

## Electronic Supplementary Material

### Proteasome Inhibitor PS-341 Effectively Blocks Infection by the Severe Fever with Thrombocytopenia Syndrome Virus

Sihua Liu<sup>1</sup>, Hongyun Liu<sup>1</sup>, Keke Zhang<sup>1</sup>, Xueping Li<sup>1</sup>, Yuqin Duan<sup>1</sup>, Zhiyun Wang<sup>2</sup>✉, Tao Wang<sup>1</sup>✉

1. School of Life Sciences, Tianjin University, Tianjin 300073, China

2. School of Environmental Science and Engineering, Tianjin University, Tianjin 300073, China

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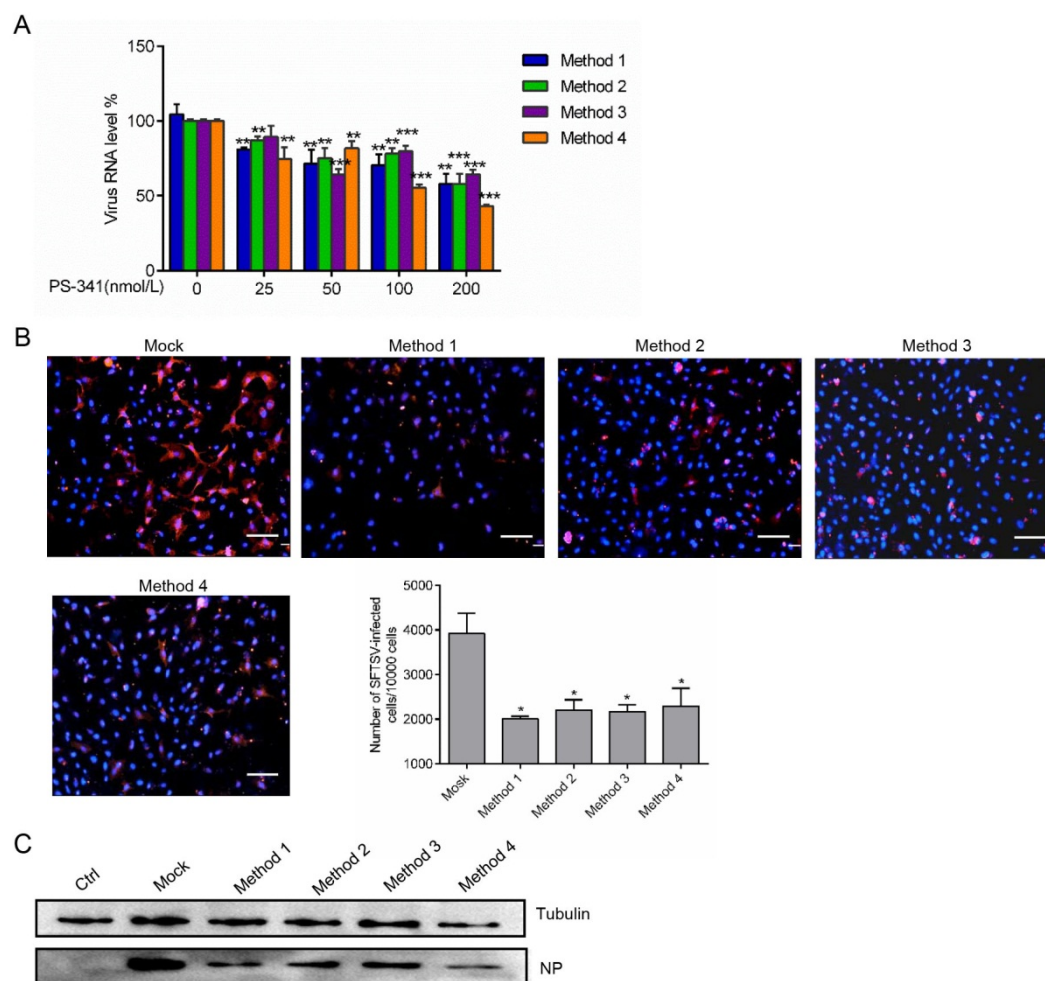


Fig. S1 The efficacy of PS-341 in Vero cells (A) After infection with SFTSV (MOI = 0.1), Vero cells were each treated with 0, 25, 50, 100, or 200 nmol/L PS-341 for 24 h under four treatment conditions. The infected cells were collected and the viral RNA were measured by qRT-PCR. Asterisk indicates significant difference in viral RNA level between PS-341 untreated group and PS-341 treated group, \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ . (B) Vero cells infected with SFTSV (MOI = 1) and treated with PS-341 (50 nmol/L) under four treatment conditions for 24 h and detected by immunofluorescence. The histogram shows the statistical analysis of Vero cell fluorescence image (Bar = 30  $\mu\text{m}$ ). Asterisk indicates significant difference in viral RNA level between mock and PS-341 treated group, \*  $P < 0.05$ . (C) Vero cells were infected with SFTSV (MOI = 1) for 1 h and then treated with 50 nmol/L PS-341 under four treatment conditions. The total protein of SFTSV-infected cells was extracted at 24 h p.i. and detected by Western blotting. All samples were run in triplicate, and the experiment was repeated three times.

