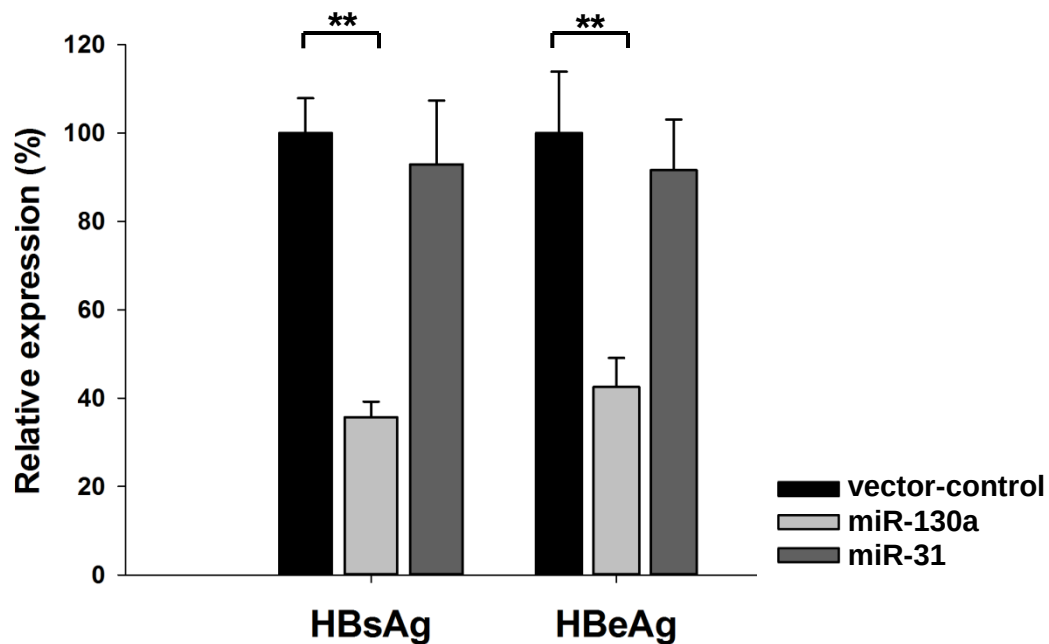
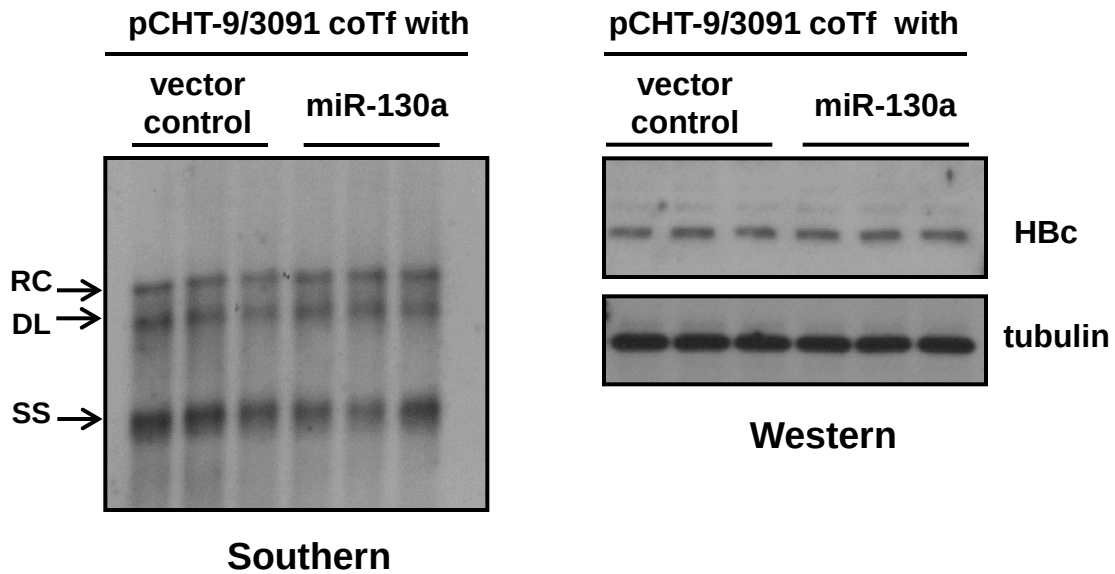


