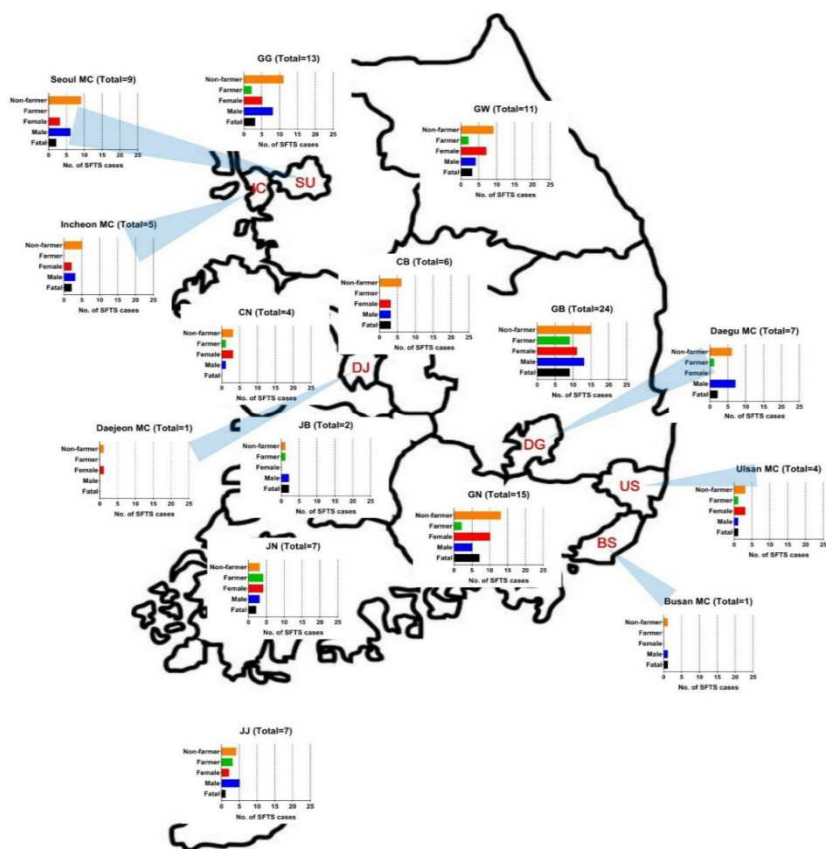


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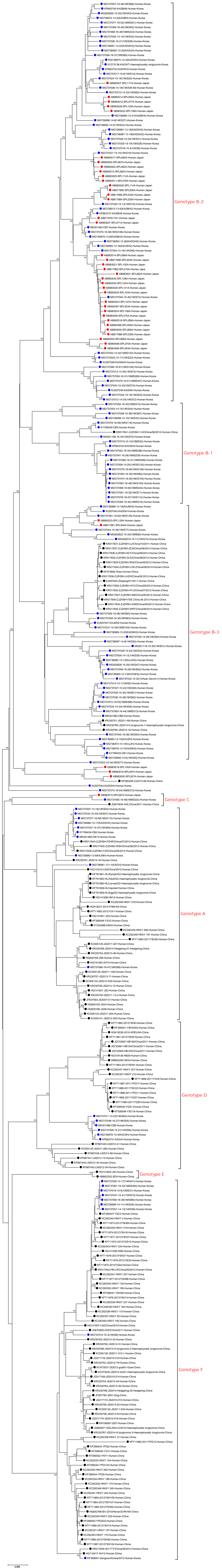
Supplemental Figures

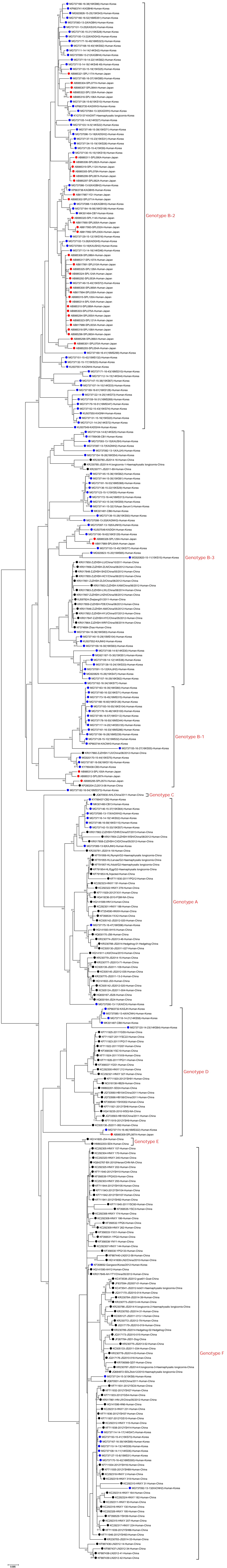


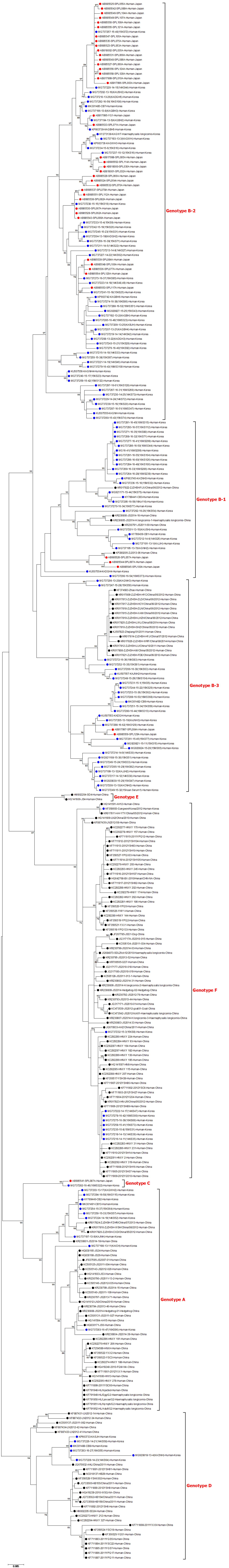
Supplemental Figure 1. A map summarizing the regional characteristics of isolated SFTS cases analyzed in this study. Gyeonggi Province (GG), Gangwon Province (GW), Chungcheongnam Province (CN), Chungcheongbuk Province (CB), Gyeongsangnam Province (GN), Gyeongsangbuk Province (GB), Jeollanam Province (JN), Jeollabuk Province (JB), Jeju Special Autonomous Province (JJ), Seoul (SU) metropolitan city [MC], Incheon (IC) MC, Daejeon (DJ) MC, Daegu (DG) MC, Ulsan (US) MC, Busan (BS) MC.

Supplemental data

Supplemental Figure 2. The full version of the Maximum Likelihood (ML) trees of Figure 2. Phylogenetic analysis based on the complete ORF sequences of (A) *L*, (B) *M*, and (C) *S* segments of Korean SFTSVs compared with those from China and Japan. The full version of the Maximum Likelihood (ML) trees based on the Kimura 2-parameter model were constructed and tested by bootstrap analysis with 1,000 replications. The scale bar indicates the number of nucleotide substitutions per site, and the phylogenetic branches were supported with greater than 70% bootstrap values. The SFTSV strains from China, Japan, and South Korea are marked with black, red, and blue closed circles, respectively.







Genotype B-2

Genotype B-1

Genotype B-3

Genotype E

Genotype F

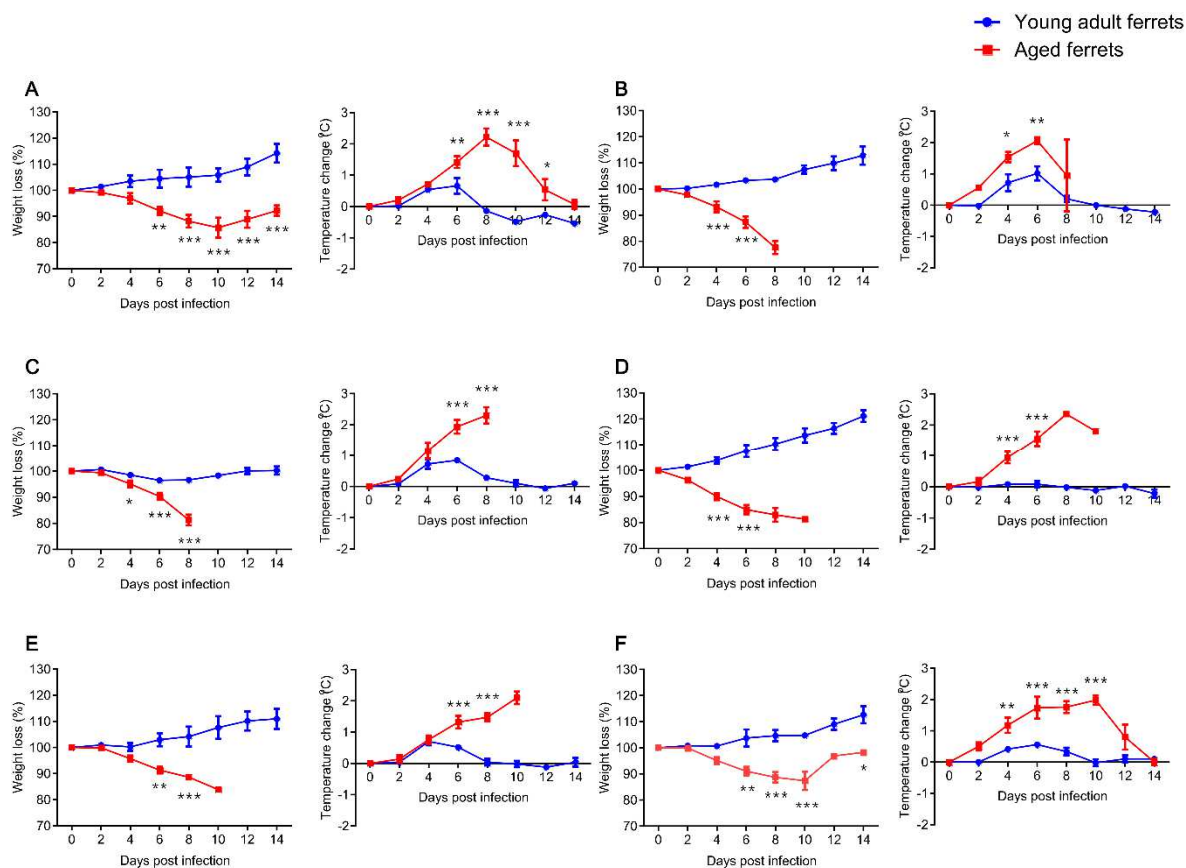
Genotype C

Genotype A

Genotype D

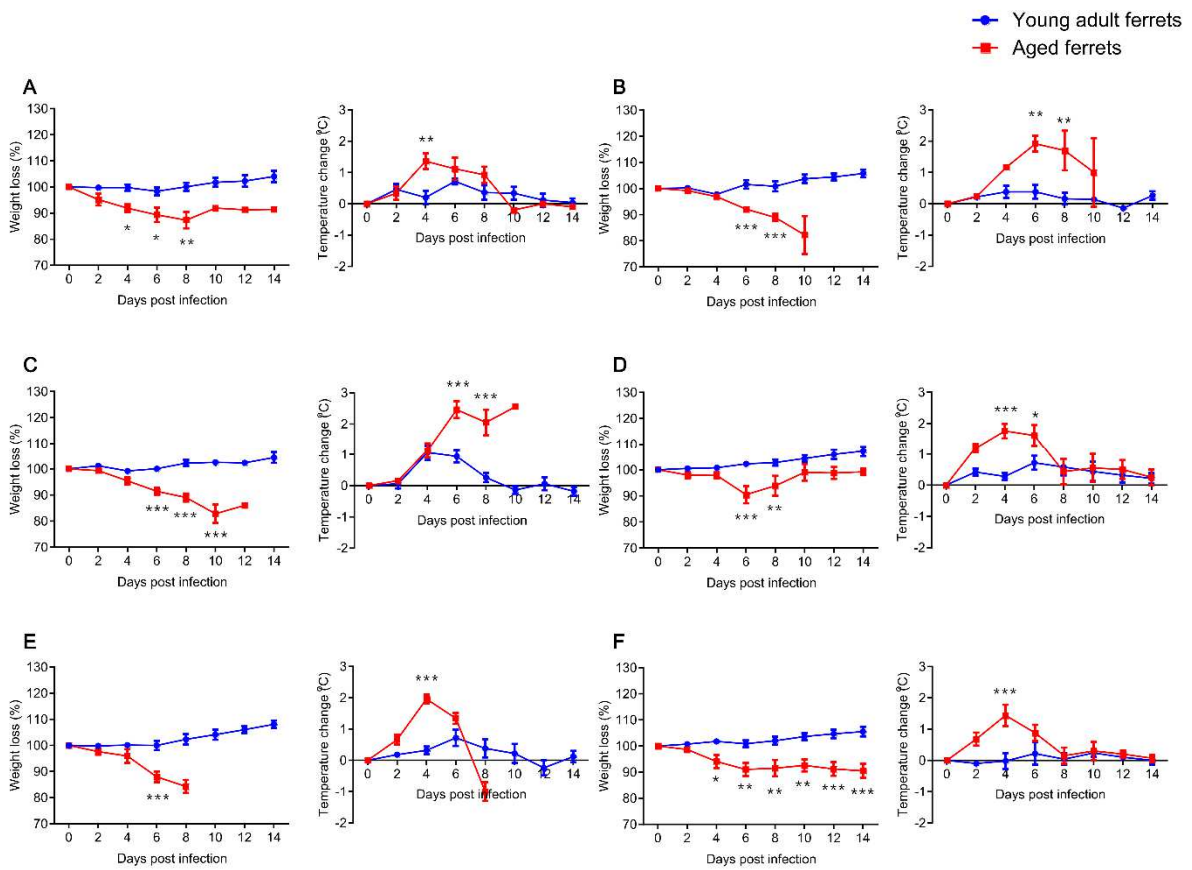
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Supplemental data

