

Table S1 Basic clinical information of 24 HCC patients

Sample ID	Gender	Age (years)	Ethnicity	Smoking	Drinking	BMI	Liver fluke	Preoperative HBV-DNA	Antiviral therapies
P1	Male	52	Minority	No	No	≤25	No	NA	No
P2	Male	45	Han	No	No	>25	No	7.32×10 ⁻⁴	NA
P3	Male	42	Han	No	No	≤25	No	<1×10 ⁻³	No
P4	Male	33	Han	Yes	Yes	≤25	No	9.9×10 ⁻³	No
P5	Male	49	Minority	Yes	No	≤25	No	<1×10 ⁻³	Yes
P6	Male	64	Han	No	No	≤25	No	<1×10 ⁻³	No
P7	Male	38	Han	Yes	Yes	≤25	No	NA	Yes
P8	Male	48	Han	Yes	No	≤25	No	<1×10 ⁻³	Yes
P9	Male	56	Minority	No	Yes	≤25	No	NA	No
P10	Male	51	Han	No	Yes	≤25	No	NA	NA
P11	Male	39	Minority	Yes	Yes	≤25	No	<1×10 ⁻³	No
P12	Male	57	Han	No	No	>25	No	6.5×10 ⁻³	Yes
P13	Female	40	Minority	No	No	≤25	No	1.22×10 ⁻⁵	NA
P14	Male	51	Minority	No	Yes	≤25	No	<1×10 ⁻³	Yes
P15	Female	38	Han	No	No	≤25	No	<1×10 ⁻³	Yes
P16	Male	66	Minority	No	No	≤25	Yes	<1×10 ⁻³	Yes
P17	Male	46	Minority	No	No	≤25	No	3.47×10 ⁻³	Yes
P18	Male	40	Minority	No	No	≤25	No	<1×10 ⁻³	Yes
P19	Male	42	Minority	No	No	>25	No	NA	NA
P20	Male	35	Minority	No	Yes	≤25	No	NA	No
P21	Male	23	Minority	No	No	≤25	No	NA	NA
P22	Female	59	Han	No	No	>25	No	NA	NA
P23	Male	54	Han	No	No	≤25	No	<1×10 ⁻³	No
P24	Male	42	Han	Yes	Yes	>25	Yes	6.3×10 ⁻⁴	Yes

NA, not available; HCC, hepatocellular carcinoma; BMI, body mass index; HBV, hepatitis B virus.

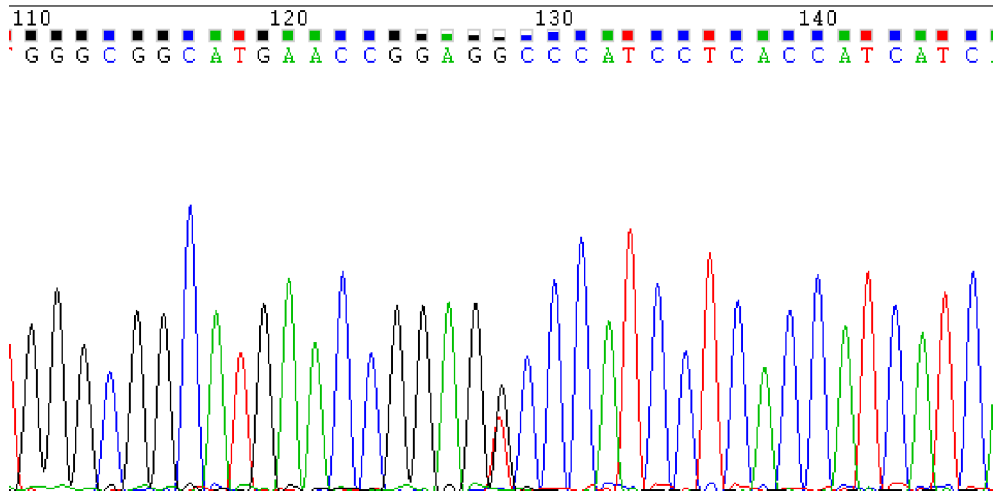


Figure S1 Gene sequencing of TP53 G249T patients.

