Supplementary information

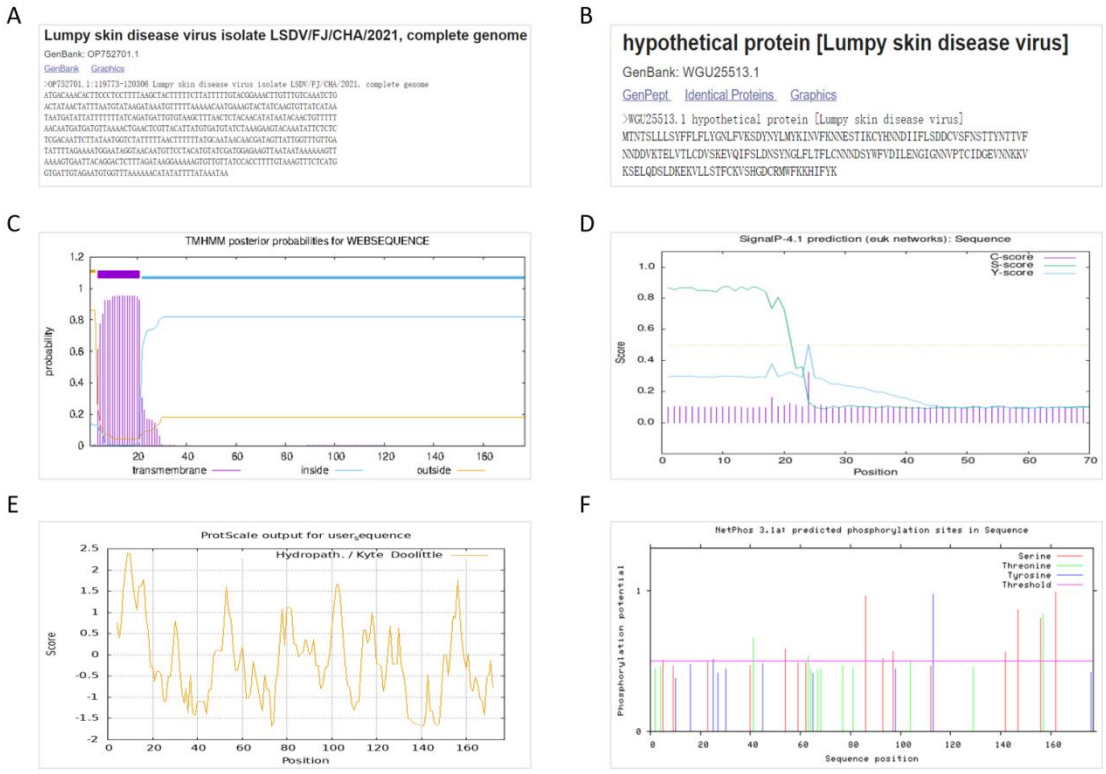