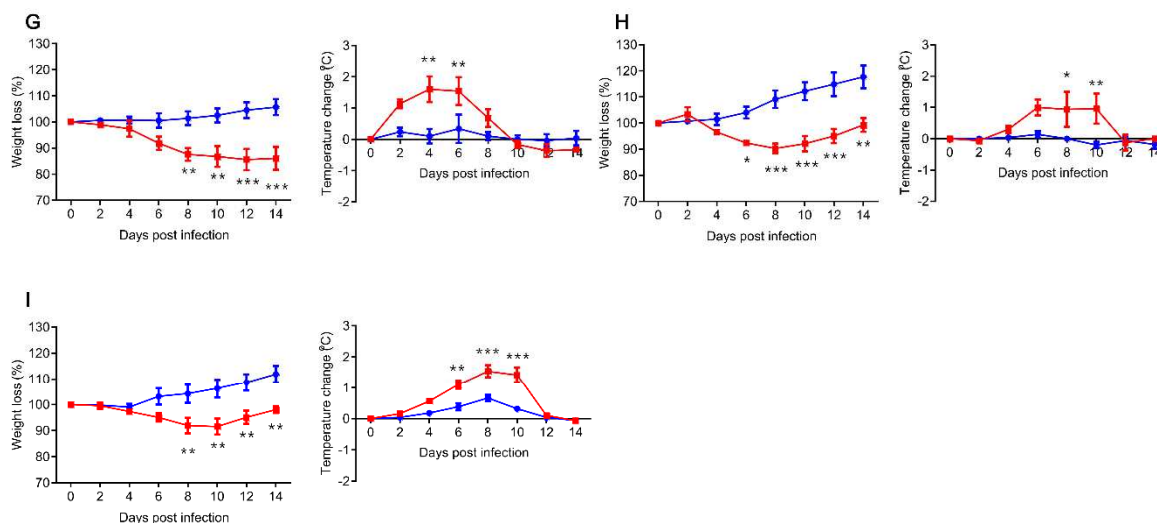


Supplemental Figure 3. Pathogenicity of each randomly selected SFTSV pure genotype in ferrets. Young adult (< 2 years, n=5) or aged female and male ferrets (> 4 years, n=5) were inoculated with $10^{5.0}$ FFU/ml of each randomly selected SFTSV strain (A) A, (B) B-1, (C) B-2, (D) B-3, (E) D, (F) F. Body weight loss (first lane) and body temperature change (second lane) were assessed. Both weight loss and temperature change are presented as mean \pm SEM. Comparison between results in young adult and aged ferrets is represented in blue and red, respectively. Asterisks indicate statistical significance between infected young adult or aged ferrets and infected ferrets per day post-infection as determined by two way ANOVA with Sidak comparison tests (* indicates $p < 0.05$, and ** indicate $p < 0.001$, *** indicate $p < 0.0001$).

Supplemental data

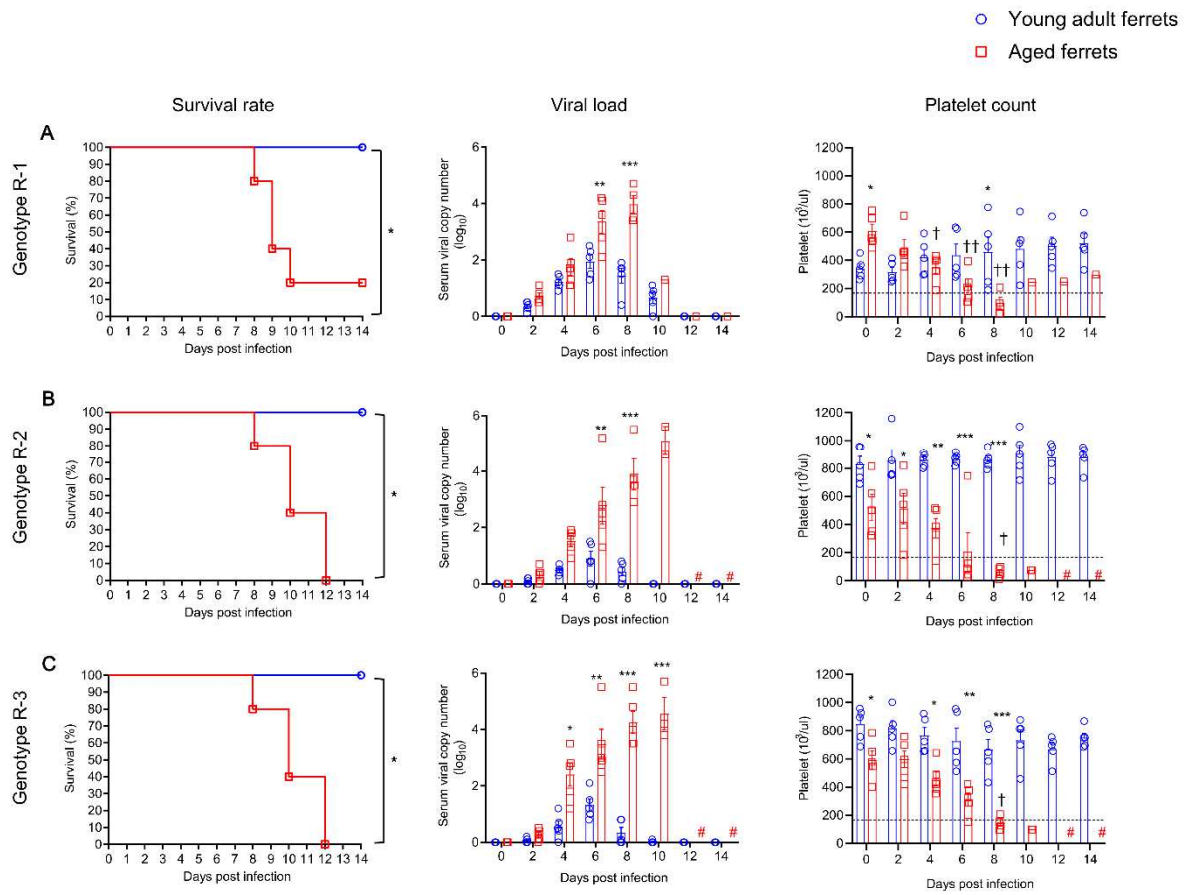


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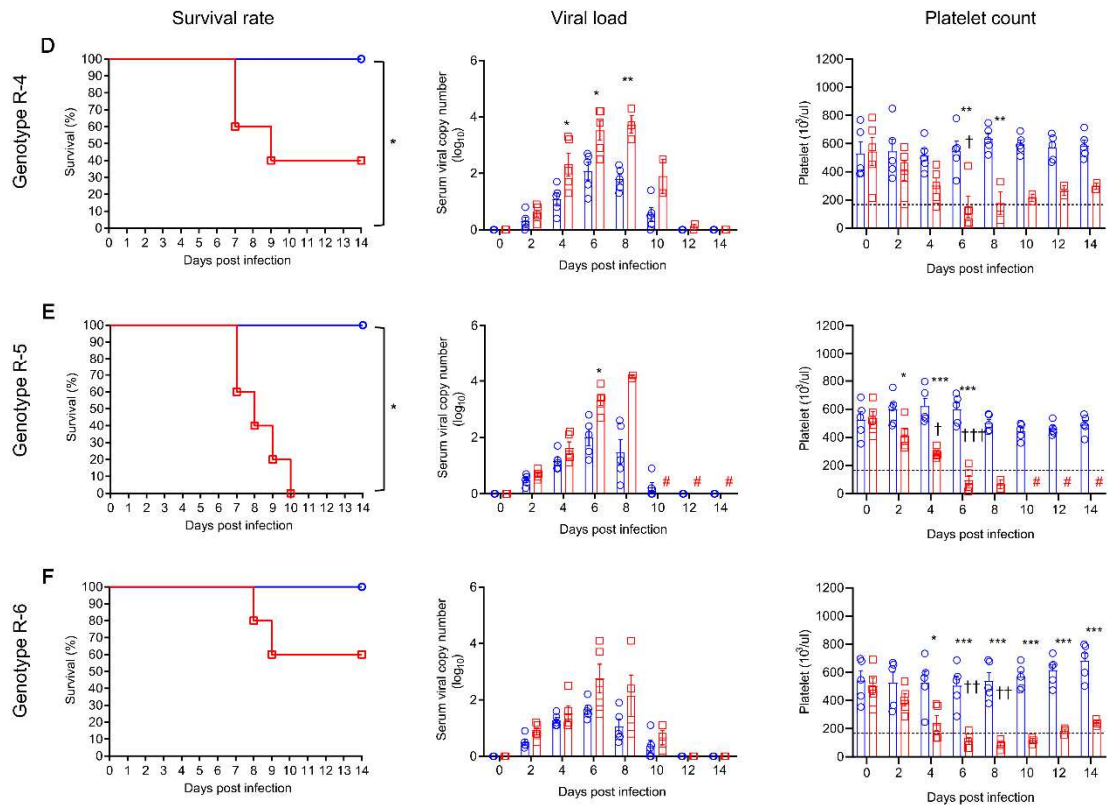


Supplemental Figure 4. Pathogenicity of each randomly selected SFTSV reassortant genotype in ferrets. Young adult (< 2 years, n=5) or aged female and male ferrets (> 4 years, n=5) were inoculated with $10^{5.0}$ FFU/ml of each randomly selected SFTSV strain (A) R-1, (B) R-2, (C) R-3, (D) R-4, (E) R-5, (F) R-6, (G) R-7, (H) R-8 and (I) R-9. Body weight loss (first lane) and body temperature change (second lane) were assessed. Both weight loss and temperature change are presented as mean \pm SEM. Comparison between results in young adult and aged ferrets is represented in blue and red, respectively. Asterisks indicate statistical significance between infected young adult and infected aged ferrets per day post-infection as determined by two way ANOVA with Sidak comparison tests (* indicates $p < 0.05$, and ** indicate $p < 0.001$, *** indicate $p < 0.0001$).

