 compared with GS14-121. E: The band showed the construction of rGS14ΔCBPΔGIFΔ121