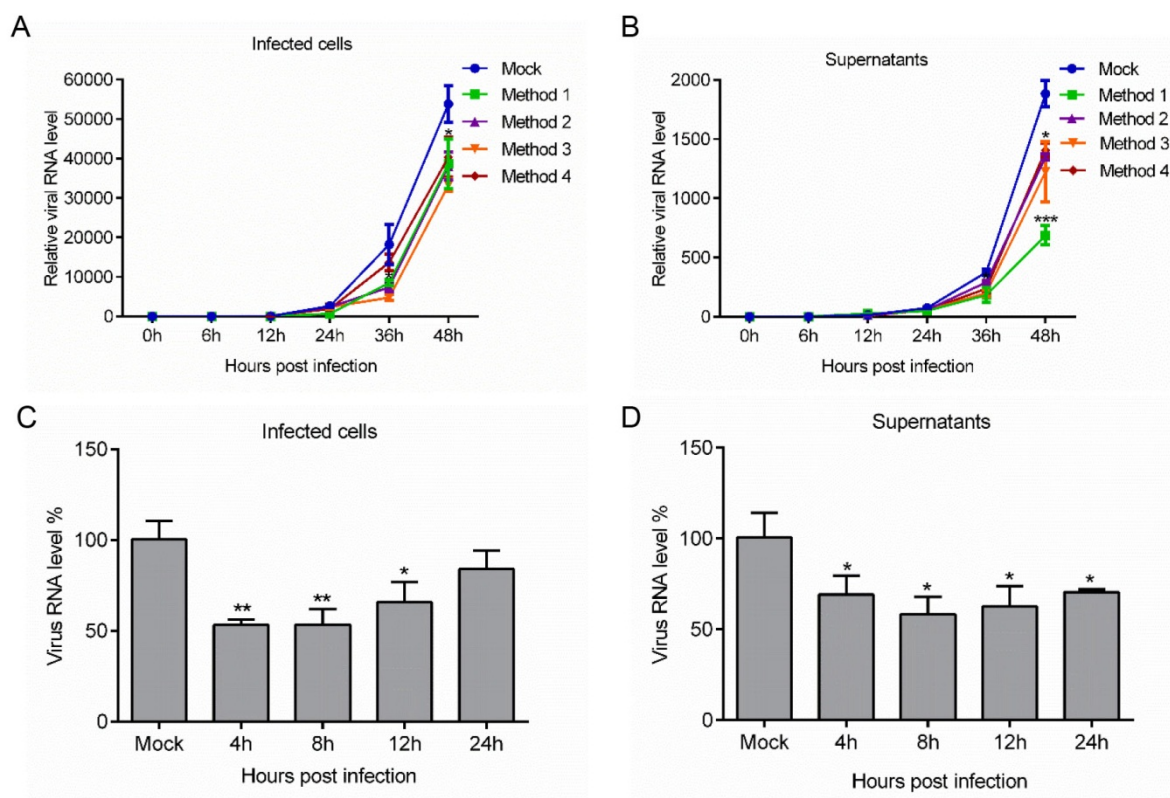


Fig. S2 PS-341 inhibits SFTSV replication and release in Vero cells. (A) Vero cells were treated with PS-341 (50 nmol/L) under four conditions; the infected cells were collected at particular points of time, and the viral RNA level were analyzed by qRT-PCR. (B) The culture supernatants were also collected, and measured by qRT-PCR. The relative viral RNA level was expressed as fold change relative to the value of viral RNA at 0 h (set as 1). Asterisk indicates significant difference in viral RNA level between Mock and PS-341 -treated group, \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ . (C and D) After SFTSV (MOI = 0.1) absorption for 1 h, PS-341 (50 nmol/L) was added to Vero cells at 4, 8, 12, and 24 h p.i.. The infected cells (C) and supernatants (D) were collected at 48 h p.i. for qRT-PCR detection. Asterisk indicates significant difference in viral RNA level between Mock and PS-341 -treated group \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ . All samples were run in triplicate, and the experiment was repeated three times.