Supplemental Figure 1



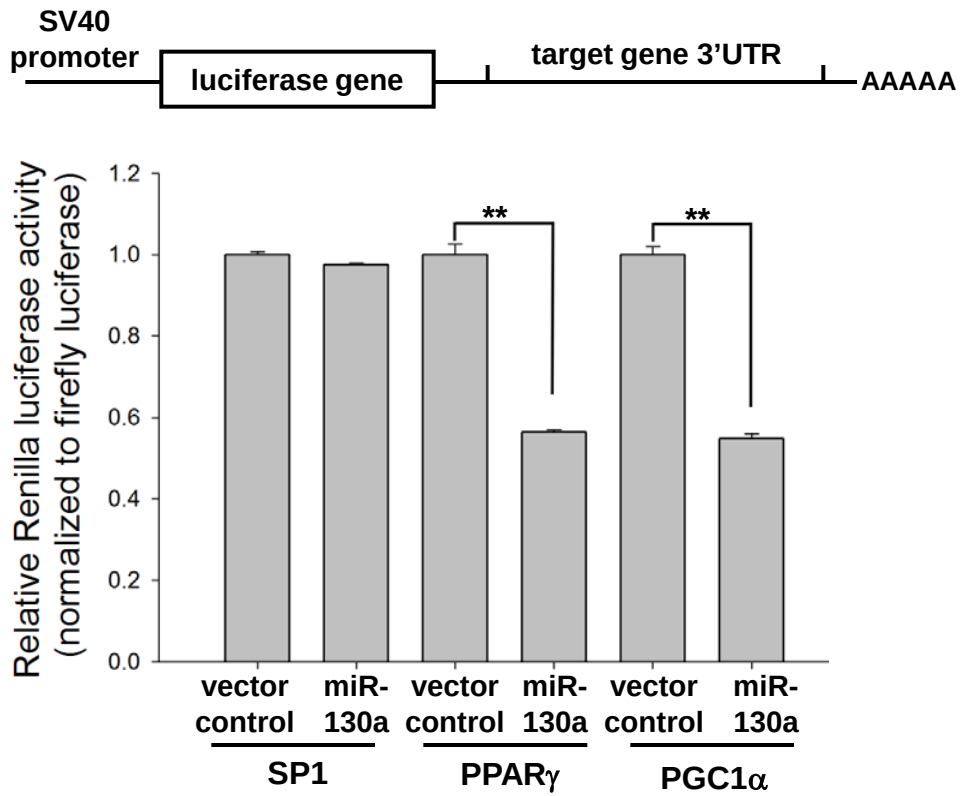
Supplemental Figure 1. Cotransfection of HBV *ayw* genomic plasmid with miR-130a expression vector reduced secretion of HBsAg and HBeAg in the media of HepG2 by ELISA. (* $p < 0.05$).

Supplemental Figure 2



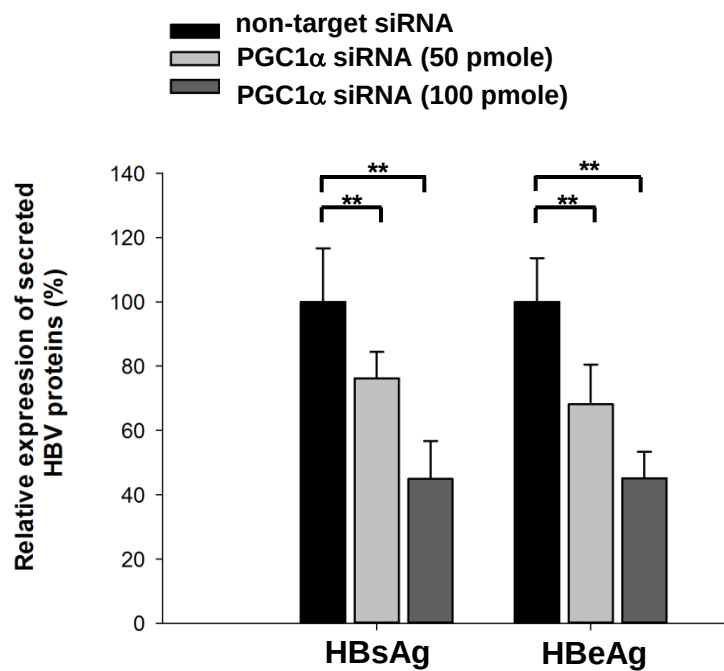
Supplemental Figure 2. Intracellular HBV replication in HepG2 cells was not affected by cotransfection (coTf) of plasmid pCHT-9/3091 (a plasmid carrying a 1.3mer HBV *ayw* genome driven by a CMV promoter)(Nassal., 1992) and a miR-130a expression vector using Southern (*left panel*) and Western blot assay (*right panel*).