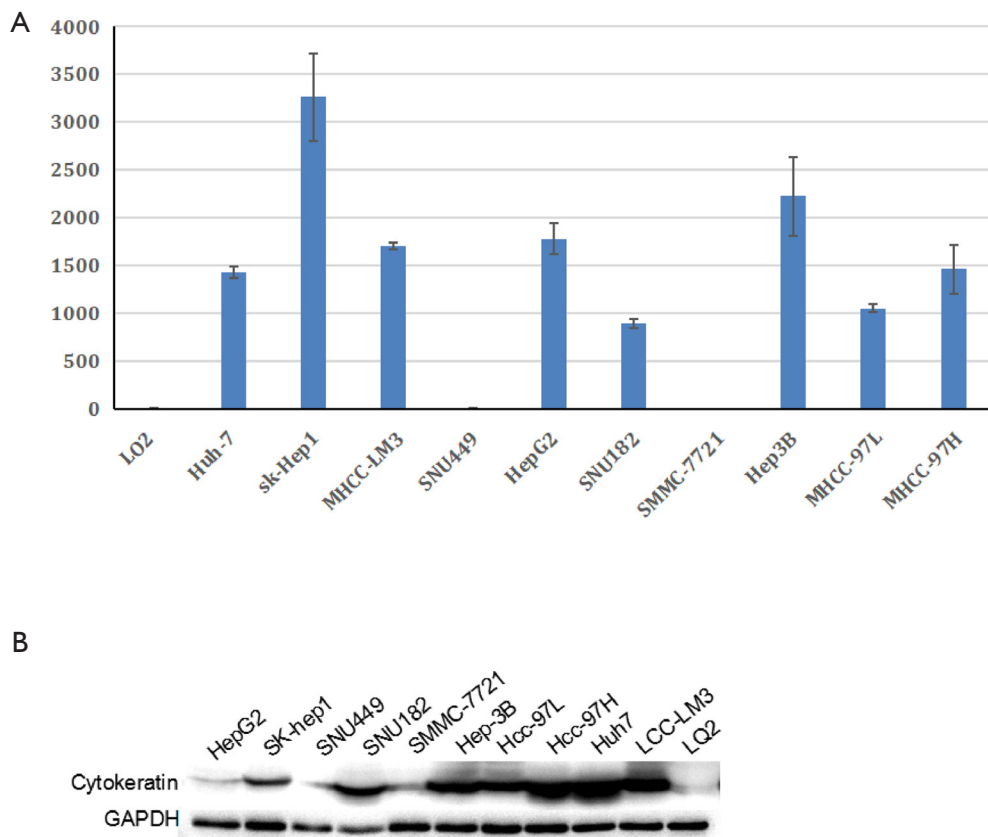


Figure S2 The relative expression level of *CK19* relative to normal liver cells (LO2) in each cell line. (A) Relative expression levels of *CK19* gene relative to normal hepatocytes (LO2) in each cell line sample. (B) Results of *CK19* protein expression in each liver cancer cell line.

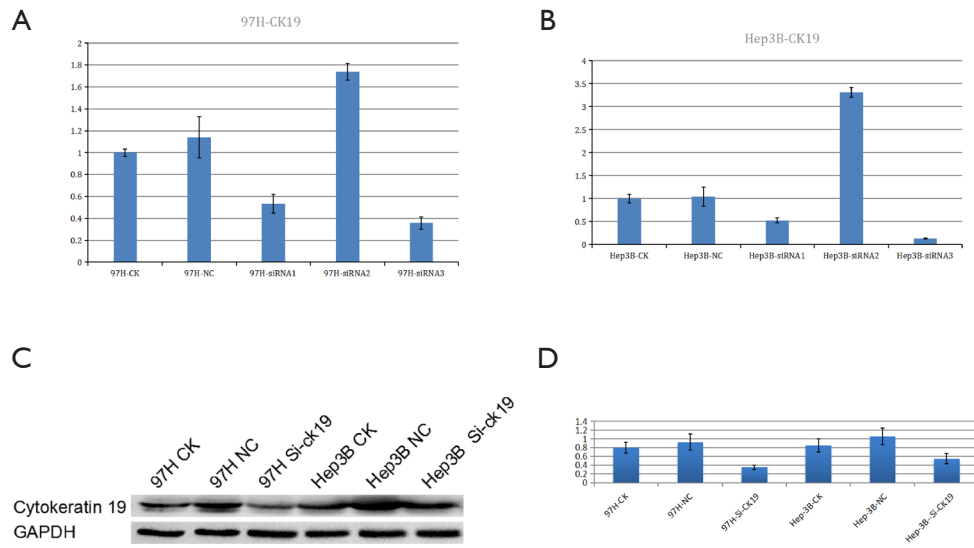


Figure S3 Expression level of *CK19* gene in MHCC-97H and Hep-3B cells. (A) Expression level of *CK19* gene in each sample in MHCC-97H cells. (B) Expression level of *CK19* gene in Hep3B cells in each sample. (C) Protein expression results of *CK19* in hepatocarcinoma cell lines MHCC-97H and Hep-3B after siRNA silencing. (D) Relative protein expression levels of *CK19* in hepatocellular carcinoma cell lines MHCC-97H and Hep-3B after siRNA silencing. siRNA, small interfering RNA.