

Supplementary materials

Table S1. Clinical Scoring of swine inoculated with ASFV.

Characteristic	Score (points)	
Anorexia		
	1-4	Reduced eating
	5-8	Only picking at food
	9-10	Not eating
Recumbency		
	1-3	Lethargic
	4-5	Animal gets up only when touched
	6-8	Gets up only slowly when touched
	9-10	Remains recumbent when touched
Neurologic signs		
	0	Normal
	1-10	Neurological disorders (ataxia, paralysis, convulsion) depending on the occurrence and severity of signs
Skin lesion		
	0	Normal
	1-10	Skin erythema, edema, and hemorrhages depending on combined assessment
Swelling of joints		
	0	Normal
	1-5	Joint swelling depending on the severity of signs
	5-10	Severe swelling with lameness depending on the severity of signs
Breathing		
	1-5	Labored and/or coughing depending on the severity of signs
	5-10	Severe depending on the severity of signs
Ocular discharge		
	1-4	Mild
	5-10	Moderate
Digestive findings		
	0	Normal
	1-3	Mild diarrhea for less than 24 h
	4-6	Moderate findings, e.g., diarrhea and vomiting for more than 24 h
	7-10	Severe, bloody diarrhea and/or bloody urine
Body Temperature		
	0	38-40.2°C
	3-5	40.3-40.5°C
	6-8	40.6-41°C
	9-10	> 41.0°C

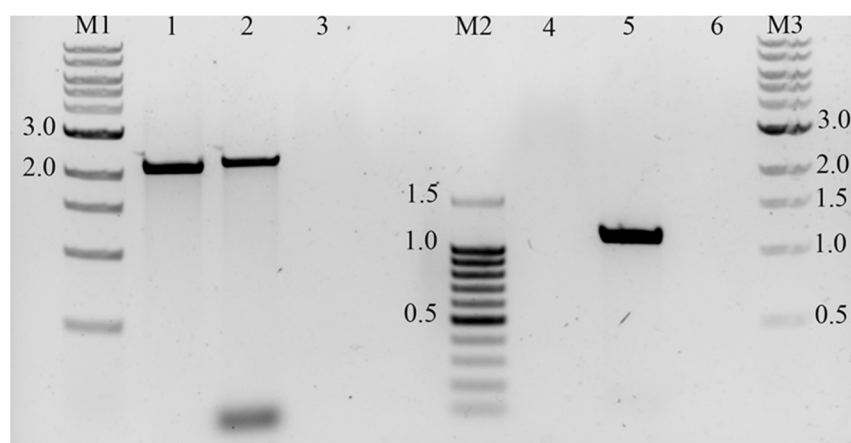


Figure S1. Analysis of the EP402R gene deletion in genomic viral DNA by PCR. Viral DNA was extracted from parental Congo-a virus and the recombinant Δ CongoCD2v virus. Specific PCR fragments were amplified and analyzed by electrophoresis in 1.5% agarose gel. Lanes 1–3: PCR with primers flanking the recombination site; lanes 4–6: PCR of the complete EP402R gene. The following viral genomic DNAs were used as templates: recombinant Δ CongoCD2v virus (lanes 1 and 4), parental Congo-a virus (lanes 2 and 5), no template (lanes 3 and 6). Lanes M1 and M3 contain a 1 kb DNA ladder, and lane M2 contains a 100 bp DNA ladder.

Table S2. Detection of EGFP gene in organs and lymph nodes of Δ CongoCD2v and Congo-a immunized pigs following the challenge with ASFV Congo-v.

Group	# Animal	CT Value of Real-time PCR				
		Spleen	Liver	Lung	Mesenteric Lymph Node	Sub-mandibular Lymph Node
Δ CongoCD2v	1/1	40,32	42,21	33,01	43,17	41,27
	1/2	Neg	Neg	Neg	42,4	43,54
	1/3	Neg	Neg	Neg	44,89	Neg
	1/4	Neg	Neg	44,54	Neg	Neg
	1/5	41,32	Neg	39,87	42,67	42,54
	1/6	43,1	Neg	43,78	41,32	42,76
	1/7	43,98	Neg	Neg	Neg	44,91
Congo-a	2/1	Neg	Neg	Neg	Neg	Neg
	2/2	Neg	Neg	Neg	Neg	Neg
	2/3	Neg	Neg	Neg	Neg	Neg
	2/4	Neg	Neg	Neg	Neg	Neg
	2/5	Neg	Neg	Neg	Neg	Neg

Neg – no CT value.