Supplemental Figure 3



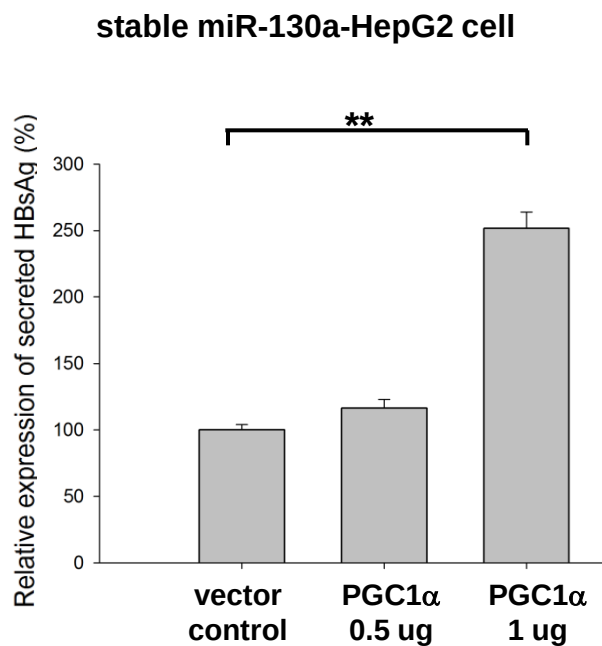
Supplemental Figure 3. The 3' UTR reporter assay confirmed that miR-130a significantly reduced the luciferase activities from the cotransfected reporter plasmids containing the 3' UTR of PGC1 α (NM_013261) and PPAR γ (NM_005037), but not the 3' UTR of SP1 (NM_003109).

Supplemental Figure 4



Supplemental Figure 4. Gradually decreased amounts of secreted HBsAg and HBeAg by ELISA were observed when siRNA concentration was gradually increased.

Supplemental Figure 5



Supplemental Figure 5. When the stable miR-130a expressing HepG2 cell lines were transfected with increasing dose of PGC1 α expression vector DNA, secreted HBsAg was also increased by ELISA assay.

Supplemental Table. DNA sequences of synthetic oligonucleotides and PCR primers used in this study

Primer name	sequences
hsa-miR-31-F	5'-CATCTTCAAAAAGCGGACACTC-3'
hsa-miR-31-R	5'-TCATGGAAATCCACATCCAA-3'
hsa-miR-130a-F	5'-GGCAAAAAGGAAGAGTGGTGA-3'
hsa-miR-130a-R	5'-ACCAGGGTAGCTGACTGGTG-3'
HBV ayw nt 1521-2122 F	5'-AGCAGGTCTGGAGCAAACAT-3'
HBV ayw nt 1521-2122 R	5'-CACCCACCCAGGTAGCTAGA-3'
HBV ayw nt 1521-2122 mt F	5'-GGAGGAGTTGGGAGAGGAAATTAGGTTAAAGG-3'
HBV ayw nt 1521-2122 mt R	5'- CCTTTAACCTAATTTCTCTCCCAACTCCTCC-3'
hsa-PGC1a 3'UTR-F	5'- ATATTCTAGAGCTTGTTTCAGCGGTTCTTTC-3'
hsa-PGC1a 3'UTR-R	5'- ATAT TCTAGA AGCCATCAAGAAAGGACACA-3'
hsa-PGC1a 3'UTR mt-F	5'- GCAGTGTTTCTACTTGCTCAAGCATGGCCTCT-3'
hsa-PGC1a 3'UTR mt-R	5'- AGAGGCCATGCTTGAGCAAGTAGAAACACTGC-3'
hsa-miR-130a mt-F	5'- GCACCTGTCACTAGCTGAGCAATGTTAAAAGG-3'
hsa-miR-130a mt-R	5'- CCTTTTAACATTGCTCAGCTAGTGACAGGTGC-3'
miR-130a sponge-F	5'-GCACTGCTCGAGATGCCCTTTTAACATTGCACTGGAATTCATGCCCTTTTA ACATTGCACTGCTCGAGATGCC-3'
miR-130a sponge-R	5'-GGCATCTCGAGCAGTGCAATGTTAAAAGGGCATGAATTCCAGTGCAATGT TAAAAGGGCATCTCGAGCAGTGC-3'
hsa-SP1 3'UTR-F	5'- ATATCTCGAGAGATGCATTCACAGGGGTTg-3'
hsa-SP1 3'UTR-R	5'-ATATCTCGAGGCTCAGAGCAGCTAATGAAG-3'
hsa-PPAR γ 3'UTR-F	5'-ATATCTCGAGCAGAGAGTCCTGAGCCACT -3'
hsa-PPAR γ 3'UTR-R	5'-ATATCTCGAGGGGTGGGAAACACACAAGA-3'
Q-PCR hsa-SOD2-F	5'-CCACTGCTGGGGATTGATGT-3'
Q-PCR hsa-SOD2-R	5'-GAGCTTAACATACTCAGCATAACG-3'
Q-PCR hsa-GPx1-F	5'-GCGGGGCAAGGTACTACTTAT-3'
Q-PCR hsa-GPx1-R	5'-CGTTCTTGCGTTTCTCCTGA-3'
Q-PCR hsa-CYCS-F	5'-GGAGCGAGTTTGGTTGCACT-3'
Q-PCR hsa-CYCS-R	5'-GTGGCACTGGGAACACTTCA-3'
Q-PCR hsa-Acly-F	5'-CCTGCCATGCCACAAGATTTC-3'
Q-PCR hsa-Acly-R	5'-TCTGCATGCCCCACACAAT-3'
Q-PCR hsa-ApoE-F	5'-CCTTCCCCAGGAGCCGAC-3'
Q-PCR hsa-ApoE-R	5' -GCTCTGTCTCCACCGCTT-3'

