

Supplementary Information

Virus-induced p38 MAPK activation facilitates viral infection

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Running title: Pharmacological blockage of p38 activation is a promising antiviral strategy

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Supplementary Figure Legends

Figure S1. HCV activates p38 in a time-dependent manner. Huh7.5.1 cells were infected with JFH1 (MOI=1) for 0, 24 h, 48 h and 72 h. Cell lysates were prepared, followed by detecting intracellular total p38, P-p38 and HCV core protein levels by western blotting.

Figure S2. HCV infection has no effect on the mRNA expression of p38 α , MKK3 and MKK6. (A) Huh7.5.1 cells were infected with the HCV strain JFH-1 at MOIs of 0, 0.1, 1 and 10 for 72 h, and then intracellular p38 α mRNA levels were analyzed via qRT-PCR. (B, C) Huh7.5.1 cells were infected (+) or uninfected (-) with the HCV JFH-1 strain at the MOI of 1 for 72 h. The intracellular MKK3 (B) and MKK6 (C) mRNA levels were detected via qRT-PCR.

Figure S3. Impairment of TAB1 knockdown on p38 activation in HCV-uninfected Huh7.5.1 cells. (A) TAB1 was knocked down by CRISPR/Cas9 (KD-TAB1) in Huh7.5.1 cells. The P-p38, p38, TAB1 and GAPDH were analyzed by western blotting. (B) The fold change of the TAB1 level relative to the GAPDH level was quantified by ImageJ software. (C) The fold change in the phosphorylated p38 level relative to the total p38 level was quantified by ImageJ software.

Figure S4. p38 α knockdown attenuates the dimerization of HCV core protein in Huh7.5.1 cells. Wild type and p38 α knockdown Huh7.5.1 cells were co-transfected Flag-core and HA-core plasmids, respectively. After 48 h, cell lysates were prepared for co-IP followed by western blot.

Figure S5. Amino acid sequence, purification and identification of CN-peptide. (A) Amino acid sequence of CN-peptide. **(B)** The MS analysis of CN-peptide. **(C)** The HPLC analysis of CN-peptide.

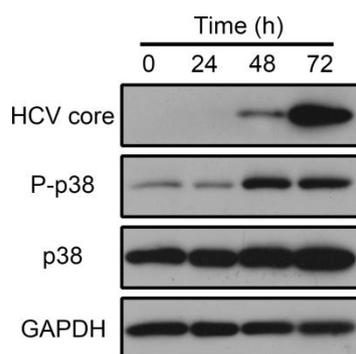
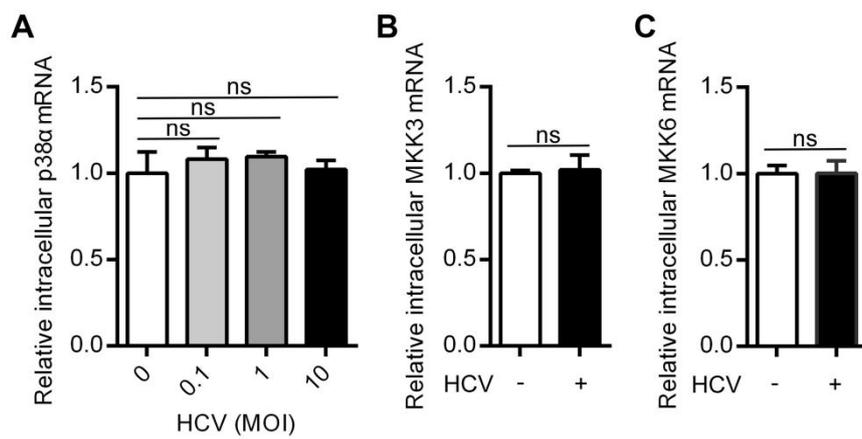