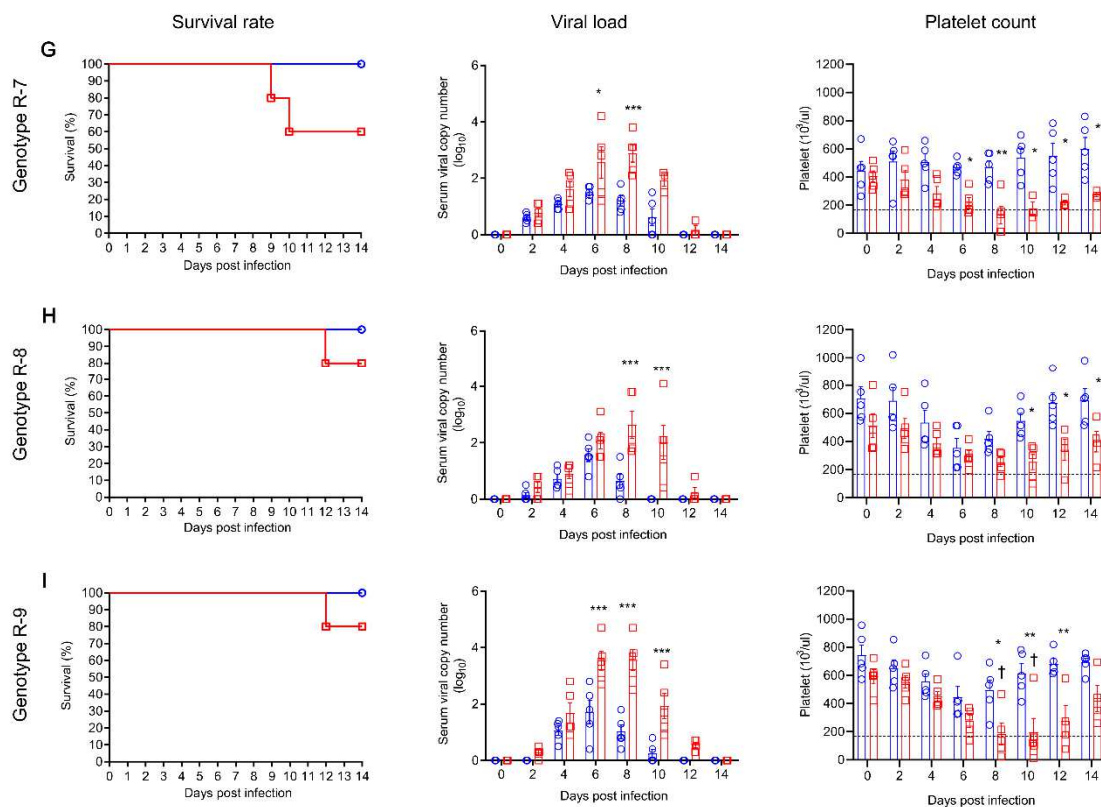
Supplemental data



Supplemental data



Supplemental data

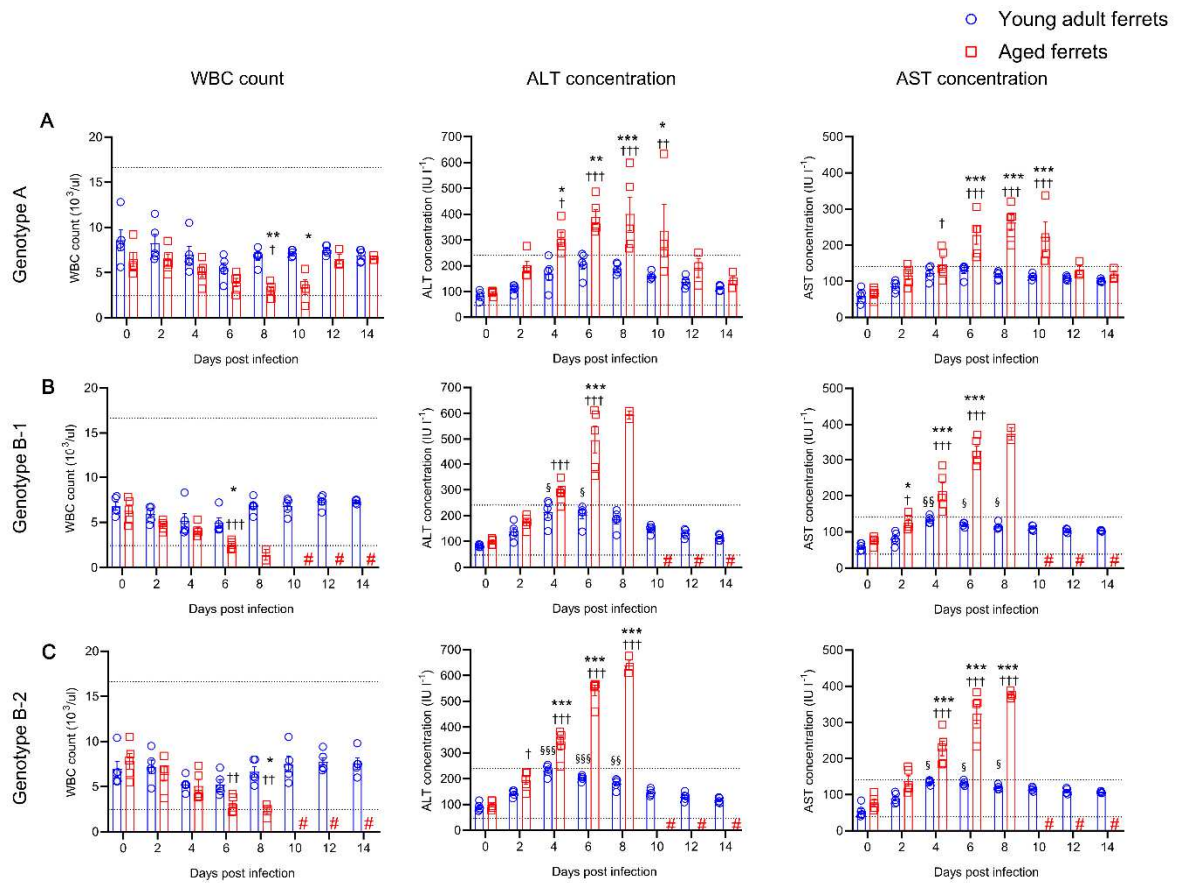


Supplemental Figure 5. Pathogenicity of each randomly selected SFTSV reassortant genotype in ferrets. Young adult (< 2 years, n=5) or aged female and male ferrets (> 4 years, n=5) were inoculated with $10^{5.0}$ FFU/ml of each randomly selected SFTSV strain (A) R-1, (B) R-2, (C) R-3, (D) R-4, (E) R-5, (F) R-6, (G) R-7, (H) R-8 and (I) R-9. Survival (first lane), viral titers in serum (second lane), and platelet concentration (third lane) were assessed. The normal range of platelets ($171.7\text{--}1,280.6 \times 10^3$ per μl) is marked by dashed lines in each panel. Both viral titers and platelet concentrations are presented as mean \pm SEM. Comparison between results in young adult and aged ferrets is represented in blue and red, respectively. Asterisks (*) indicate statistical significance between infected young adult and infected aged ferrets per day post-infection as determined by Mantel-Cox method (survival), two way ANOVA with Sidak comparison (viral copy number and platelet). The significance

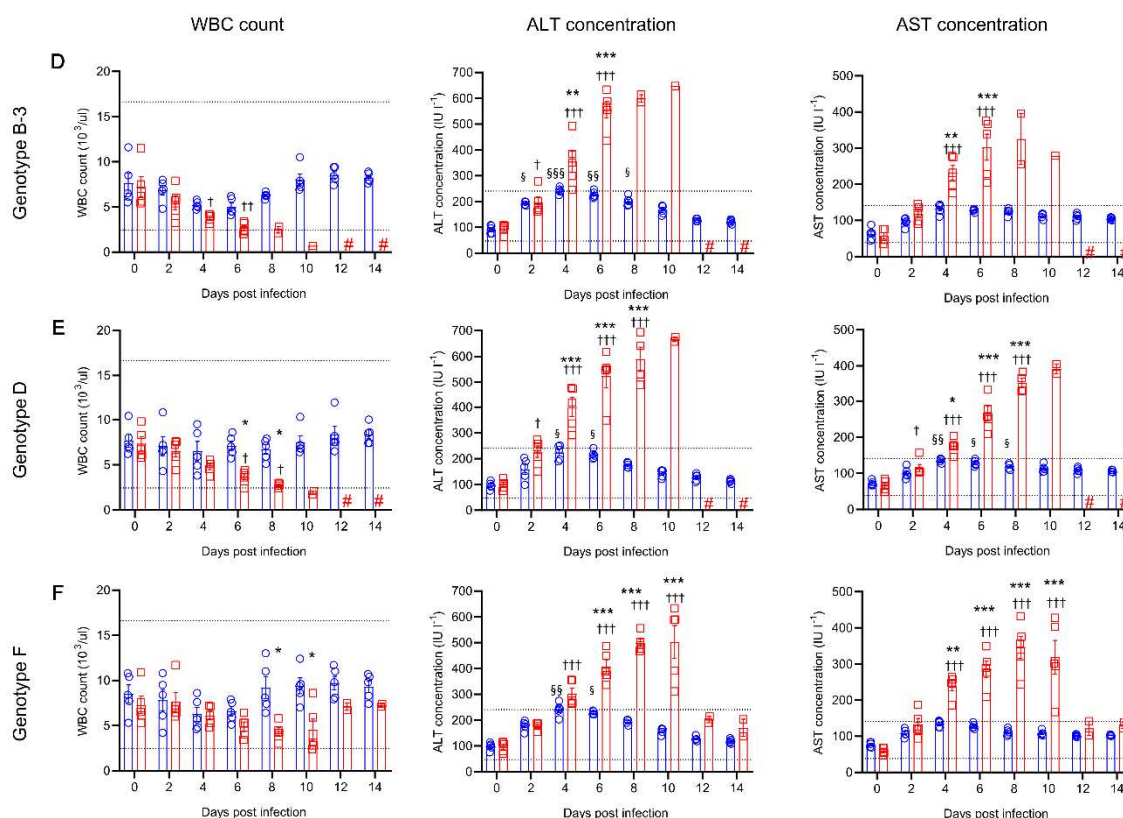
Supplemental data

(platelet) between non infected aged adult and infected aged ferrets were calculated by two way ANOVA with Tukey's test which are indicated with dagger (†). (*, † indicate $p < 0.05$, and **, †† indicate $p < 0.001$, ***indicate $p < 0.0001$).

Supplemental data



Supplemental data

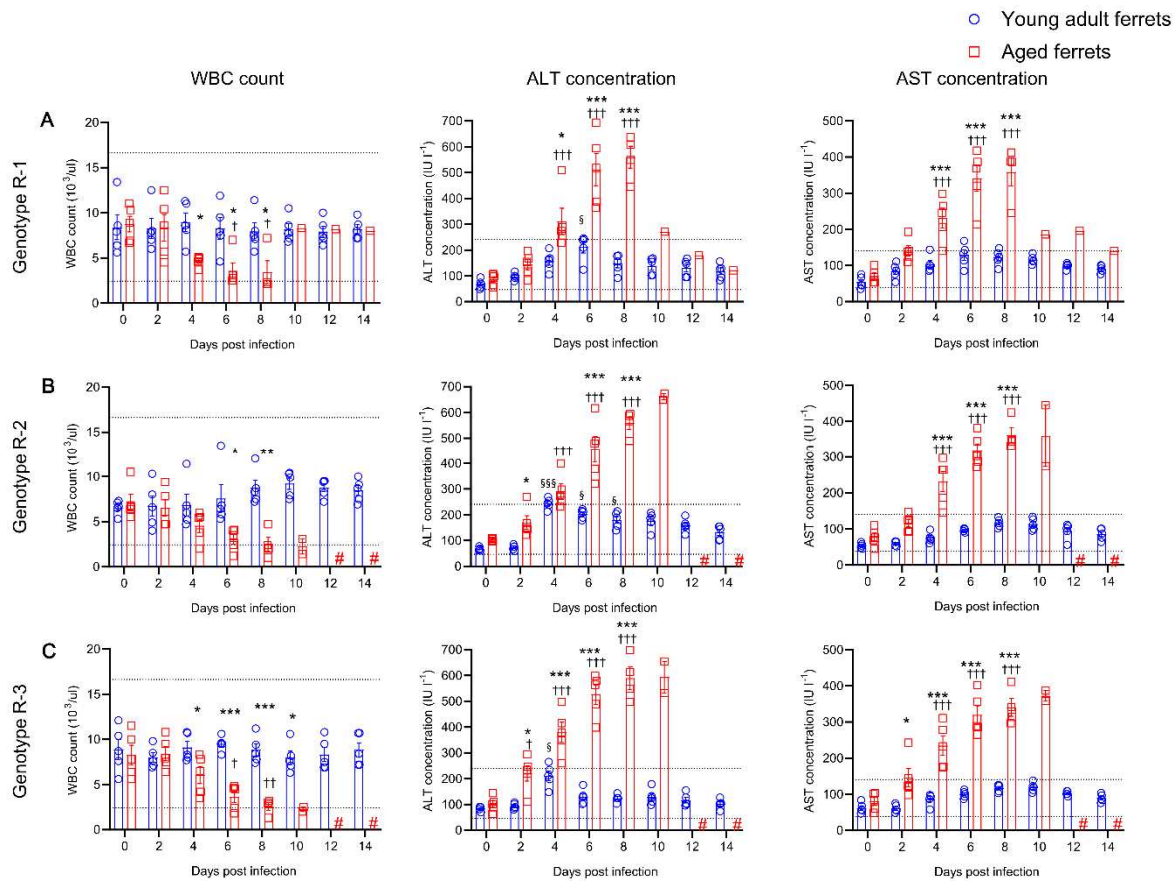


Supplemental Figure 6. Hematology analysis of each randomly selected SFTSV pure genotype in ferrets. . Young adult (< 2 years, n=5) or aged female and male ferrets (> 4 years, n=5) were inoculated with $10^{5.0}$ FFU/ml of each randomly selected SFTSV strain (A) A, (B) B-1, (C) B-2, (D) B-3, (E) D, (F) F. WBC count (first lane), ALT (second lane) and AST (third lane) levels were assessed. WBC, ALT and AST concentrations are presented as mean \pm SEM. Comparison between results in young adult and aged ferrets is represented in blue and red, respectively. Asterisks indicate statistical significance between infected young adult and infected aged ferrets per day post-infection as determined by two way ANOVA with Sidak comparison tests. The significance between non infected young adult and infected young adult ferrets or between non infected aged and infected aged ferrets were calculated by two way ANOVA with Tukey's test which are indicated with section signs (§) and daggers