Continuned

Supplemental Table. DNA sequences of synthetic oligonucleotides and PCR primers used in this study

Primer name	sequences
Q-PCR hsa-GCK-F	5'-TACATGGAGGAGATGCAGAATg-3'
Q-PCR hsa-GCK-R	5'-ACTTGCCACCTATGAGCTTCTC-3'
Q-PCR hsa-PKLR-F	5'-GAGATCCCAGCAGAGAAGGTTT-3'
Q-PCR hsa-PKLR-R	5'-AGTCTCCCCTGACAGCATGA-3'
Q-PCR hsa-PPARg-F	5'-CATAAAGTCCTTCCCGCTGA-3'
Q-PCR hsa-PPARg-R	5'-TCTGTGATCTCCTGCACAGC-3'
Q-PCR hsa- HNF1- F	5'-ACCTCATCATGGCCTCACTT-3'
Q-PCR hsa-HNF1 - R	5'-GTTGATGACCGGCACACTC-3'
Q-PCR hsa- HNF4-F	5'- GAGCTGCAGATCGATGACAA-3'
Q-PCR hsa-HNF4-R	5'-TACTGGCGGTCGTTGATGTA-3'
Q-PCR hsa-PPARa -F	5'-CCTCTCAGGAAAGGCCAGTA-3'
Q-PCR hsa-PPARa-R	5'-CACTTGATCGTTCAGGTCCA -3'
Q-PCR hsa- ESRRg-F	5'-GGAGAACAGCCCATACCTGA -3'
Q-PCR hsa- ESRRg- R	5'- GCCCATCCAATGATAACCAC-3'
Q-PCR hsa- CEBPb-F	5'- GACAAGCACAGCGACGAGTA -3'
Q-PCR hsa- CEBPb- R	5'-AGCTGCTCCACCTTCTTCTG -3'
Q-PCR hsa- CEBPa-F	5'- CAGACCACCATGCACCTG-3'
Q-PCR hsa- CEBPa-R	5'-CTCGTTGCTGTTCTTGTCCA -3'
Q-PCR hsa- SP1-F	5'-GCACCTGCCCCTACTGTAAA -3'
Q-PCR hsa- SP1-R	5'- GCGTTTCCCACAGTATGACC-3'
Q-PCR hsa- ESRRa-F	5'- TGGCTACCCTCTGTGACCTC-3'
Q-PCR hsa- ESRRa-R	5'-CCCCTCTTCATCCAGGACTA -3'
Q-PCR hsa- LRH-F	5'- ATCCTCGACCACATTTACCG-3'
Q-PCR hsa- LRH-R	5'- TGCCACTAACTCCTGTGCAT -3'
Q-PCR hsa-PGC1a-F	5'- TATCAGCACGAGAGGCTGAA-3'
Q-PCR hsa-PGC1a-R	5'- TCAAAACGGTCCCTCAGTTC-3'
Q-PCR hsa-Scd1-F	5'- GCAAACACCCAGCTGTCAAA-3'
Q-PCR hsa-Scd1-R	5'- GCACATCATCAGCAAGCCAG -3'
Q-PCR hsa-Acs1-F	5'-GAGTGGGCTGCAGTGACA -3'
Q-PCR hsa-Acs1-R	5'-GCACGTACTGTGCGGAAGTCA -3'