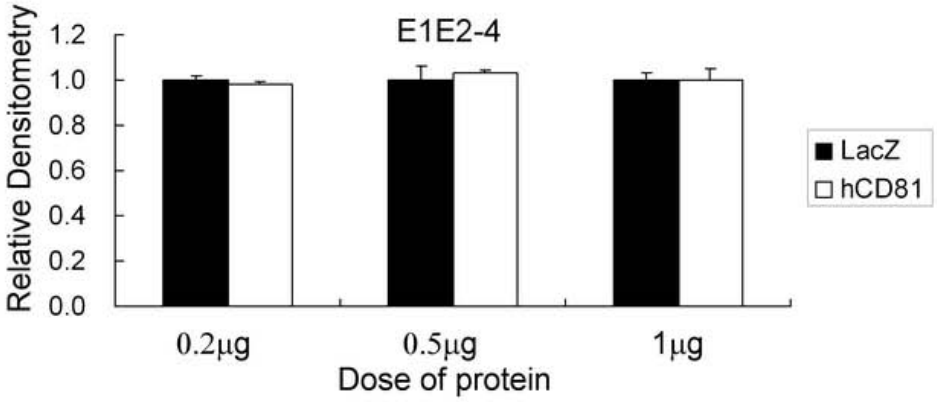
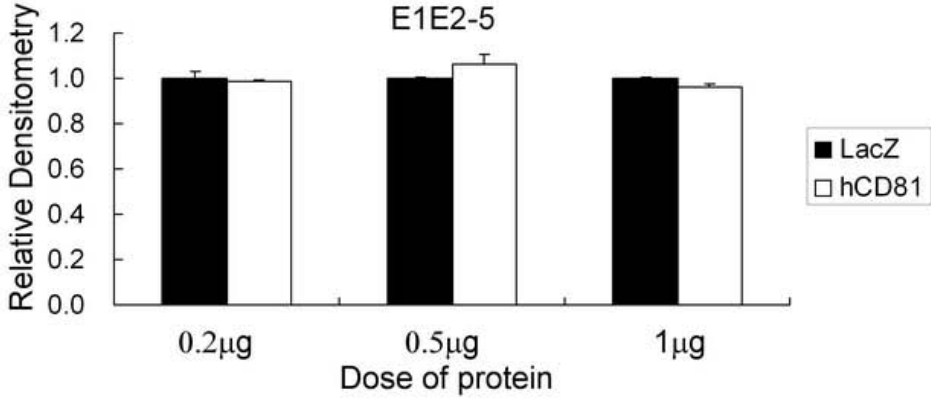
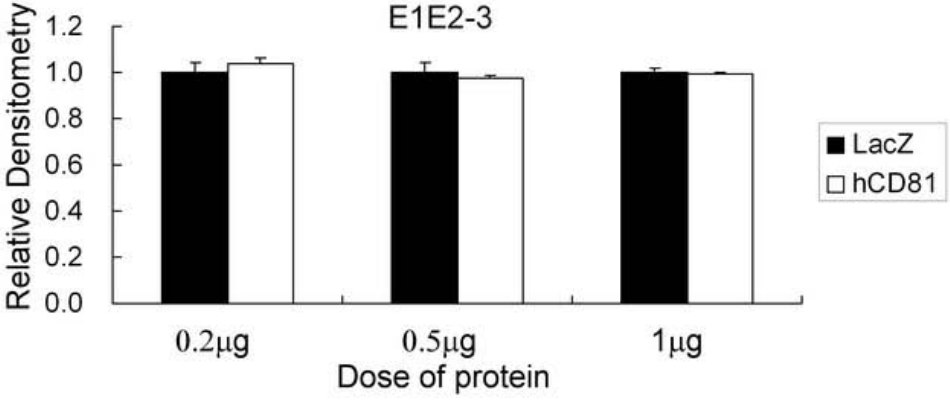
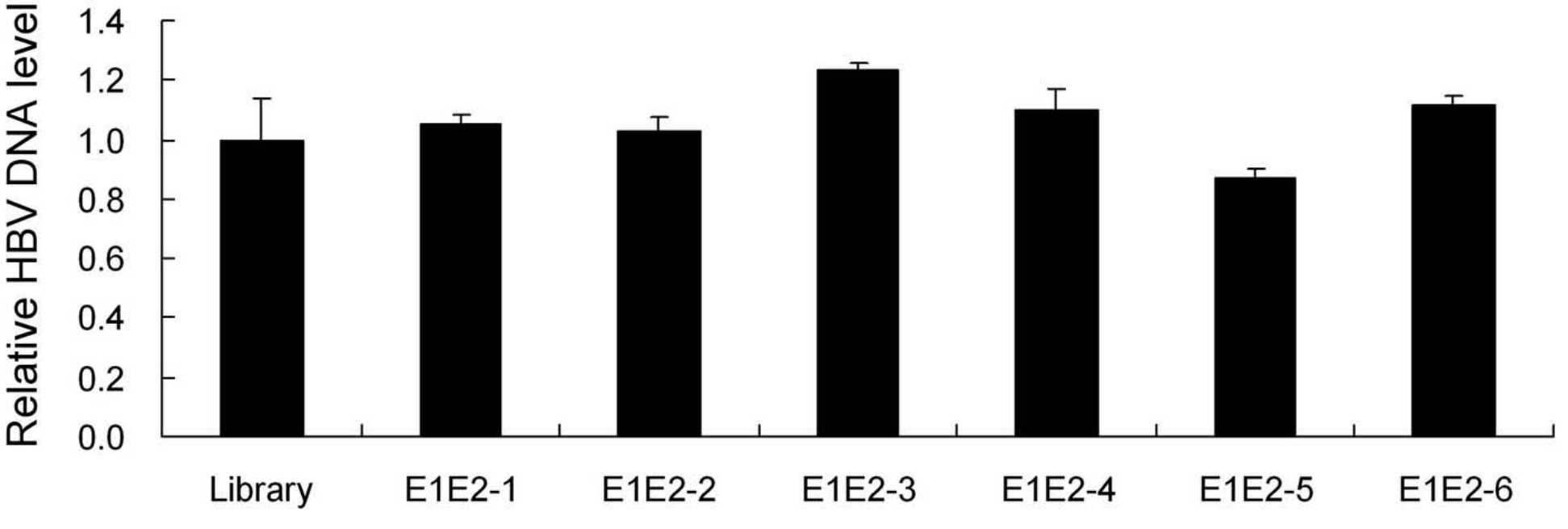