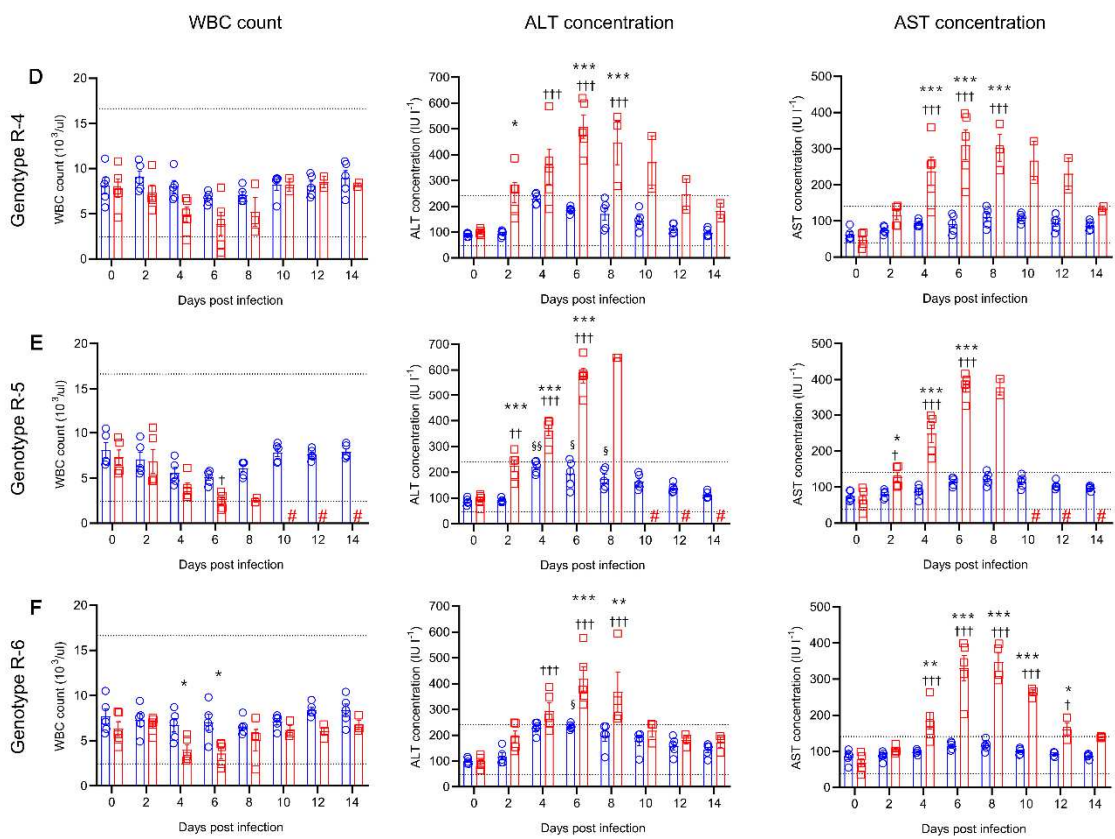
Supplemental data

(†), respectively. (*, §, † indicate $p < 0.05$, and **, §§, †† indicate $p < 0.001$, ***, §§§, ††† indicate $p < 0.0001$).

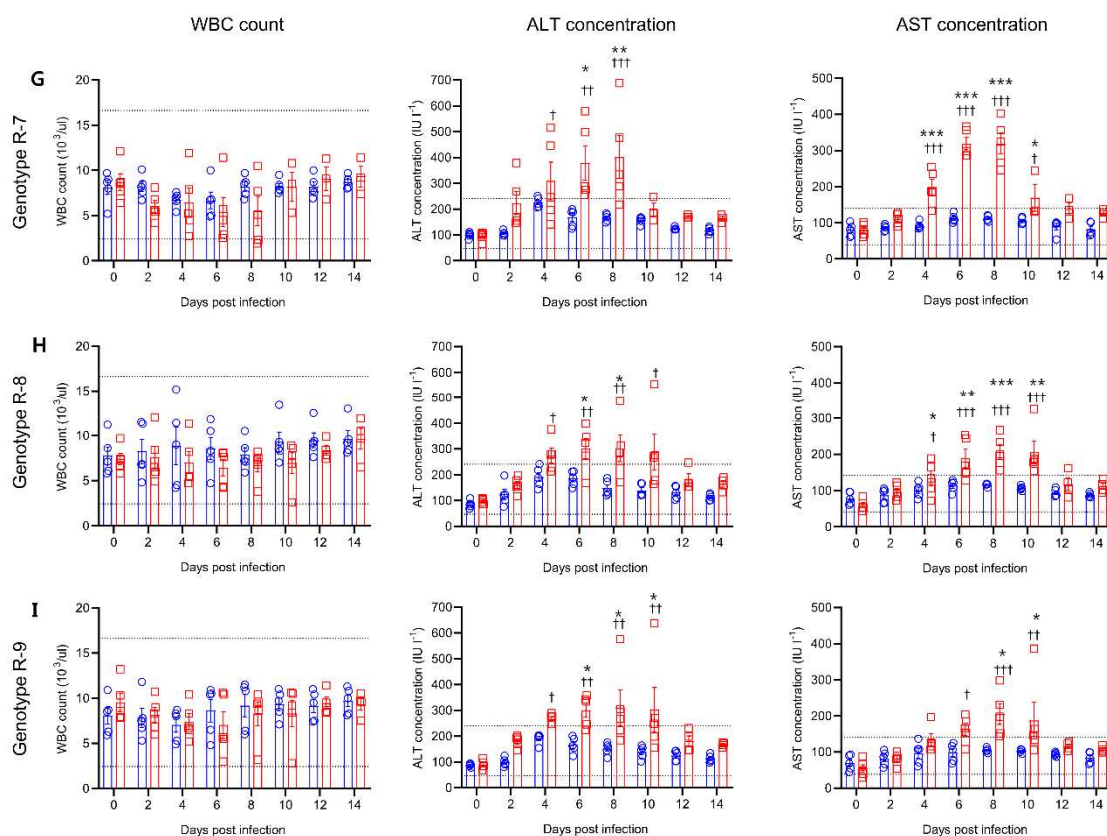
Supplemental data



Supplemental data



Supplemental data



Supplemental Figure 7. Hematology analysis of each randomly selected SFTSV reassortant genotype in ferrets. Young adult (< 2 years, n=5) or aged female and male ferrets (> 4 years, n=5) were inoculated with $10^{5.0}$ FFU/ml of each randomly selected SFTSV strain (A) R-1, (B) R-2, (C) R-3, (D) R-4, (E) R-5, (F) R-6, (G) R-7, (H) R-8 and (I) R-9. WBC counts (first lane), ALT (second lane) and AST (third lane) levels were assessed. WBC, ALT and AST concentrations are presented as mean \pm SEM. Comparison between results in young adult and aged ferrets is represented in blue and red, respectively Asterisks indicate statistical significance between infected young adult and infected aged ferrets per day post-infection as determined by two way ANOVA with Sidak comparison tests. The significance between non infected young adult and infected young adult ferrets or between non infected aged and infected aged ferret were calculated by two way ANOVA with Tukey's test which

Supplemental data

are indicated with section signs (§) and daggers (†), respectively. (*, §, † indicate $p < 0.05$, and **, §§, †† indicate $p < 0.001$, ***, §§§, ††† indicate $p < 0.0001$).

Supplemental data

Supplemental Table 1. Clinical information of 233 confirmed SFTS cases identified in this study, except for those patients with unknown symptom.

Clinical manifestations	No. of patients (%) (n=233)	Outcomes	
		Fatal cases (%) (n=47)	Non-fatal cases (%) (n=186)
High fever ($\geq 38^{\circ}\text{C}$)	198 (85.0)	40 (20.2)	158 (79.8)
Thrombocytopenia	188 (80.7)	39 (20.7)	149 (79.3)
Leukocytopenia	150 (64.4)	27 (18.0)	123 (82.0)
Gastrointestinal symptoms, including vomiting, diarrhea, and nausea	76 (32.6)	17 (22.4)	59 (77.6)
Multiple organ failure	17 (7.3)	10 (58.8)	7 (41.2)
Loss of consciousness	2 (0.9)	1 (50.0)	1 (50.0)
Cerebral hemorrhage	1 (0.4)	1 (100.0)	0 (0.0)
Lymph node enlargement	1 (0.4)	0 (0.0)	1 (100.0)
Neurological symptoms	1 (0.4)	0 (0.0)	1 (100.0)
Sepsis	1 (0.4)	1 (100.0)	0 (0.0)

Supplemental Table 2. The genotype prevalence of SFTSVs by country.

Strain	Country	L ORF	M ORF	S ORF	Reassortant
<i>Gangwon/Korea/2012</i>	Korea	F	F	F	
<i>KASJH</i>	Korea	D	D	D	
<i>KAGWH3</i>	Korea	B-2	B-2	B-2	
<i>KAGBH5</i>	Korea	B-2	B-2	B-2	
<i>KAGBH6</i>	Korea	B-2	B-2	B-2	
<i>KACNH3</i>	Korea	B-1	B-1	B-1	
<i>KAGWT</i>	Korea	B-2	B-2	B-2	
<i>CB1</i>	Korea	B-3	B-3	B-1	R-3
<i>CB2</i>	Korea	A	A	A	
<i>CB3</i>	Korea	B-1	B-1	B-1	
<i>CB6</i>	Korea	B-3	B-3	B-3	
<i>CB7</i>	Korea	B-2	B-2	B-2	
<i>CB8</i>	Korea	D	D	D	
<i>CB13</i>	Korea	A	A	A	
<i>KAJNH2</i>	Korea	B-3	B-3	B-3	
<i>KAGNH4</i>	Korea	B-2	B-2	B-2	
<i>KAGNH</i>	Korea	B-2	B-2	B-2	
<i>KADGH4</i>	Korea	Unassigned	B-2	B-1	R-7
<i>KADGH</i>	Korea	B-3	B-3	B-3	
<i>13-1 (KAJJH)</i>	Korea	B-3	B-3	B-1	R-3
<i>13-2 (KAGBH)</i>	Korea	B-2	B-2	B-2	
<i>13-3 (KAGWH)</i>	Korea	B-2	B-2	B-2	
<i>13-4 (KACNH)</i>	Korea	D	D	D	
<i>13-5 (KAGBH2)</i>	Korea	B-2	B-2	B-2	
<i>13-7 (KAGNH2)</i>	Korea	B-3	B-3	B-1	R-3
<i>13-8 (KAGBH3)</i>	Korea	B-2	B-2	B-2	
<i>13-9 (KAJNH)</i>	Korea	A	A	A	
<i>13-11 (KAICH)</i>	Korea	A	A	A	
<i>13-12 (KAJJH2)</i>	Korea	B-3	B-3	B-3	
<i>13-13 (KACNH2)</i>	Korea	B-3	F	B-3	R-4
<i>13-15 (KAUSH)</i>	Korea	B-3	B-3	B-1	R-3
<i>13-16 (KAUSH2)</i>	Korea	B-2	B-2	B-2	
<i>13-17 (KAGWH2)</i>	Korea	A	A	A	
<i>13-18 (KADGH2)</i>	Korea	B-2	B-2	B-2	

Supplemental data

13-19 (KAJNH3)	Korea	B-3	B-3	B-3	
13-20 (KAGNH3)	Korea	B-3	B-3	B-3	
13-21 (KAGBH4)	Korea	B-2	B-2	B-2	
13-22 (KADGH3)	Korea	B-2	B-2	B-2	
13-25 (KASUH)	Korea	B-2	B-2	B-2	
13-26 (KADGH5)	Korea	B-2	B-2	B-2	
14-5 (14KS22)	Korea	B-2	B-2	B-2	
14-6 (14KS25)	Korea	B-3	B-3	B-1	R-3
14-8 (14KS27)	Korea	B-2	B-2	B-2	
14-9 (14KS30)	Korea	B-3	B-3	B-3	
14-10 (14KS33)	Korea	B-1	B-2	B-2	R-2
14-11 (14KS35)	Korea	F	F	F	
14-12 (14KS38)	Korea	B-3	B-3	B-3	
14-13 (14KS39)	Korea	F	F	F	
14-14 (14KS42)	Korea	B-2	B-2	B-2	
14-15 (14KS44)	Korea	B-1	B-2	B-2	R-2
14-16 (14KS46)	Korea	B-2	B-2	B-2	
14-17 (14KS47)	Korea	F	F	F	
14-18 (14KS48,49)	Korea	B-2	B-2	B-2	
14-19 (14KS52)	Korea	A	A	A	
14-20 (14KS53,55)	Korea	B-1	B-1	B-1	
14-21 (14KS58)	Korea	D	D	D	
14-22 (14KS62)	Korea	B-2	B-2	B-2	
14-23 (14KS64)	Korea	D	D	D	
14-24 (14KS72)	Korea	B-2	B-2	B-2	
14-25 (14KS73)	Korea	B-2	B-2	B-2	
15-1 (15KS5)	Korea	B-3	B-3	B-3	
15-3 (15KS8)	Korea	F	F	F	
15-4 (15KS9)	Korea	B-2	B-2	B-2	
15-6 (15KS10)	Korea	B-2	B-2	B-2	
15-8 (15MS31)	Korea	F	F	F	
15-10 (15MS32)	Korea	B-1	B-1	B-1	
15-11 (15KS15)	Korea	B-3	B-3	B-3	
15-12 (15KS16)	Korea	B-2	B-2	B-2	
15-15 (15KS19)	Korea	B-2	B-2	B-2	
15-16 (15KS20)	Korea	B-2	B-2	B-2	
15-17 (15KS23)	Korea	B-2	B-2	B-2	

