Figure S1. Growth curve of cc-006cp and cc-006cpm8 cells. Data points are representative of the mean of three independent experiments.



Figure S2. Representative CK7<sup>+</sup>/CK20<sup>-</sup> expression profiles in the cc-006cpm8 cell line and patient tumor sections by immunohistochemical staining. Analysis revealed (A) CK7(+) and (B) CK20(-) expression in cc-006cpm8 cells and (C) CK7(+) and (D) CK20(-) expression in corresponding original tumor sections. Magnification, x400 (above) and x200 (below). CK, cytokeratin 7.



Figure S3. AFP, HepPar-1 and glypican-3 immunostaining of the cc-006cpm8 cell line. Immunohistochemical analysis of AFP(-), HepPar-1(-) and glypican-3(-) in (A) cc-006cpm8 cells (magnification, x400) and (B) patient tumor sections (magnification, x200). (C) AFP, HepPar-1 and glypican-3 stained HCC tissue sections served as positive controls (magnification, x200). AFP,  $\alpha$ -fetoprotein; HCC, hepatocellular carcinoma.



Table SI. Modified progressive H&E staining procedure with ST Infinity H&E staining.

Stain/reagent	Duration
Xylene	2 min
Xylene	2 min
100% ethanol	2 min
100% ethanol	2 min
95% ethanol	2 min
Water wash	2 min
Hematoxylin	3 min
Water wash	1 min
Bluing	1 min
Water wash	1 min
95% ethanol	1 min
Eosin	45 sec
95% ethanol	1 min
100% ethanol	1 min
100% ethanol	1 min
Xylene	2 min
Xylene	2 min
Coverslip	