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## Supplementary Information

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4 Amino Acid Polymorphisms in Hepatitis C Virus Core Affect Infectious Virus

5 Production and Major Histocompatibility Complex Class I Molecule Expression

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7 Megumi Tasaka-Fujita, Nao Sugiyama, Wonseok Kang, Takahiro Masaski,

8 Asako Murayama, Norie Yamada, Ryuichi Sugiyama, Senko Tsukuda,

9 Koichi Watashi, Yasuhiro Asahina, Naoya Sakamoto, Takaji Wakita,

10 Eui-Cheol Shin, Takanobu Kato.

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2     **Supplementary Figure S1.** Time point analysis of HCV-positive cell population  
3     and MFI of core staining

4                 Huh-7.5.1 cells were transfected with RNA of TH/JFH1-RL, -RM, -QL,  
5     and -QM. Transfected cells were harvested at the indicated time point and  
6     stained with anti-HCV core antibody. The percentages of HCV core-positive cells  
7     were determined. The MFI of HCV core in the gate of core-positive cells was  
8     calculated and is presented in Supplementary Table S1.

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10    **Supplementary Figure S2.** Cell surface expression of MHC class I molecules  
11    induced by type I and II IFNs.

12                 Huh-7.5.1 cells were treated with IFN- $\alpha$  (10 IU/mL), IFN- $\beta$  (10 IU/mL)  
13    and IFN- $\gamma$  (200 pg/mL) for 24 h. Harvested cells were stained with anti-HLA-ABC  
14    antibody. The shaded areas indicate IFN untreated control.

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1 Supplementary Table S1.

2 IFN sensitivity of chimeric viruses with polymorphisms

| Strains           | HCV core Ag levels                    |                                       |
|-------------------|---------------------------------------|---------------------------------------|
|                   | IFN (-)                               | IFN (+)                               |
| <b>TH/JFH1-RL</b> |                                       |                                       |
| Medium (fmol/L)   | $9.0 \times 10^4 \pm 7.4 \times 10^3$ | $1.1 \times 10^4 \pm 5.6 \times 10^2$ |
| Cell (fmol/well)  | $127.4 \pm 23.5$                      | $22.6 \pm 2.0$                        |
| <b>TH/JFH1-RM</b> |                                       |                                       |
| Medium (fmol/L)   | $1.0 \times 10^5 \pm 7.2 \times 10^3$ | $1.3 \times 10^4 \pm 2.4 \times 10^3$ |
| Cell (fmol/well)  | $195.3 \pm 32.6$                      | $27.4 \pm 7.1$                        |
| <b>TH/JFH1-QL</b> |                                       |                                       |
| Medium (fmol/L)   | $1.5 \times 10^4 \pm 1.3 \times 10^3$ | $1.8 \times 10^3 \pm 3.1 \times 10^2$ |
| Cell (fmol/well)  | $94.5 \pm 3.0$                        | $20.0 \pm 3.0$                        |
| <b>TH/JFH1-QM</b> |                                       |                                       |
| Medium (fmol/L)   | $9.0 \times 10^4 \pm 7.4 \times 10^3$ | $1.1 \times 10^4 \pm 5.6 \times 10^2$ |
| Cell (fmol/well)  | $164.5 \pm 11.0$                      | $35.7 \pm 6.1$                        |