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15-21 (15KS28)	Korea	B-2	B-2	B-2	
15-22 (15KS29)	Korea	B-3	B-3	B-3	
15-23 (15KS31)	Korea	B-2	B-2	B-2	
15-24 (15KS33)	Korea	B-3	B-3	B-3	
15-25 (15KS43)	Korea	B-2	B-2	B-2	
15-26 (15KS47)	Korea	B-3	B-3	B-3	
15-28 (15KS50)	Korea	B-3	B-3	B-3	
15-29 (15MS104)	Korea	B-3	B-3	B-3	
15-30 (15KS51)	Korea	B-3	B-3	B-3	
15-32 (15Asan_Serum1)	Korea	B-3	B-3	B-3	
15-33 (15KS57)	Korea	A	A	A	
15-34 (15KS59)	Korea	B-3	B-3	B-3	
15-35 (15KS61)	Korea	B-3	B-3	B-3	
15-36 (15KS62)	Korea	B-3	B-3	B-3	
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15-41 (15KS73)	Korea	F	F	F	
15-42 (15MS132)	Korea	B-2	B-2	B-2	
15-43 (15KS74)	Korea	B-2	B-2	B-2	
15-44 (15KS75)	Korea	B-1	B-1	B-1	
15-45 (15KS77)	Korea	B-3	B-3	B-3	
16-26 (16KS54)	Korea	B-3	B-3	B-1	R-3
16-27 (16KS55)	Korea	D	B-1	D	R-6
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16-32 (16KS71)	Korea	B-1	B-1	B-1	
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Supplemental data

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16-43 (16MS310)	Korea	B-1	B-2	B-2	R-2
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16-45 (16MS315)	Korea	B-1	B-1	B-1	
16-46 (16MS322)	Korea	C	D	C	R-5
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16-51 (16MS347)	Korea	B-2	B-2	B-2	
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SPL010A	Japan	B-2	B-2	B-2	
SPL030A	Japan	B-2	B-2	B-2	
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SPL035A	Japan	B-2	B-2	B-2	
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Supplemental data

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SPL066A	Japan	B-2	B-2	B-2	
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SPL069A	Japan	B-2	B-2	B-2	
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SPL097A	Japan	Unassigned	B-1	B-1	Yes
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SPL104A	Japan	B-2	B-2	B-2	
SPL105A	Japan	B-2	B-2	B-2	
SPL106A	Japan	B-2	B-2	B-2	
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SPL117A	Japan	B-2	B-2	B-2	
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SPL121A	Japan	B-2	B-2	B-2	
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SPL128A	Japan	B-2	B-2	B-2	
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SDLZtick12/2010	China	F	F	F	
HB154/China/2011	China	D	D	D	
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HB156/China/2011	China	D	D	D	
HNXY_207	China	F	F	F	

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<i>HNXY_170</i>	China	F	F	F	
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<i>HNXY_224</i>	China	F	F	F	
<i>HNXY_2</i>	China	F	F	F	
<i>HNXY_319</i>	China	F	F	F	
<i>HNXY_245</i>	China	F	F	F	
<i>HNXY_327</i>	China	D	D	D	
<i>HNXY_278</i>	China	A	A	A	
<i>HNXY_191</i>	China	A	A	A	
<i>HNXY_182</i>	China	F	F	F	
<i>HNXY_202</i>	China	F	F	F	
<i>HNXY_195</i>	China	F	F	F	
<i>HNXY_188</i>	China	A	A	A	
<i>HNXY_206</i>	China	A	A	A	
<i>HNXY_212</i>	China	D	D	D	
<i>HNXY_293</i>	China	F	F	F	
<i>HNXY_157</i>	China	F	F	F	
<i>HNXY_174</i>	China	F	F	F	
<i>HNXY_144</i>	China	F	F	F	
<i>HNXY_186</i>	China	F	F	F	
<i>HNXY_262</i>	China	F	F	F	
<i>HNXY_31</i>	China	F	F	F	
<i>HNXY_93</i>	China	F	F	F	
<i>HNXY_115</i>	China	F	F	F	
<i>HNXY_231</i>	China	F	F	F	
<i>HNXY_164</i>	China	F	F	F	
<i>JS2012-tick01</i>	China	F	F	F	
<i>JS2012-goat01</i>	China	F	F	F	
<i>JS2007-01</i>	China	A	F	A	Yes
<i>JS2010-014</i>	China	F	F	F	
<i>JS2010-015</i>	China	F	F	F	
<i>JS2010-018</i>	China	F	F	F	
<i>JS2010-019</i>	China	F	F	F	
<i>JS2011-004</i>	China	A	A	A	
<i>JS2011-013-1</i>	China	F	F	F	
<i>JS2011-027</i>	China	A	A	A	
<i>JS2011-034</i>	China	F	F	F	

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JS2011-062	China	D	D	D	
JS2011-109	China	A	A	A	
JS2012-020	China	A	A	A	
JS2012-035	China	A	A	A	
Zhao	China	B-3	B-3	B-3	
HL/Injected	China	A	A	A	
HL/Egg/G2	China	A	A	A	
HL/Larvae/G2	China	A	A	A	
HL/Nymph/G2	China	A	A	A	
HL/Adult/G2	China	A	A	A	
LN2012-14	China	D	F	D	Yes
LN2012-34	China	D	F	D	Yes
LN2012-41	China	D	F	D	Yes
LN2012-42	China	D	F	D	Yes
LN2012-58	China	D	F	F	Yes
Zhejiang/01/2011	China	B-3	B-3	B-3	
ZJ2013-06	China	Unassigned	B-1	B-1	Yes
AH15	China	A	A	A	
HN13	China	A	A	A	
YXX2	China	A	A	A	
2012YXX1	China	A	A	A	
2010-FQM	China	A	A	A	
JS3	China	A	A	A	
JS4	China	E	E	E	
JS6	China	A	A	A	
JS24	China	A	A	A	
JS26	China	A	A	A	
LN2/China/2010	China	F	F	F	
LN3/China/2010	China	A	A	A	
2011YSC60	China	A	F	A	Yes
AHL/China/2011	China	C	C	D	Yes
YSHX002	China	D	D	D	
YGS1	China	D	D	D	
YSC19	China	D	D	D	
2011YGS5	China	D	D	D	
2011YSC22	China	D	D	D	
2011YGS7	China	D	D	D	

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2011YPQ17	China	D	D	D	
2011YPQ11	China	D	D	D	
2012YSH91	China	D	D	D	
2011YXX9	China	D	D	D	
2012YSH9	China	D	D	D	
2012YSH6	China	D	D	D	
2010-WSQ	China	D	D	D	
SD24	China	D	D	D	
SD4	China	E	E	E	
AH12	China	F	F	F	
AHZ/China/2011	China	F	F	F	
BX-2010/Henan/CHN	China	F	F	F	
HN6	China	F	F	F	
HN-LR/China/05/2012	China	F	F	F	
YNY1	China	F	F	F	
YPQX03	China	F	F	F	
YPQ2	China	F	F	F	
YPQ5	China	F	F	F	
YXX1	China	F	F	F	
YSH39	China	F	F	F	
YPQ133	China	F	F	F	
2012YGS4	China	F	F	F	
2012YSH37	China	F	F	F	
2012YGS10	China	F	F	F	
2012YSH86	China	F	F	F	
2012YSH10	China	F	F	F	
2012YSC6	China	F	F	F	
2012YSH89	China	F	F	F	
2012YSH16	China	F	F	F	
2012YSH14	China	F	F	F	
2012YSH104	China	F	F	F	
2012YSH93	China	F	F	F	
2012YSH105	China	F	F	F	
2012YSH107	China	F	F	F	
2012YSH92	China	F	F	F	
2012YSH27	China	F	F	F	
JSD1	China	F	F	F	

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2011YPQ12	China	F	A	F	Yes
YSC3	China	F	F	A	Yes
QD7	China	F	F	F	
HNXH	China	A	A	A	
HB29	China	D	D	D	
ZJZSHH-AM/China/05/2012	China	B-3	B-3	B-3	
ZJZSHH-HYC/China/05/2012	China	B-3	B-3	B-3	
ZJZSHH-SHZ/China/05/2012	China	B-3	B-3	B-3	
AH-YTY/China/05/2012	China	F	F	F	
ZJZSHH-LU/China/10/2011	China	B-3	B-3	B-3	
ZJZSHH-ZLD/China/06/2012	China	B-3	B-3	B-3	
ZJZSHH-HYJ/China/07/2012	China	B-3	B-3	B-3	
ZJZSHH-XAM/China/06/2012	China	B-3	B-3	B-3	
ZJZSHH-WSH/China/08/2012	China	A	A	A	
ZJZSHH-HCY/China/06/2012	China	B-3	B-3	B-3	
ZJZSHH-ZLN/China/06/2012	China	B-3	B-3	B-3	
ZJZSHH-LHZH/China/06/2012	China	B-3	B-3	B-3	
ZJZSHH-CXD/China/05/2012	China	A	A	A	
ZJZSHH-FDE/China/06/2012	China	B-3	B-3	B-3	
ZJZSHH-YJX/China/06/2012	China	B-1	B-1	B-1	
ZJZSHH-FZHR/China/07/2013	China	A	A	A	
ZJZSHH-LWL/China/08/2014	China	B-3	B-3	B-3	
ZJZSHH-WRF/China/08/2014	China	B-3	B-3	B-3	
JS2014-Hedgehog-02	China	F	F	F	
JS2014-Hedgehog-01	China	A	A	A	
JS2014-H.longicornis-03	China	F	F	F	
JS2014-H.longicornis-02	China	F	F	F	
JS2014-H.longicornis-01	China	B-3	B-3	B-1	Yes
JS2014-39	China	F	F	A	Yes

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<i>JS2014-33</i>	China	F	F	F	
<i>JS2014-31</i>	China	F	F	F	
<i>JS2014-18</i>	China	A	A	A	
<i>JS2014-16</i>	China	B-3	B-3	B-1	Yes
<i>JS2014-15</i>	China	A	A	A	
<i>JS2014-03</i>	China	F	F	F	
<i>JS2013-71</i>	China	A	A	A	
<i>JS2013-52</i>	China	F	F	F	
<i>JS2013-46</i>	China	A	A	A	
<i>JS2013-44</i>	China	F	F	F	
<i>JS2012-79</i>	China	F	F	F	
<i>JS2011-69</i>	China	B-3	B-3	B-1	Yes
<i>JS2011-13-2</i>	China	A	A	A	

Supplemental data

Supplemental Table 3. Viral growth curve in Vero E6 cells

Genotype	Viral growth (Log ₁₀ FFU/ml)					
	1dpi	2dpi	3dpi	4dpi	5dpi	6dpi
A	2.3±0	2.9±0.58	3.9±0.58	4.6±0.58	5.9±0.58	4.6±0.58
B-1	2.3±0	3.6±0.58	5.6±0.58	6.9±0.58	7.6±0.58	6.9±0.58
B-2	2.3±0	3.6±0.58	4.9±0.58	6.6±0.58	7.3±0	6.6±0.58
B-3	2.3±0	2.9±0.58	4.9±0.58	5.6±0.58	6.3±0	5.9±0.58
D	2.3±0	2.9±0.58	5.3±0	5.3±0	5.9±0.58	5.3±0
F	2.3±0	3.6±0.58	4.9±0.58	5.6±0.58	5.6±0.58	4.9±0.58
R1	2.3±0	2.9±0.58	4.9±0.58	5.9±0.58	6.3±0	5.6±0.58
R2	2.3±0	2.9±0.58	4.9±0.58	4.9±0.58	6.3±0	5.3±0
R3	2.3±0	2.9±0.58	5.3±0	5.9±0.58	6.6±0.58	5.6±0.58
R4	2.3±0	2.9±0.58	3.9±0.58	5.6±0.58	6.3±0	5.3±0
R5	2.3±0	2.9±0.58	4.6±0.58	5.3±0	5.3±0	5.3±1
R6	2.3±0	3.9±0.58	4.9±0.58	5.9±0.58	6.3±0	5.9±0.58
R7	2.3±0	2.9±0.58	4.9±0.58	5.3±0	5.9±0.58	5.3±0
R8	2.3±0	2.9±0.58	3.9±0	3.9±0.58	5.3±0	4.9±0.58
R9	2.3±0	2.9±0.58	3.3±0	4.6±0.58	5.3±0	4.3±0

^aResults were obtained from three independent assays and expressed as log₁₀ FFU/ml.

