

Supplementary Materials: Re-designed Recombinant Hepatitis B Virus Vectors Enable Efficient Delivery of Versatile Cargo Genes to Hepatocytes with Improved Safety

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5dCG

M Q L F H L C L I I S C S C P
 (1814) ATG CAA CTT TTT CAC CTC TGC CTA ATC ATC TCT TGT TCA TGT CCT
 preC start

T V Q A S K L C L G W L W G M
 ACT GTT CAA GCC TCC AAG CTG TGC CTT GGG TGG CTT TGG GGC ATG
 C start

D I D T Y K E F G A S V E L L
 GAC ATT GAC ACG TAT AAA GAA TTT GGA GCT TCT GTG GAG TTA CTC

S F L P S D F F P S I Q D L I
 TCT TTT TTG CCT TCT GAC TTC TTT CCT TCT ATT CAA GAT CTC ATC

D T A S A * PstI NheI
 GAC ACC GCC TCT GCT **TAA** CCC TGC AGG CTC GCT AGC **CTG TTG CCC**

TCT GGT TTC TCC CCA GGT TAT CCG GCG GGT TTC TGA CAT CCG GCG
 Green: Gtx IRES

M P L S Y Q .
GGT GAC TCA CAA CCC CAG AAA CAG ACA TAT GCC CCT ATC TTA TCA
 P Start

H F R K L L L L D D
 ACA CTT CCG GAA ACT ACT GTT GTT AGA CGA C(2354)

Figure S1. Listing of partial sequences of 5dCG rHBV vector used in this work. Sequences surrounding the cargo sequence insertion site are shown. Numbers indicate nucleotide positions on wild type HBV genome. Start codons of preC, C and P ORF as well as artificially introduced premature termination codon (*) of preC/C ORF are indicated. Gtx IRES sequences introduced upstream of P start codon are highlighted in green. Restriction enzyme recognition sites used for inserting cargo sequences are also shown.

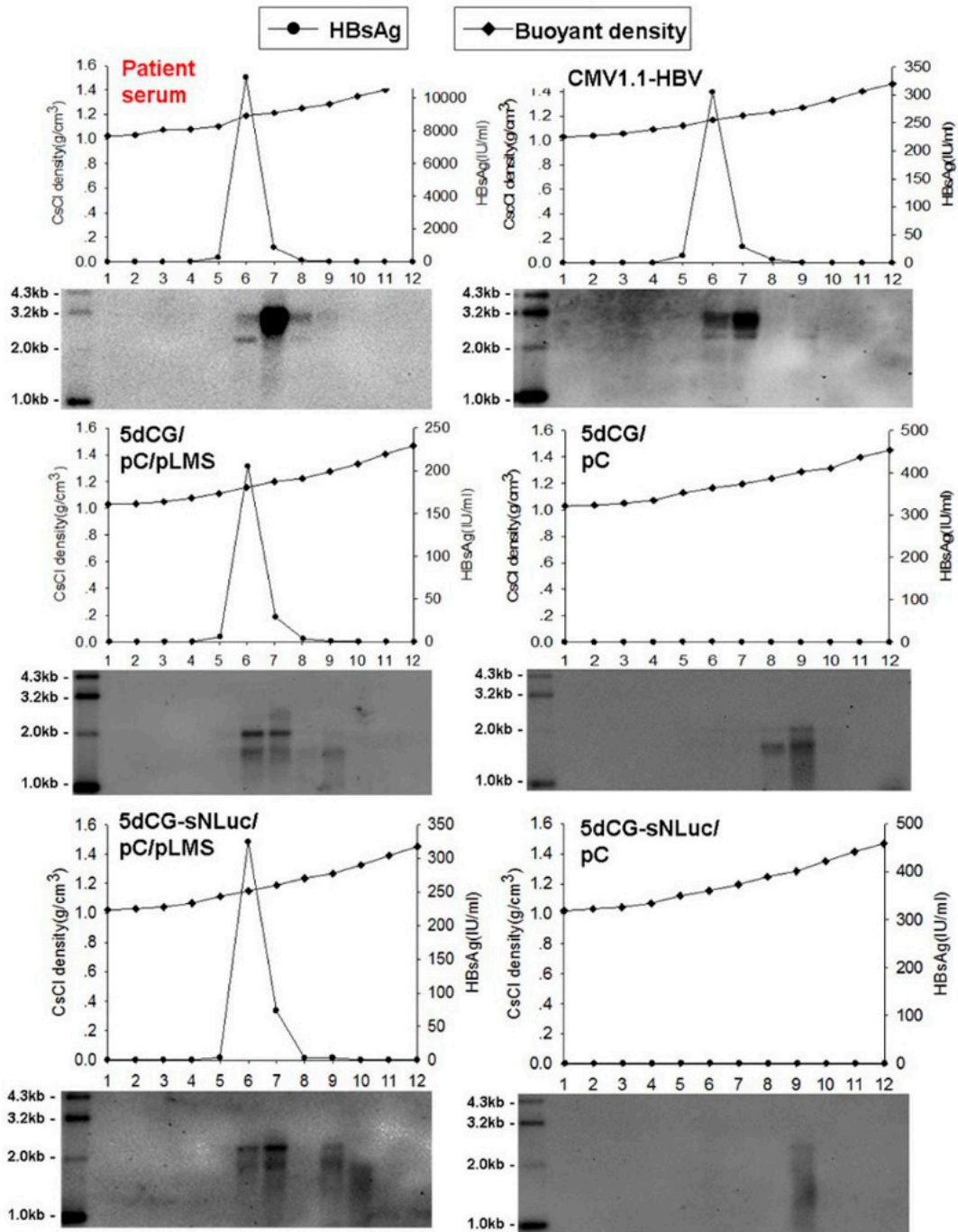


Figure S2. Sedimentation analysis of wild type and recombinant HBV virions. Culture supernatants of Huh-7 cells transfected with indicated plasmids, as well as HBV-infected patient serum, were subjected to CsCl density gradient ultracentrifugation. Fractions were analyzed for CsCl density (solid diamonds), HBsAg (solid circles) and HBV DNA.



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