Figure S1

**Figure S2**

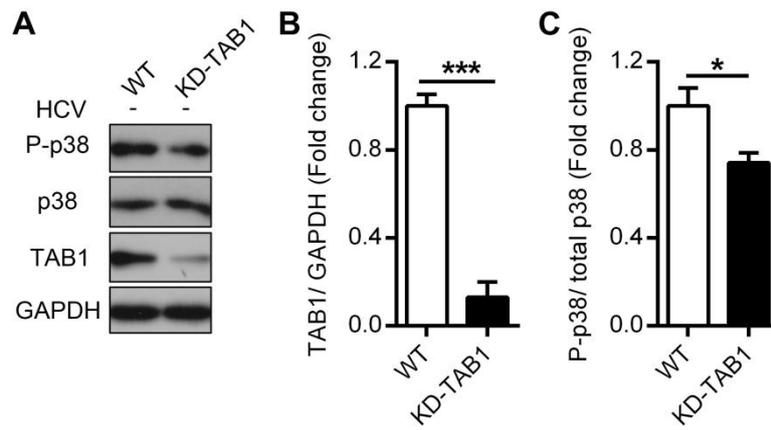
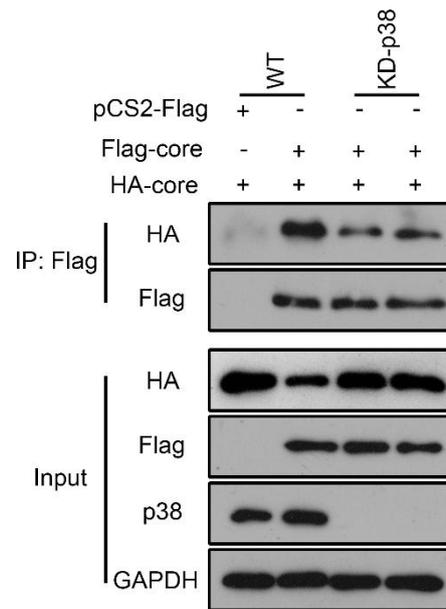


Figure S3

**Figure S4**

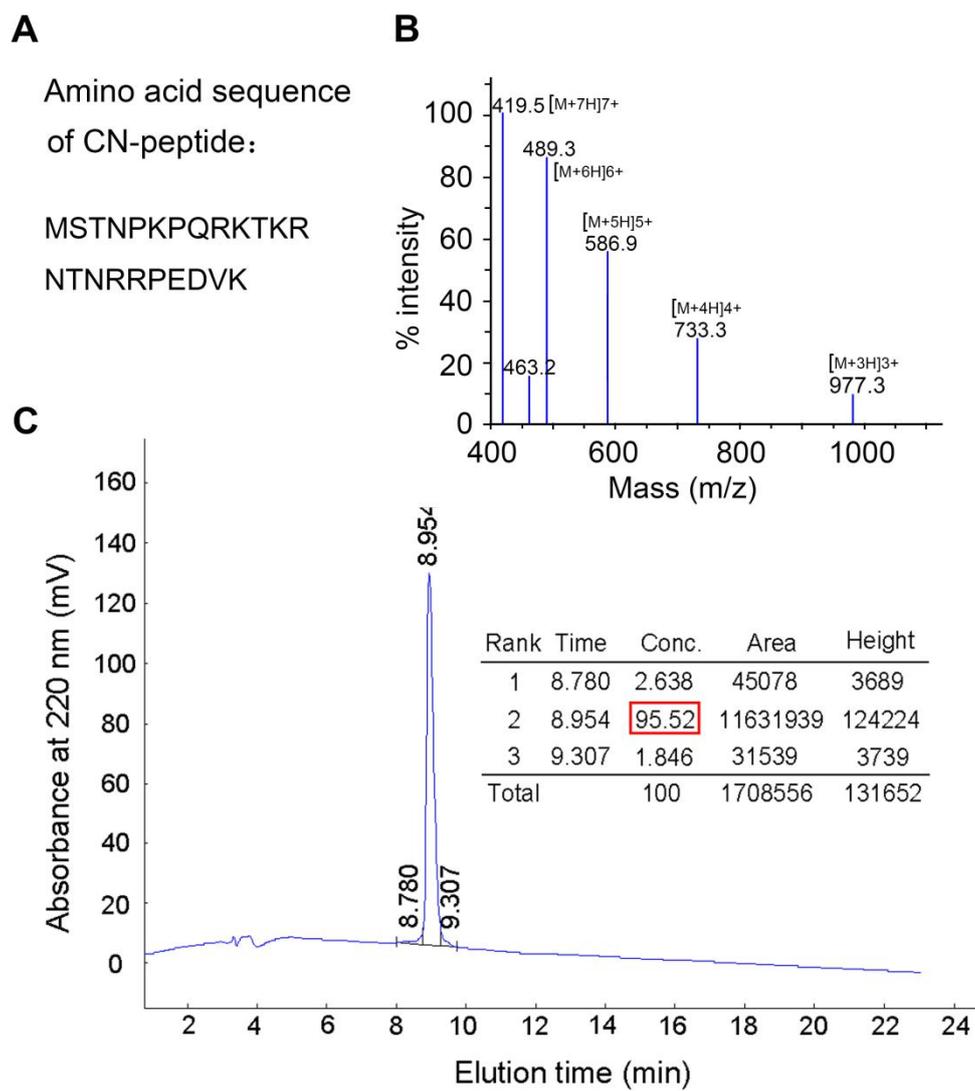


Figure S5