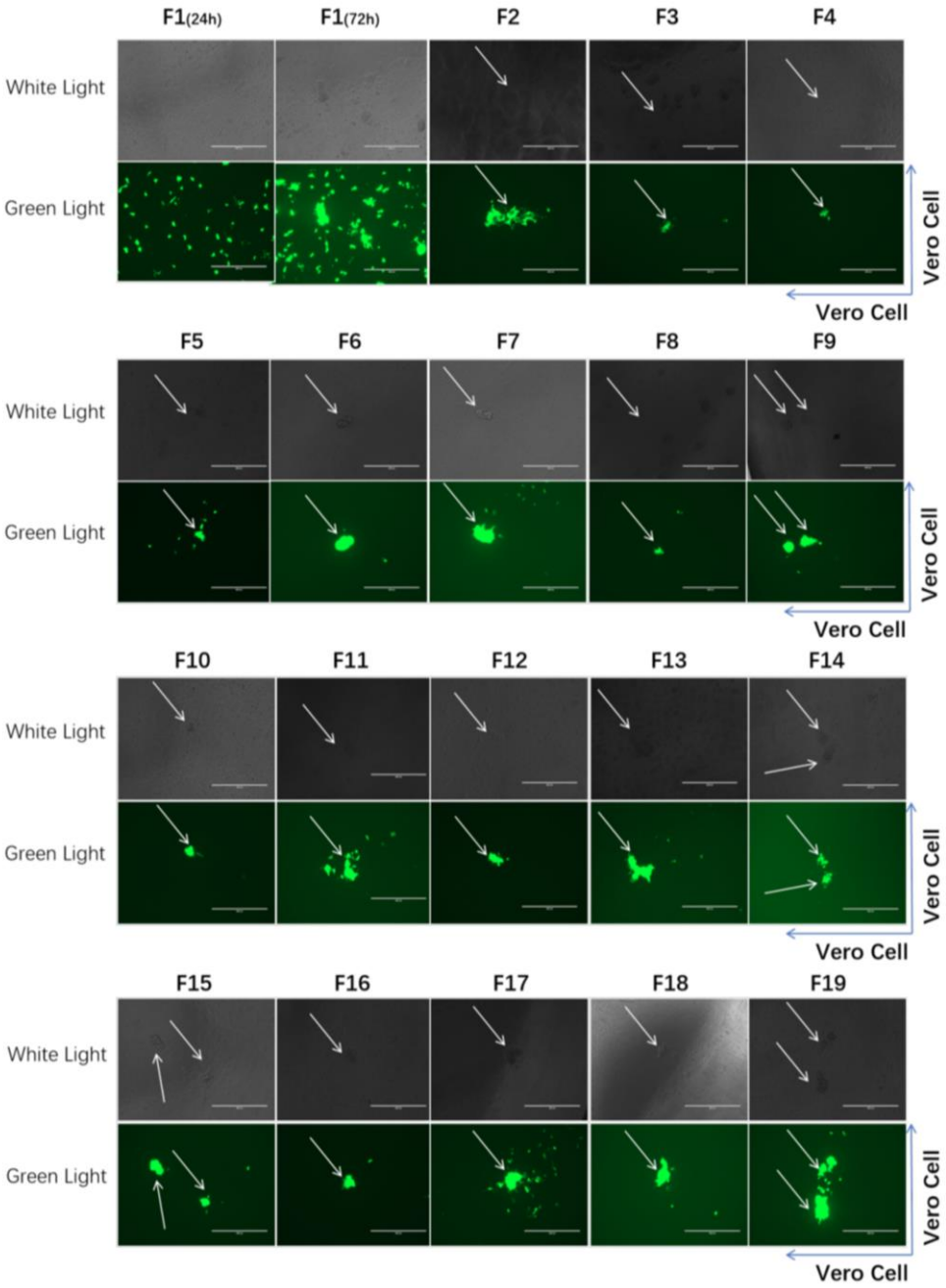