E1E2-1
Relative Densitometry
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.2μg
0.5μg
1μg
Dose of protein
LacZ
hCD81

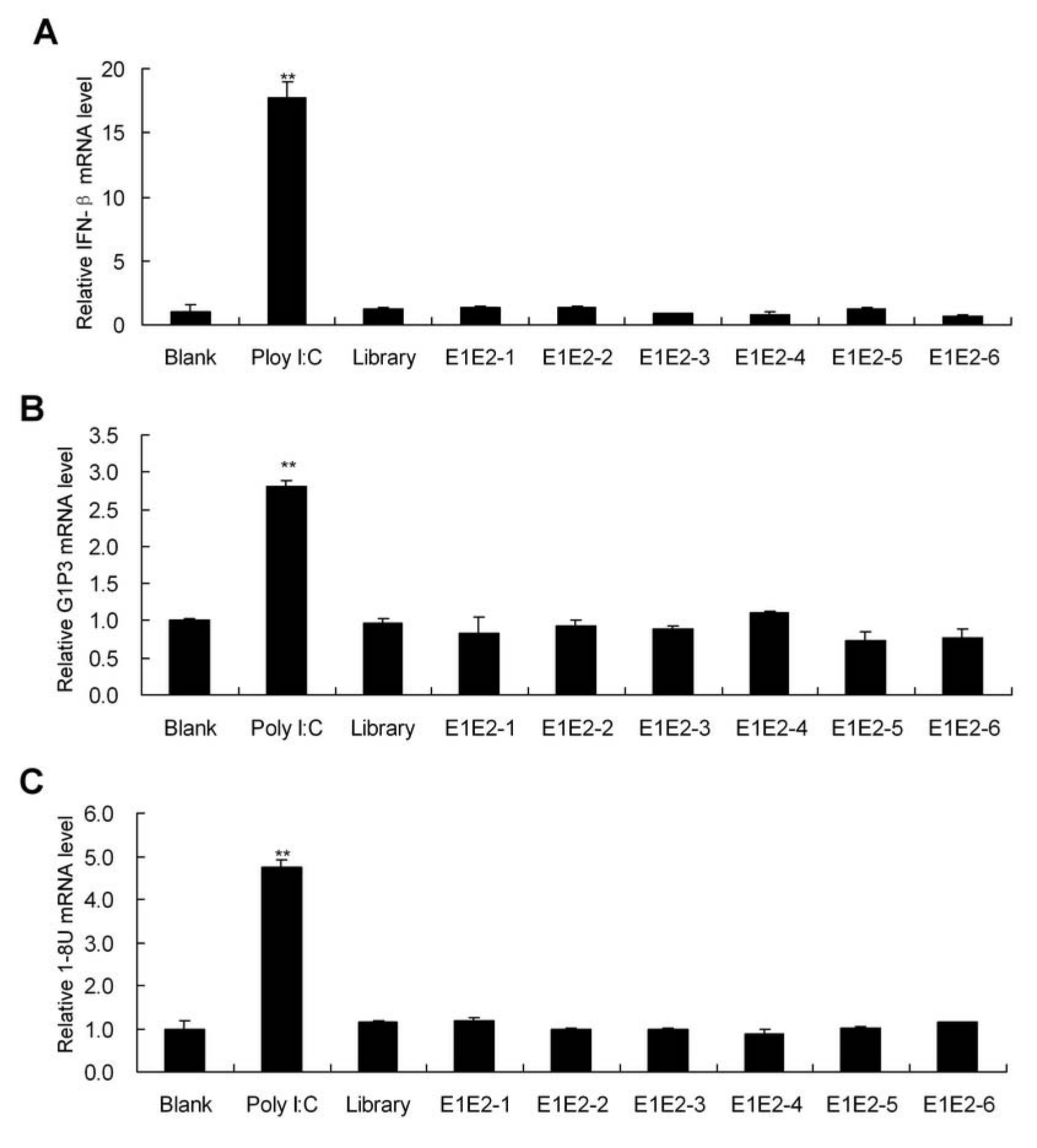

E1E2-4
Relative Densitometry
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.2μg
0.5μg
1μg
Dose of protein
LacZ
hCD81


E1E2-2
Relative Densitometry
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.2μg
0.5μg
1μg
Dose of protein
LacZ
hCD81


E1E2-5
Relative Densitometry
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.2μg
0.5μg
1μg
Dose of protein
LacZ
hCD81


E1E2-3
Relative Densitometry
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.2μg
0.5μg
1μg
Dose of protein
LacZ
hCD81


Relative HBV DNA level
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Library
E1E2-1
E1E2-2
E1E2-3
E1E2-4
E1E2-5
E1E2-6


A
Relative IFN-β mRNA level
20
15
10
5
0
**
Blank
Ploy I:C
Library
E1E2-1
E1E2-2
E1E2-3
E1E2-4
E1E2-5
E1E2-6
B
Relative G1P3 mRNA level
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
**
Blank
Poly I:C
Library
E1E2-1
E1E2-2
E1E2-3
E1E2-4
E1E2-5
E1E2-6
C
Relative 1-8U mRNA level
6.0
5.0
4.0
3.0
2.0
1.0
0.0
**
Blank
Poly I:C
Library
E1E2-1
E1E2-2
E1E2-3
E1E2-4
E1E2-5
E1E2-6

SUPPLEMENTAL MATERIAL LEGENDS