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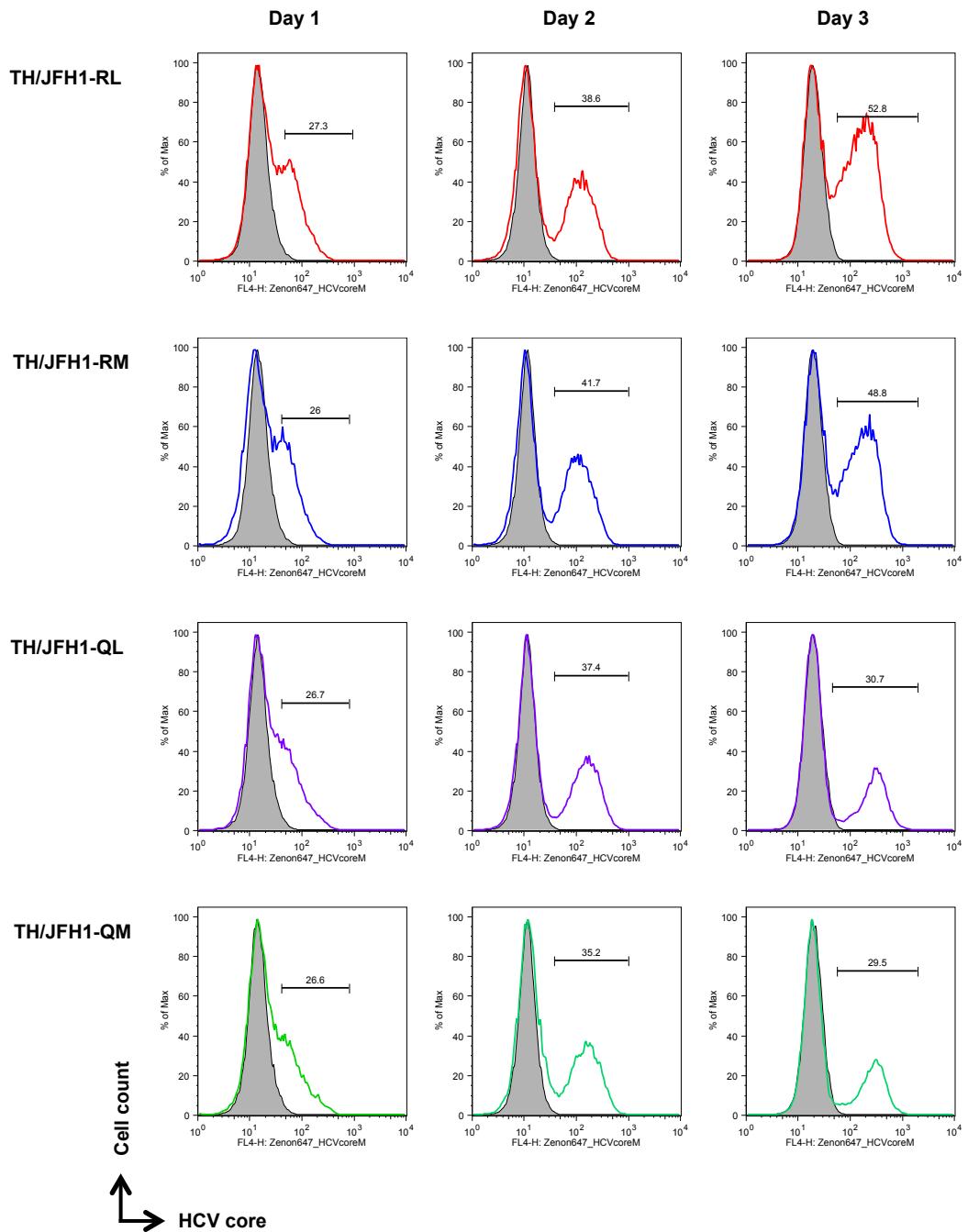
1      Supplementary Table S2.  
 2      Percentage of HCV-positive cells and amounts of core protein

| Strains           | Positive Cells (%) | MFI           |
|-------------------|--------------------|---------------|
| <b>TH/JFH1-RL</b> |                    |               |
| Day 1             | 26.9 ± 0.4         | 93.8 ± 0.8    |
| Day 2             | 39.1 ± 0.6         | 147.3 ± 1.5   |
| Day 3             | 52.3 ± 0.5         | 204.0 ± 6.1   |
| <b>TH/JFH1-RM</b> |                    |               |
| Day 1             | 27.0 ± 1.2         | 80.8 ± 1.7    |
| Day 2             | 40.3 ± 2.0         | 136.7 ± 0.6   |
| Day 3             | 49.4 ± 0.7         | 215.3 ± 2.5   |
| <b>TH/JFH1-QL</b> |                    |               |
| Day 1             | 25.6 ± 0.9         | 94.3 ± 1.1    |
| Day 2             | 37.8 ± 2.4         | 180.3 ± 5.5*  |
| Day 3             | 29.7 ± 0.9*        | 329.0 ± 6.1*  |
| <b>TH/JFH1-QM</b> |                    |               |
| Day 1             | 26.2 ± 0.8         | 98.8 ± 2.1    |
| Day 2             | 34.6 ± 1.9*        | 186.0 ± 1.0*  |
| Day 3             | 29.4 ± 0.2*        | 300.7 ± 11.5* |

3      MFI, mean fluorescence intensity. \* $p < 0.05$  compared with aa70R strains.

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## Supplementary Figure S1



## Supplementary Figure S2