^b± indicates Standard deviation .

Bold indicates peak titer in each strain

Supplemental data

Supplemental Table 4. Sequence information of SFTSV strains used in this study.

SFTSV strain	Genotype	Source of virus	Geographical origin	Year of isolation	GenBank accession No.			Sequence source
					L segment	M segment	S segment	
Gangwon/Korea/2012	F	Human serum	Korea	2012.8	KF358691	KF358692	KF358693	GenBank
KASJH	D	Human serum	Korea	2014.9	KP663731	KP663732	KP663733	GenBank
KAGWH3	B-2	Human serum	Korea	2014.9	KP663734	KP663735	KP663736	GenBank
KAGBH5	B-2	Human serum	Korea	2014.9	KP663737	KP663738	KP663739	GenBank
KAGBH6	B-2	Human serum	Korea	2014.9	KP663740	KP663741	KP663742	GenBank
KACNH3	B-1	Human serum	Korea	2014.9	KP663743	KP663744	KP663745	GenBank
KAGWT	B-2	<i>Haemaphysalis longicornis</i>	Korea	2013.6	KY273136	KY273137	KY273138	GenBank
CB1	Reassortant (R-3)	Human serum	Korea	2014.8	KY789433	KY789436	KY789439	GenBank
CB2	A	Human serum	Korea	2015.7	KY789434	KY789437	KY789440	GenBank
CB3	B-1	Human serum	Korea	2016.10	KY789435	KY789438	KY789441	GenBank
CB6	B-3	Human serum	Korea	2016.8	MK301480	MK301481	MK301482	GenBank
CB7	B-2	Human serum	Korea	2017.5	MK301483	MK301484	MK301485	GenBank
CB8	D	Human serum	Korea	2016.5	MK301486	MK301487	MK301488	GenBank
CB13	A	Human serum	Korea	2016.11	MK301489	MK301490	MK301491	GenBank
KAJNH2	B-3	Human serum	Korea	2013.7	KU507547	KU507552	KU507557	GenBank
KAGNH4	B-2	Human serum	Korea	2013.10	KU507546	KU507551	KU507556	GenBank
KAGNH	B-2	Human serum	Korea	2013.7	KU507545	KU507550	KU507555	GenBank
KADGH4	Reassortant (R-7)	Human serum	Korea	2013.10	KU507544	KU507549	KU507554	GenBank
KADGH	B-3	Human serum	Korea	2013.8	KU507543	KU507548	KU507553	GenBank
13-1 (KAJJH)	B-3	Human serum	Korea	2013.5	MG736973	MG737082	MG737191	In this study
13-2 (KAGBH)	B-2	Human serum	Korea	2013.5	MG736974	MG737083	MG737192	In this study
13-3 (KAGWH)	B-2	Human serum	Korea	2013.5	MG736975	MG737084	MG737193	In this study
13-4 (KACNH)	D	Human serum	Korea	2013.6	MG736976	MG737085	MG920818	In this study
13-5 (KAGBH2)	B-2	Human serum	Korea	2013.6	MG736977	MG737086	MG737194	In this study

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13-7 (KAGNH2)	Reassortant (R-3)	Human serum	Korea	2013.7	MG736978	MG737087	MG737195	In this study
13-8 (KAGBH3)	B-2	Human serum	Korea	2013.7	MG736979	MG737088	MG737196	In this study
13-9 (KAJNH)	A	Human serum	Korea	2013.7	MG736980	MG737089	MG737197	In this study
13-11 (KAICH)	A	Human serum	Korea	2013.7	MG736981	MG737090	MG737198	In this study
13-12 (KAJJH2)	B-3	Human serum	Korea	2013.7	MG736982	MG737091	MG737199	In this study
13-13 (KACNH2)	Reassortant (R-4)	Human serum	Korea	2013.8	MG736983	MG737092	MG737200	In this study
13-15 (KAUSH)	Reassortant (R-3)	Human serum	Korea	2013.8	MG736984	MG737093	MG737201	In this study
13-16 (KAUSH2)	B-2	Human serum	Korea	2013.8	MG736985	MG737094	MG737202	In this study
13-17 (KAGWH2)	A	Human serum	Korea	2013.8	MG736986	MG737095	MG737203	In this study
13-18 (KADGH2)	B-2	Human serum	Korea	2013.8	MG736987	MG737096	MG737204	In this study
13-19 (KAJNH3)	B-3	Human serum	Korea	2013.9	MG736988	MG737097	MG737205	In this study
13-20 (KAGNH3)	B-3	Human serum	Korea	2013.9	MG736989	MG737098	MG737206	In this study
13-21 (KAGBH4)	B-2	Human serum	Korea	2013.10	MG736990	MG737099	MG737207	In this study
13-22 (KADGH3)	B-2	Human serum	Korea	2013.10	MG736991	MG737100	MG737208	In this study
13-25 (KASUH)	B-2	Human serum	Korea	2013.10	MG736992	MG737101	MG737209	In this study
13-26 (KADGH5)	B-2	Human serum	Korea	2013.11	MG736993	MG737102	MG737210	In this study
14-5 (14KS22)	B-2	Human serum	Korea	2014.7	MG736994	MG737103	MG737211	In this study
14-6 (14KS25)	Reassortant (R-3)	Human serum	Korea	2014.7	MG736995	MG737104	MG737212	In this study
14-8 (14KS27)	B-2	Human serum	Korea	2014.7	MG736996	MG737105	MG737213	In this study
14-9 (14KS30)	B-3	Human serum	Korea	2014.7	MG736997	MG737106	MG737214	In this study
14-10 (14KS33)	Reassortant (R-2)	Human serum	Korea	2014.8	MG736998	MG737107	MG737215	In this study
14-11 (14KS35)	F	Human serum	Korea	2014.8	MG736999	MG737108	MG737216	In this study
14-12 (14KS38)	B-3	Human serum	Korea	2014.8	MG737000	MG737109	MG737217	In this study
14-13 (14KS39)	F	Human serum	Korea	2014.8	MG737001	MG737110	MG737218	In this study
14-14 (14KS42)	B-2	Human serum	Korea	2014.8	MG737002	MG737111	MG737219	In this study
14-15 (14KS44)	Reassortant (R-2)	Human serum	Korea	2014.9	MG737003	MG737112	MG737220	In this study

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14-16 (14KS46)	B-2	Human serum	Korea	2014.9	MG737004	MG737113	MG737221	In this study
14-17 (14KS47)	F	Human serum	Korea	2014.9	MG737005	MG737114	MG737222	In this study
14-18 (14KS48,49)	B-2	Human serum	Korea	2014.9	MG737006	MG737115	MG737223	In this study
14-19 (14KS52)	A	Human serum	Korea	2014.10	MG737007	MG737116	MG737224	In this study
14-20 (14KS53,55)	B-1	Human serum	Korea	2014.9	MG737008	MG737117	MG737225	In this study
14-21 (14KS58)	D	Human serum	Korea	2014.9	MG737009	MG737118	MG737226	In this study
14-22 (14KS62)	B-2	Human serum	Korea	2014.10	MG737010	MG737119	MG737227	In this study
14-23 (14KS64)	D	Human serum	Korea	2014.10	MG737011	MG737120	MG737228	In this study
14-24 (14KS72)	B-2	Human serum	Korea	2014.10	MG737012	MG737121	MG737229	In this study
14-25 (14KS73)	B-2	Human serum	Korea	2014.10	MG737013	MG737122	MG737230	In this study
15-1 (15KS5)	B-3	Human serum	Korea	2015.5	MG737014	MG737123	MG737231	In this study
15-3 (15KS8)	F	Human serum	Korea	2015.5	MG737015	MG737124	MG737232	In this study
15-4 (15KS9)	B-2	Human serum	Korea	2015.5	MG737016	MG737125	MG737233	In this study
15-6 (15KS10)	B-2	Human serum	Korea	2015.5	MG737017	MG737126	MG737234	In this study
15-8 (15MS31)	F	Human serum	Korea	2015.6	MG737018	MG737127	MG737235	In this study
15-10 (15MS32)	B-1	Human serum	Korea	2015.6	MG737019	MG737128	MG737236	In this study
15-11 (15KS15)	B-3	Human serum	Korea	2015.6	MG920819	MG920820	MG920821	In this study
15-12 (15KS16)	B-2	Human serum	Korea	2015.6	MG737020	MG737129	MG737237	In this study
15-15 (15KS19)	B-2	Human serum	Korea	2015.6	MG737021	MG737130	MG737238	In this study
15-16 (15KS20)	B-2	Human serum	Korea	2015.7	MG737022	MG737131	MG737239	In this study
15-17 (15KS23)	B-2	Human serum	Korea	2015.7	MG737023	MG737132	MG737240	In this study
15-18 (15KS25)	B-2	Human serum	Korea	2015.7	MG737024	MG737133	MG737241	In this study
15-19 (15KS26)	B-2	Human serum	Korea	2015.7	MG737025	MG737134	MG737242	In this study
15-20 (15MS65)	B-3	Human serum	Korea	2015.7	MG920822	MG920823	MG920824	In this study
15-21 (15KS28)	B-2	Human serum	Korea	2015.7	MG737026	MG737135	MG737243	In this study
15-22 (15KS29)	B-3	Human serum	Korea	2015.7	MG737027	MG737136	MG737244	In this study
15-23 (15KS31)	B-2	Human serum	Korea	2015.7	MG737028	MG737137	MG737245	In this study
15-24 (15KS33)	B-3	Human serum	Korea	2015.7	MG737029	MG737138	MG737246	In this study
15-25 (15KS43)	B-2	Human serum	Korea	2015.8	MG920825	MG920826	MG920827	In this study
15-26 (15KS47)	B-3	Human serum	Korea	2015.8	MG920828	MG920829	MG920830	In this study
15-28 (15KS50)	B-3	Human serum	Korea	2015.8	MG737030	MG737139	MG737247	In this study

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15-29 (15MS104)	B-3	Human serum	Korea	2015.9	MG737031	MG737140	MG737248	In this study
15-30 (15KS51)	B-3	Human serum	Korea	2015.9	MG921166	MG921167	MG921168	In this study
15-32 (15Asan_Serum1)	B-3	Human serum	Korea	2015.9	MG737032	MG737141	MG737249	In this study
15-33 (15KS57)	A	Human serum	Korea	2015.9	MG737033	MG737142	MG737250	In this study
15-34 (15KS59)	B-3	Human serum	Korea	2015.9	MG737034	MG737143	MG737251	In this study
15-35 (15KS61)	B-3	Human serum	Korea	2015.10	MG737035	MG737144	MG737252	In this study
15-36 (15KS62)	B-3	Human serum	Korea	2015.9	MG737036	MG737145	MG737253	In this study
15-37 (15KS64)	A	Human serum	Korea	2015.9	MG737037	MG737146	MG737254	In this study
15-38 (15KS67)	Reassortant (R-2)	Human serum	Korea	2015.9	MG737038	MG737147	MG737255	In this study
15-39 (15KS71)	B-2	Human serum	Korea	2015.10	MG737039	MG737148	MG737256	In this study
15-40 (15KS72)	B-2	Human serum	Korea	2015.10	MG737040	MG737149	MG737257	In this study
15-41 (15KS73)	F	Human serum	Korea	2015.10	MG737041	MG737150	MG737258	In this study
15-42 (15MS132)	B-2	Human serum	Korea	2015.10	MG737042	MG737151	MG737259	In this study
15-43 (15KS74)	B-2	Human serum	Korea	2015.10	MG737043	MG737152	MG737260	In this study
15-44 (15KS75)	B-1	Human serum	Korea	2015.10	MG921169	MG921170	MG921171	In this study
15-45 (15KS77)	B-3	Human serum	Korea	2015.11	MG737044	MG737153	MG737261	In this study
16-26 (16KS54)	Reassortant (R-3)	Human serum	Korea	2016.8	MG737045	MG737154	MG737262	In this study
16-27 (16KS55)	Reassortant (R-6)	Human serum	Korea	2016.8	MG737046	MG737155	MG737263	In this study
16-28 (16MS239)	B-1	Human serum	Korea	2016.8	MG737047	MG737156	MG737264	In this study
16-29 (16KS62)	B-3	Human serum	Korea	2016.8	MG737048	MG737157	MG737265	In this study
16-30 (16KS63)	B-3	Human serum	Korea	2016.8	MG737049	MG737158	MG737266	In this study
16-31 (16MS269)	B-2	Human serum	Korea	2016.9	MG737050	MG737159	MG737267	In this study
16-32 (16KS71)	B-1	Human serum	Korea	2016.9	MG737051	MG737160	MG737268	In this study
16-33 (16MS286)	B-1	Human serum	Korea	2016.9	MG737052	MG737161	MG737269	In this study
16-34 (16KS77)	Reassortant (R-8)	Human serum	Korea	2016.9	MG737053	MG737162	MG737270	In this study
16-35 (16KS80)	B-1	Human serum	Korea	2016.9	MG737054	MG737163	MG737271	In this study
16-36 (16KS83)	B-3	Human serum	Korea	2016.9	MG737055	MG737164	MG737272	In this study