Figure S1. Main Bioinformatics of LSDV ORF133. (**A**) LSDV ORF133 Gene Sequence. (**B**) LSDV ORF133 Amino Acid Sequence. (**C**) Prediction of Transmembrane Domains of LSDV ORF133 Using the TMHMM Server 2.0 Online Software. (**D**) Prediction of Signal Peptides and Cleavage Sites of LSDV ORF133 Using the SignalP 4.1 Online Software. (**E**) Prediction and Analysis of Hydrophilicity and Hydrophobicity of LSDV ORF133 Protein Using the ProtScale Online Tool. (**F**) Prediction of Phosphorylation Sites of LSDV ORF133 Protein Kinase Using the Online Software Expasy-ProtScale.

A


F1(24h)
F1(72h)
F2
F3
F4
White Light
Green Light
Vero Cell
Vero Cell
F5
F6
F7
F8
F9
White Light
Green Light
Vero Cell
Vero Cell
F10
F11
F12
F13
F14
White Light
Green Light
Vero Cell
Vero Cell
F15
F16
F17
F18
F19
White Light
Green Light
Vero Cell
Vero Cell

B

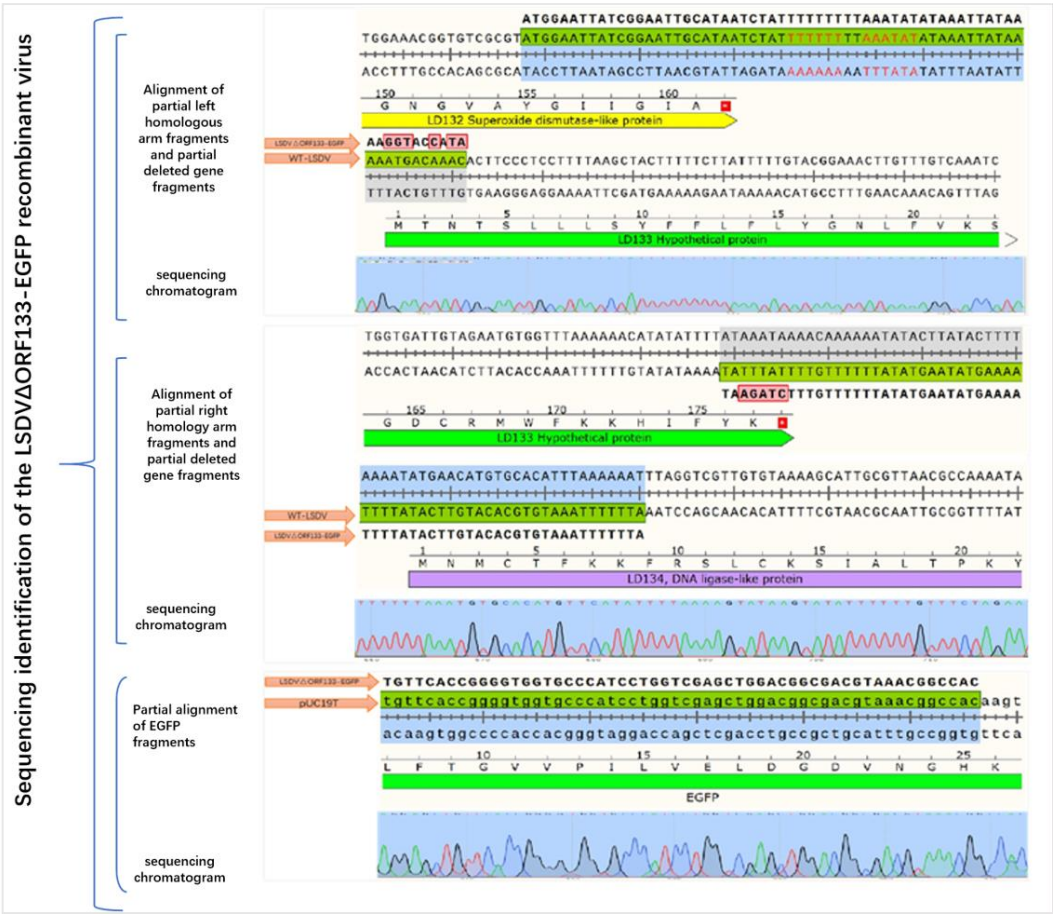


Figure S2. Purification and Identification of the LSDV Δ ORF133-EGFP Strain. (**A**) The purification of the recombinant LSDV strain deleted ORF133 gene. The recombinant virus underwent 19 generations of purification in Vero cells, where the direction of the arrow indicates the location of obvious cytopathic effects after viral infection. (**B**) Sequencing validation of the purified LSDV Δ ORF133 - EGFP deletion strain **.**The recombinant viral DNA was entrusted to Tsingke Biotechnology Co., Ltd. (Beijing) for sequencing, and the sequencing results were compared with the WT-LSDV sequence and the EGFP sequence.