**Virologica Sinica**

**Supplementary Data**

**Enhanced host immune responses in presence of HCV facilitate HBV clearance in coinfection**

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**Supplementary Materials**

**Table S1: Primers for RT-qPCR**

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| **Strand** | **Sequence 5**′**-3**′ |
| HBV DNA -F | ACCAATCGCCAGTCAGGAAG |
| HBV DNA-R | ACCAGCAGGGAAATACAGGC |
| HBV RNA -F | CCGTCTGTGCCTTCTCATCTGC |
| HBV RNA-R | ACCAATTTATGCCTACAGCCTCC |
| HCV-F | GTCTAGCCATGGCGTTAGTATGAG |
| HCV-R | ACCCTATCAGGCAGTACCACAAG |
| mActin-F | AAGGAGCCCCACGAGAAAAAT |
| mActin-R | ACCGAACTTGCATTGATTCCAG |
| mGAPDH-F | ACGGCCGCATCTTCTTGTGCA |
| mGAPDH-R | ACGGCCAAATCCGTTCACACC |
| mIfi27-F | GCTTGTTGGGAACCCTGTTTG |
| mIfi27-R | GGATGGCATTTGTTGATGTGGAG |
| mIfi44-F | AACTGACTGCTCGCAATAATGT  |
| mIfi44-R | GTAACACAGCAATGCCTCTTGT  |
| mMx1-F | GACCATAGGGGTCTTGACCAA  |
| mMx1-R | AGACTTGCTCTTTCTGAAAAGCC  |
| mOas1a-F | ATGGAGCACGGACTCAGGA  |
| mOas1a-R | TCACACACGACATTGACGGC  |
| mIfnb1-F | CAGCTCCAAGAAAGGACGAAC  |
| mIfnb1-R | GGCAGTGTAACTCTTCTGCAT  |
| mIfna4-F | AGGACAGGAAGGATTTTGGA  |
| mIfna4-R | GCTGCTGATGGAGGTCATT  |
| mIL-6-F | TGGTGACAACCACGGCCTTCC |
| mIL-6-R | AGCCTCCTGACTTGTGAAGTGGT |
| mTNF-F | CAGGCGGTGCCTATGTCTC |
| mTNF-R | CGATGACCCCGAAGTTCAGTAG |

**Figures**

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**Fig. S1** Hydrodynamic injection of pAAV-1.2HBV mediated acute HBV replication in ICR mice. **A** Schematic plot of the structure of pAAV-1.2HBV plasmids. Serum HBeAg(**B**), HBsAg(**C**), and HBV core-associated DNA(**D**) in serum. DNA copies were normalized to those in control plasmid injected mice, shown as relative levels. **E** Specific expression of HBcAg and HBsAg in liver but not **F** other organs. Scale bar =100 μm.

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**Fig.** **S2** HCV inhibited HBV replication irrespective of the virus infection order.**A** Schematic representation of the experimental design of simultaneous coinfection and **D** HCV superinfection of HBV pre-infected mice after 2 days of HBV infection. Serum HBsAg (**B and E**) and anti-HBs antibodies (**C and F**) in serum were detected at indicated time points.



**Fig. S3** HCV increases the percentage of HBcAg-specific cytokine producing splenocytes.**A–C** The frequencies of IFN-γ+, TNF-α+ or IL-2+ CD4+ T cells and **D–F** CD8+ T cells after *ex vivo* restimulation with HBcAg-derived peptides. **G** Quantitative analysis of the percentages of one-, two-, or three-cytokine (IFN-γ/ TNF-α/ IL-2) simultaneously producing cells within the CD4+ or **H** CD8+ T cell populations from the spleen.