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16-37 (16KS85)	B-2	Human serum	Korea	2016.10	MG737056	MG737165	MG737273	In this study
16-38 (16KS86)	B-2	Human serum	Korea	2016.10	MG737057	MG737166	MG737274	In this study
16-39 (16KS89)	F	Human serum	Korea	2016.9	MG737058	MG737167	MG737275	In this study
16-40 (16KS92)	B-2	Human serum	Korea	2016.10	MG737059	MG737168	MG737276	In this study
16-41 (16MS299)	Reassortant (R-1)	Human serum	Korea	2016.9	MG737060	MG737169	MG737277	In this study
16-42 (16MS300)	F	Human serum	Korea	2016.9	MG737061	MG737170	MG737278	In this study
16-43 (16MS310)	Reassortant (R-2)	Human serum	Korea	2016.10	MG737062	MG737171	MG737279	In this study
16-44 (16MS313)	B-3	Human serum	Korea	2016.10	MG737063	MG737172	MG737280	In this study
16-45 (16MS315)	B-1	Human serum	Korea	2016.10	MG737064	MG737173	MG737281	In this study
16-46 (16MS322)	Reassortant (R-5)	Human serum	Korea	2016.10	MG737065	MG737174	MG737282	In this study
16-47 (16KS96)	A	Human serum	Korea	2016.10	MG737066	MG737175	MG737283	In this study
16-48 (16KS100)	B-1	Human serum	Korea	2016.10	MG737067	MG737176	MG737284	In this study
16-49 (16MS323)	B-2	Human serum	Korea	2016.10	MG737068	MG737177	MG737285	In this study
16-50 (16MS344)	B-1	Human serum	Korea	2016.10	MG737069	MG737178	MG737286	In this study
16-51 (16MS347)	B-2	Human serum	Korea	2016.10	MG737070	MG737179	MG737287	In this study
16-52 (16MS351)	B-2	Human serum	Korea	2016.10	MG737071	MG737180	MG737288	In this study
16-53 (16MS368)	B-3	Human serum	Korea	2016.10	MG737072	MG737181	MG737289	In this study
16-54 (16MS373)	Reassortant (R-9)	Human serum	Korea	2016.11	MG737073	MG737182	MG737290	In this study
16-55 (16KS104)	B-1	Human serum	Korea	2016.10	MG737074	MG737183	MG737291	In this study
16-56 (16KS108)	B-2	Human serum	Korea	2016.10	MG737075	MG737184	MG737292	In this study
16-57 (16KS112)	B-1	Human serum	Korea	2016.10	MG737076	MG737185	MG737293	In this study
16-58 (16KS115)	A	Human serum	Korea	2016.10	MG737077	MG737186	MG737294	In this study
16-59 (16KS116)	B-1	Human serum	Korea	2016.10	MG737078	MG737187	MG737295	In this study
16-60 (16KS126)	B-1	Human serum	Korea	2016.9	MG737079	MG737188	MG737296	In this study
16-61 (16KS128)	B-2	Human serum	Korea	2016.11	MG737080	MG737189	MG737297	In this study
16-62 (16KS129)	B-3	Human serum	Korea	2016.11	MG737081	MG737190	MG737298	In this study
YG1	B-2	Human serum	Japan	2012	AB817979	AB817987	AB817995	GenBank
SPL003A	B-2	Human serum	Japan	2012	AB817980	AB817988	AB817996	GenBank

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SPL004A	B-3	Human serum	Japan	2012	AB817981	AB817989	AB817997	GenBank
SPL005A	B-2	Human serum	Japan	2012	AB817982	AB817990	AB817998	GenBank
SPL010A	B-2	Human serum	Japan	2005	AB817983	AB817991	AB817999	GenBank
SPL030A	B-2	Human serum	Japan	2010	AB817984	AB817992	AB818000	GenBank
SPL032A	B-2	Human serum	Japan	2005	AB817985	AB817993	AB818001	GenBank
SPL035A	B-2	Human serum	Japan	2012	AB817986	AB817994	AB818002	GenBank
SPL053A	B-2	Human serum	Japan	2012	AB983497	AB985292	AB985523	GenBank
SPL054A	B-2	Human serum	Japan	2013	AB983498	AB985293	AB985524	GenBank
SPL055A	B-2	Human serum	Japan	2013	AB983499	AB985294	AB985525	GenBank
SPL057A	Reassortant	Human serum	Japan	2013	AB983500	AB985295	AB985526	GenBank
SPL060A	B-2	Human serum	Japan	2013	AB983501	AB985296	AB985527	GenBank
SPL062A	B-2	Human serum	Japan	2013	AB983502	AB985297	AB985528	GenBank
SPL066A	B-2	Human serum	Japan	2013	AB983503	AB985298	AB985529	GenBank
SPL067A	B-2	Human serum	Japan	2013	AB983504	AB985299	AB985530	GenBank
SPL069A	B-2	Human serum	Japan	2013	AB983505	AB985300	AB985531	GenBank
SPL070A	B-2	Human serum	Japan	2013	AB983506	AB985301	AB985532	GenBank
SPL071A	B-2	Human serum	Japan	2013	AB983507	AB985302	AB985533	GenBank
SPL075A	B-2	Human serum	Japan	2013	AB983509	AB985303	AB985535	GenBank
SPL077A	B-2	Human serum	Japan	2013	AB983510	AB985304	AB985536	GenBank
SPL078A	B-2	Human serum	Japan	2013	AB983511	AB985305	AB985537	GenBank
SPL082A	B-2	Human serum	Japan	2013	AB983512	AB985306	AB985538	GenBank
SPL084A	B-2	Human serum	Japan	2013	AB983513	AB985307	AB985539	GenBank
SPL086A	B-2	Human serum	Japan	2013	AB983514	AB985308	AB985540	GenBank
SPL087A	Reassortant	Human serum	Japan	2013	AB983515	AB985309	AB985541	GenBank
SPL089A	B-2	Human serum	Japan	2013	AB983516	AB985310	AB985542	GenBank
SPL090A	B-2	Human serum	Japan	2013	AB983517	AB985311	AB985543	GenBank
SPL097A	Reassortant	Human serum	Japan	2013	AB983518	AB985312	AB985544	GenBank
SPL100A	Reassortant	Human serum	Japan	2013	AB983519	AB985313	AB985545	GenBank
SPL104A	B-2	Human serum	Japan	2013	AB983520	AB985314	AB985546	GenBank
SPL105A	B-2	Human serum	Japan	2013	AB983521	AB985315	AB985547	GenBank
SPL106A	B-2	Human serum	Japan	2013	AB983522	AB985316	AB985548	GenBank

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SPL107A	B-2	Human serum	Japan	2013	AB983523	AB985317	AB985549	GenBank
SPL108A	B-2	Human serum	Japan	2013	AB983524	AB985318	AB985550	GenBank
SPL112A	B-2	Human serum	Japan	2013	AB983525	AB985319	AB985551	GenBank
SPL114A	B-2	Human serum	Japan	2013	AB983526	AB985320	AB985552	GenBank
SPL117A	B-2	Human serum	Japan	2013	AB983527	AB985321	AB985553	GenBank
SPL120A	B-2	Human serum	Japan	2012	AB983528	AB985322	AB985554	GenBank
SPL121A	B-2	Human serum	Japan	2013	AB983529	AB985323	AB985555	GenBank
SPL124A	B-2	Human serum	Japan	2013	AB983530	AB985324	AB985556	GenBank
SPL128A	B-2	Human serum	Japan	2014	AB983532	AB985325	AB985558	GenBank
SPL129A	B-3	Human serum	Japan	2014	AB983533	AB985326	AB985559	GenBank
SDLZtick12/2010	F	<i>Haemaphysalis longicornis</i>	China	2010.7	JQ684871	JQ684872	JQ684873	GenBank
HB154/China/2011	D	Human serum	China	2011.8	JQ733561	JQ733560	JQ733562	GenBank
HB155/China/2011	D	Human serum	China	2011.8	JQ733564	JQ733563	JQ733565	GenBank
HB156/China/2011	D	Human serum	China	2011.8	JQ733567	JQ733566	JQ733568	GenBank
HXY_207	F	Human serum	China	2011	KC292341	KC292315	KC292288	GenBank
HXY_170	F	Human serum	China	2011	KC292353	KC292304	KC292277	GenBank
HXY_130	F	Human serum	China	2011	KC292342	KC292316	KC292289	GenBank
HXY_224	F	Human serum	China	2011	KC292343	KC292317	KC292290	GenBank
HXY_2	F	Human serum	China	2011	KC292344	KC292318	KC292291	GenBank
HXY_319	F	Human serum	China	2011	KC292345	KC292319	KC292292	GenBank
HXY_245	F	Human serum	China	2011	KC292346	KC292320	KC292293	GenBank
HXY_327	D	Human serum	China	2011	KC292347	KC292321	KC292294	GenBank
HXY_278	A	Human serum	China	2011	KC292348	KC292322	KC292295	GenBank
HXY_191	A	Human serum	China	2011	KC292349	KC292323	KC292296	GenBank
HXY_182	F	Human serum	China	2011	KC292350	KC292324	KC292297	GenBank
HXY_202	F	Human serum	China	2011	KC292351	KC292325	KC292298	GenBank
HXY_195	F	Human serum	China	2011	KC292352	KC292326	KC292299	GenBank
HXY_188	A	Human serum	China	2011	KC292328	KC292301	KC292274	GenBank
HXY_206	A	Human serum	China	2011	KC292329	KC292302	KC292275	GenBank
HXY_212	D	Human serum	China	2011	KC292327	KC292300	KC292273	GenBank
HXY_293	F	Human serum	China	2011	KC292330	KC292303	KC292276	GenBank

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<i>HNXY_157</i>	F	Human serum	China	2011	KC292331	KC292305	KC292278	GenBank
<i>HNXY_174</i>	F	Human serum	China	2011	KC292332	KC292306	KC292279	GenBank
<i>HNXY_144</i>	F	Human serum	China	2011	KC292333	KC292307	KC292280	GenBank
<i>HNXY_186</i>	F	Human serum	China	2011	KC292334	KC292308	KC292281	GenBank
<i>HNXY_262</i>	F	Human serum	China	2011	KC292335	KC292309	KC292282	GenBank
<i>HNXY_31</i>	F	Human serum	China	2011	KC292336	KC292310	KC292283	GenBank
<i>HNXY_93</i>	F	Human serum	China	2011	KC292337	KC292311	KC292284	GenBank
<i>HNXY_115</i>	F	Human serum	China	2011	KC292338	KC292312	KC292285	GenBank
<i>HNXY_231</i>	F	Human serum	China	2011	KC292339	KC292313	KC292286	GenBank
<i>HNXY_164</i>	F	Human serum	China	2011	KC292340	KC292314	KC292287	GenBank
<i>JS2012-tick01</i>	F	<i>Haemaphysalis longicornis</i>	China	2012.9	KC473540	KC473541	KC473542	GenBank
<i>JS2012-goat01</i>	F	Goat	China	2012.9	KC473537	KC473538	KC473539	GenBank
<i>JS2007-01</i>	Reassortant	Human serum	China	2007	JF837593	JF837594	JF837595	GenBank
<i>JS2010-014</i>	F	Human serum	China	2010.11	JQ317169	JQ317170	JQ317171	GenBank
<i>JS2010-015</i>	F	Human serum	China	2010.11	JQ317172	JQ317173	JQ317174	GenBank
<i>JS2010-018</i>	F	Human serum	China	2010.12	JQ317175	JQ317176	JQ317177	GenBank
<i>JS2010-019</i>	F	Human serum	China	2011.1	JQ317178	JQ317179	JQ317180	GenBank
<i>JS2011-004</i>	A	Human serum	China	2012.3	KC505123	KC505124	KC505125	GenBank
<i>JS2011-013-1</i>	F	Human serum	China	2012.3	KC505126	KC505127	KC505128	GenBank
<i>JS2011-027</i>	A	Human serum	China	2012.3	KC505129	KC505130	KC505131	GenBank
<i>JS2011-034</i>	F	Human serum	China	2012.3	KC505132	KC505133	KC505134	GenBank
<i>JS2011-062</i>	D	Human serum	China	2012.3	KC505135	KC505136	KC505137	GenBank
<i>JS2011-109</i>	A	Human serum	China	2012.3	KC505138	KC505139	KC505140	GenBank
<i>JS2012-020</i>	A	Human serum	China	2012.3	KC505141	KC505142	KC505143	GenBank
<i>JS2012-035</i>	A	Human serum	China	2012.3	KC505144	KC505145	KC505146	GenBank
<i>Zhao</i>	B-3	Human serum	China	2013.3	KF374682	KF374684	KF374683	GenBank
<i>HL/Injected</i>	A	Human serum	China	2013.9	KF791958	KF791953	KF791948	GenBank
<i>HL/Egg/G2</i>	A	<i>Haemaphysalis longicornis</i>	China	2013.9	KF791959	KF791954	KF791949	GenBank