Figure S1. Aptamer E1E2-1, E1E2-2, E1E2-3, E1E2-4, E1E2-5 and human CD81 protein do not share the similar binding sites on HCV E1E2 protein. Fixed concentration of each aptamer was incubated with fixed concentration of E1E2 protein and increasing concentrations of human CD81 protein. Control protein LacZ was used as a control. ELONA assay was performed. The data were obtained as described in Figure 2A and represented the means of 3 different experiments.

Figure S2. Aptamers do not affect hepatitis B viral DNA replication. HepG2.2.15 cells derived from HepG2 cells transfected with full genome of HBV were inoculated with aptamers for 48 hours. Intracellular HBV DNA was detected with real-time PCR and normalized with GAPDH.

Figure S3. E1E2 aptamers do not induce innate immune response in naïve human hepatocytes. E1E2 aptamers do not induce IFN-β **(A)**, G1P3 **(B)** and 18U **(C)** in naïve human hepatocytes. Huh7.5 cells were treated with 100nM of library and aptamers. Poly I:C was transfected into Huh7.5 cells. Twenty-four hours later, total cellular RNA was isolated. The expression of IFN-β, G1P3 and 18U was detected by real-time PCR and normalized with GAPDH. Poly I:C and blank control were used as positive and negative control respectively. The data represented the means of three different experiments. Error bars represent mean ± S.D. $^{**}P<0.01$ verse blank control.