

## **Supporting Information**

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**Supplementary table S1. Experiment Schedule for SFTSV challenge**

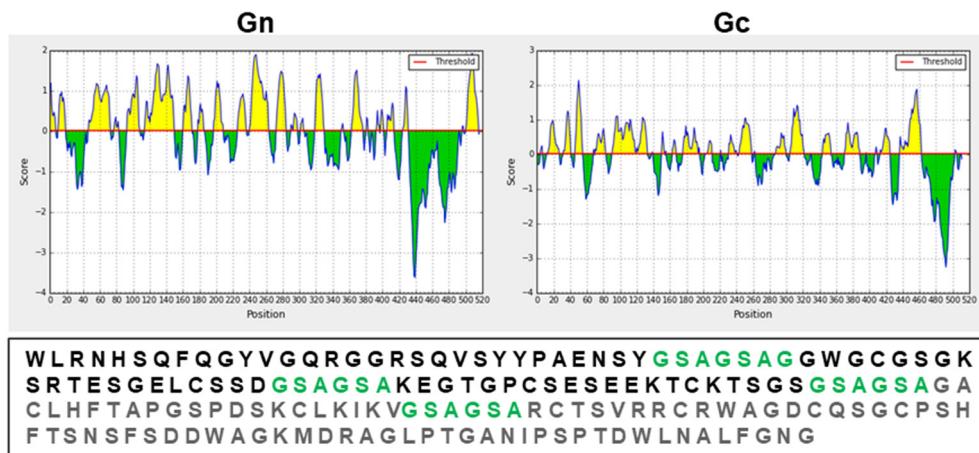
<b>Group (n=8)</b>	<b>Strain</b>	<b>Route</b>	<b>Dosage ( CFU/100 µl)</b>	<b>Booster</b>	<b>AAV/hDC- SIGN transduction</b>	<b>Challenge</b>	i.v: intravenous route,    i.p:
A	PBS	IM	100 ul	100 ul	1 week post booster	$1 \times 10^3$	
B	JOL2420	IM	$1 \times 10^7$	$1 \times 10^7$			
C	JOL2424	IM	$1 \times 10^7$	$1 \times 10^7$	immunization	FAID <sub>50</sub>	
D	JOL2425	IM	$1 \times 10^7$	$1 \times 10^7$	( $1 \times 10^{11}$ vp, i.v)	SFTSV (i.p)	
E	JOL2426	IM	$1 \times 10^7$	$1 \times 10^7$			

intraperitoneal route

**Supplementary table S2. Post-challenge body temperature measurements (°C)**

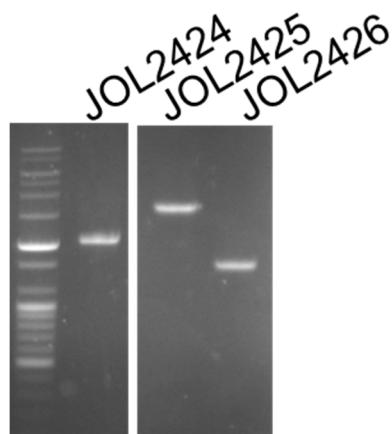
	<b>JOL2420</b>	<b>JOL2424</b>	<b>JOL2425</b>	<b>JOL2426</b>
<b>Day 01</b>	36.4±0.2	36.2±0.1	36.6±0.2	36.6±0.1
<b>Day 02</b>	37.4±0.1	37.3±0.3	36.6±0.2	36.7±0.2
<b>Day 03</b>	37.0±0.5	36.9±0.3	36.2±0.1	36.5±0.4
<b>Day 04</b>	36.9±0.1	36.8±0.1	36.6±0.2	36.7±0.1

### Supplemental Figure S1



**Supplemental Figure S1.** The BepiPred program automatically determined the cut-off value for linear B-cell epitopes of the Gn-Gc protein.

**Supplemental Figure S2**



**Supplemental Figure S2.** Vaccine antigens expressed by *Salmonella* mutant, JOL2500 was confirmed by PCR using antigen-specific primers. Genes were amplified at 2.1 kilobase pairs (kbp), 4.1 kbp, and 1.6 kbp for NP-Gn/Gc-epitope, NP-P2A-Gn/Gc, NSs genes, respectively.