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HL/Larvae/G2	A	<i>Haemaphysalis longicornis</i>	China	2013.9	KF791960	KF791955	KF791950	GenBank
HL/Nymph/G2	A	<i>Haemaphysalis longicornis</i>	China	2013.9	KF791961	KF791956	KF791951	GenBank
HL/Adult/G2	A	<i>Haemaphysalis longicornis</i>	China	2013.9	KF791962	KF791957	KF791952	GenBank
LN2012-14	Reassortant	Human serum	China	2012.7	KF887441	KF887436	KF887431	GenBank
LN2012-34	Reassortant	Human serum	China	2012.7	KF887442	KF887437	KF887432	GenBank
LN2012-41	Reassortant	Human serum	China	2012.8	KF887443	KF887438	KF887433	GenBank
LN2012-42	Reassortant	Human serum	China	2012.8	KF887444	KF887439	KF887434	GenBank
LN2012-58	Reassortant	Human serum	China	2012.8	KF887445	KF887440	KF887435	GenBank
Zhejiang/01/2011	B-3	Human serum	China	2011.6	KJ597825	KJ597824	KJ597823	GenBank
ZJ2013-06	Reassortant	Human serum	China	2013.10	KP280206	KP280204	KP280205	GenBank
AH15	A	Human serum	China	2010.8	HQ141592	HQ141593	HQ141594	GenBank
HN13	A	Human serum	China	2010.7	HQ141598	HQ141599	HQ141600	GenBank
YXX2	A	Human serum	China	2011.5	KF356546	KF356534	KF356522	GenBank
2012YXX1	A	Human serum	China	2012.8	KF711862	KF711929	KF711901	GenBank
2010-FQM	A	NA	China	2010	HQ419227	HQ419236	HQ419240	GenBank
JS3	A	Human serum	China	2010.8	HQ141601	HQ141602	HQ141603	GenBank
JS4	E	Human serum	China	2010.8	HQ141604	HQ141605	HQ141606	GenBank
JS6	A	Human serum	China	2010.10	HQ830169	HQ830170	HQ830171	GenBank
JS24	A	Human serum	China	2010.11	HQ830163	HQ830164	HQ830165	GenBank
JS26	A	Human serum	China	2010.11	HQ830166	HQ830167	HQ830168	GenBank
LN2/China/2010	F	Human serum	China	2010.7	HQ141607	HQ141608	HQ141609	GenBank
LN3/China/2010	A	Human serum	China	2010.7	HQ141610	HQ141611	HQ141612	GenBank
2011YSC60	Reassortant	Human serum	China	2011.8	KF711863	KF711945	KF711899	GenBank
AHL/China/2011	Reassortant	Human serum	China	2011.6	JQ670934	JQ670930	JQ670932	GenBank
YSHX002	D	Human serum	China	2012	KF356551	KF356540	KF356528	GenBank
YGS1	D	Human serum	China	2011.4	KF356549	KF356537	KF356525	GenBank
YSC19	D	Human serum	China	2011.5	KF356548	KF356536	KF356524	GenBank
2011YGS5	D	Human serum	China	2011.8	KF711884	KF711925	KF711893	GenBank

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2011YSC22	D	Human serum	China	2011.8	KF711888	KF711927	KF711894	GenBank
2011YGS7	D	Human serum	China	2011.8	KF711885	KF711922	KF711895	GenBank
2011YPQ17	D	Human serum	China	2011.8	KF711887	KF711923	KF711896	GenBank
2011YPQ11	D	Human serum	China	2011.8	KF711886	KF711926	KF711897	GenBank
2012YSH91	D	Human serum	China	2012.8	KF711883	KF711920	KF711891	GenBank
2011YXX9	D	Human serum	China	2011.8	KF711889	KF711924	KF711898	GenBank
2012YSH9	D	Human serum	China	2012.8	KF711881	KF711919	KF711890	GenBank
2012YSH6	D	Human serum	China	2012.8	KF711882	KF711921	KF711892	GenBank
2010-WSQ	D	NA	China	2010	HQ419226	HQ419235	HQ419239	GenBank
SD24	D	Human serum	China	2010	HM802200	HM802201	HM802205	GenBank
SD4	E	Human serum	China	2010	HM802202	HM802203	HM802204	GenBank
AH12	F	Human serum	China	2010.8	HQ116417	HQ141590	HQ141591	GenBank
AHZ/China/2011	F	Human serum	China	2011.7	JQ670929	JQ670931	JQ670933	GenBank
BX-2010/Henan/CHN	F	NA	China	2010	HQ642766	HQ642767	HQ642768	GenBank
HN6	F	Human serum	China	2010.7	HQ141595	HQ141596	HQ141597	GenBank
HN-LR/China/05/2012	F	Human serum	China	2012.5	KR017842	KR017861	KR017823	GenBank
YNY1	F	Human serum	China	2011.7	KF356552	KF356538	KF356526	GenBank
YPQX03	F	Human serum	China	2012	KF356550	KF356539	KF356527	GenBank
YPQ2	F	Human serum	China	2011.4	KF356543	KF356531	KF356519	GenBank
YPQ5	F	Human serum	China	2011.5	KF356544	KF356532	KF356520	GenBank
YXX1	F	Human serum	China	2011.5	KF356545	KF356533	KF356521	GenBank
YSH39	F	Human serum	China	2011.6	KF356541	KF356529	KF356517	GenBank
YPQ133	F	Human serum	China	2011.7	KF356542	KF356530	KF356518	GenBank
2012YGS4	F	Human serum	China	2012.8	KF711875	KF711933	KF711904	GenBank
2012YSH37	F	Human serum	China	2012.8	KF711871	KF711936	KF711905	GenBank
2012YGS10	F	Human serum	China	2012.8	KF711872	KF711937	KF711909	GenBank
2012YSH86	F	Human serum	China	2012.8	KF711877	KF711939	KF711907	GenBank
2012YSH10	F	Human serum	China	2012.8	KF711868	KF711940	KF711911	GenBank
2012YSC6	F	Human serum	China	2012.8	KF711879	KF711931	KF711902	GenBank
2012YSH89	F	Human serum	China	2012.8	KF711873	KF711935	KF711906	GenBank
2012YSH16	F	Human serum	China	2012.8	KF711874	KF711934	KF711908	GenBank

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2012YSH14	F	Human serum	China	2012.8	KF711876	KF711938	KF711910	GenBank
2012YSH104	F	Human serum	China	2012.8	KF711867	KF711943	KF711912	GenBank
2012YSH93	F	Human serum	China	2012.8	KF711866	KF711946	KF711913	GenBank
2012YSH105	F	Human serum	China	2012.8	KF711869	KF711944	KF711914	GenBank
2012YSH107	F	Human serum	China	2012.8	KF711864	KF711942	KF711916	GenBank
2012YSH92	F	Human serum	China	2012.8	KF711865	KF711941	KF711917	GenBank
2012YSH27	F	Human serum	China	2012.8	KF711878	KF711932	KF711903	GenBank
JSD1	F	Dog spleen	China	2011.1	JF267783	JF267784	JF267785	GenBank
2011YPQ12	Reassortant	Human serum	China	2011.8	KF711880	KF711930	KF711915	GenBank
YSC3	Reassortant	Human serum	China	2011.5	KF356547	KF356535	KF356523	GenBank
QD7	F	Human serum	China	2014.7	KR706567	KR706566	KR706565	GenBank
HNXH	A	Human serum	China	2014.10	KT254588	KT254590	KT254589	GenBank
HB29	D	Human serum	China	2010.5	NC018136	NC018138	NC018137	GenBank
ZJZSHH-AM/China/05/2012	B-3	Human serum	China	2012.5	KR017827	KR017846	KR017808	GenBank
ZJZSHH-HYC/China/05/2012	B-3	Human serum	China	2012.5	KR017828	KR017847	KR017809	GenBank
ZJZSHH-SHZ/China/05/2012	B-3	Human serum	China	2012.5	KR017829	KR017848	KR017810	GenBank
AH-YTY/China/05/2012	F	Human serum	China	2012.5	KR017830	KR017849	KR017811	GenBank
ZJZSHH-LU/China/10/2011	B-3	Human serum	China	2011.10	KR017831	KR017850	KR017812	GenBank
ZJZSHH-ZLD/China/06/2012	B-3	Human serum	China	2012.6	KR017832	KR017851	KR017813	GenBank
ZJZSHH-HYJ/China/07/2012	B-3	Human serum	China	2012.6	KR017833	KR017852	KR017814	GenBank
ZJZSHH-XAM/China/06/2012	B-3	Human serum	China	2012.6	KR017834	KR017853	KR017815	GenBank
ZJZSHH-WSH/China/08/2012	A	Human serum	China	2012.8	KR017835	KR017854	KR017816	GenBank
ZJZSHH-HCY/China/06/2012	B-3	Human serum	China	2012.6	KR017836	KR017855	KR017817	GenBank
ZJZSHH-	B-3	Human serum	China	2012.6	KR017837	KR017856	KR017818	GenBank

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ZLN/China/06/2012								
ZJZSHH-LHZH/China/06/2012	B-3	Human serum	China	2012.6	KR017838	KR017857	KR017819	GenBank
ZJZSHH-CXD/China/05/2012	A	Human serum	China	2012.5	KR017839	KR017858	KR017820	GenBank
ZJZSHH-FDE/China/06/2012	B-3	Human serum	China	2012.6	KR017840	KR017859	KR017821	GenBank
ZJZSHH-YJX/China/06/2012	B-1	Human serum	China	2012.6	KR017841	KR017860	KR017822	GenBank
ZJZSHH-FZHR/China/07/2013	A	Human serum	China	2013.7	KR017843	KR017862	KR017824	GenBank
ZJZSHH-LWL/China/08/2014	B-3	Human serum	China	2014.8	KR017844	KR017863	KR017825	GenBank
ZJZSHH-WRF/China/08/2014	B-3	Human serum	China	2014.8	KR017845	KR017864	KR017826	GenBank
JS2014-Hedgehog-02	F	Erinaceus europaeus serum	China	2014.6	KR230769	KR230789	KR230809	GenBank
JS2014-Hedgehog-01	A	Erinaceus europaeus serum	China	2014.1	KR230768	KR230788	KR230808	GenBank
JS2014-H.longicornis-03	F	<i>Haemaphysalis longicornis</i>	China	2014.6	KR230767	KR230787	KR230807	GenBank
JS2014-H.longicornis-02	F	<i>Haemaphysalis longicornis</i>	China	2014.6	KR230766	KR230786	KR230806	GenBank
JS2014-H.longicornis-01	Reassortant	<i>Haemaphysalis longicornis</i>	China	2014.6	KR230765	KR230785	KR230805	GenBank
JS2014-39	Reassortant	Human serum	China	2014.6	KR230764	KR230784	KR230804	GenBank
JS2014-33	F	Human serum	China	2014.6	KR230763	KR230783	KR230803	GenBank
JS2014-31	F	Human serum	China	2014.5	KR230762	KR230782	KR230802	GenBank
JS2014-18	A	Human serum	China	2014.5	KR230761	KR230781	KR230801	GenBank
JS2014-16	Reassortant	Human serum	China	2014.4	KR230760	KR230780	KR230800	GenBank
JS2014-15	A	Human serum	China	2014.4	KR230759	KR230779	KR230799	GenBank
JS2014-03	F	Human serum	China	2014.4	KR230758	KR230778	KR230798	GenBank

Supplemental data

<i>JS2013-71</i>	A	Human serum	China	2013.7	KR230757	KR230777	KR230797	GenBank
<i>JS2013-52</i>	F	Human serum	China	2013.6	KR230755	KR230775	KR230795	GenBank
<i>JS2013-46</i>	A	Human serum	China	2013.6	KR230754	KR230774	KR230794	GenBank
<i>JS2013-44</i>	F	Human serum	China	2013.6	KR230753	KR230773	KR230793	GenBank
<i>JS2012-79</i>	F	Human serum	China	2012.7	KR230752	KR230772	KR230792	GenBank
<i>JS2011-69</i>	B-3	Human serum	China	2011.7	KR230751	KR230771	KR230791	GenBank
<i>JS2011-13-2</i>	A	Human serum	China	2011.5	KR230750	KR230770	KR230790	GenBank

NA, not available.