Supplementary Figure S7

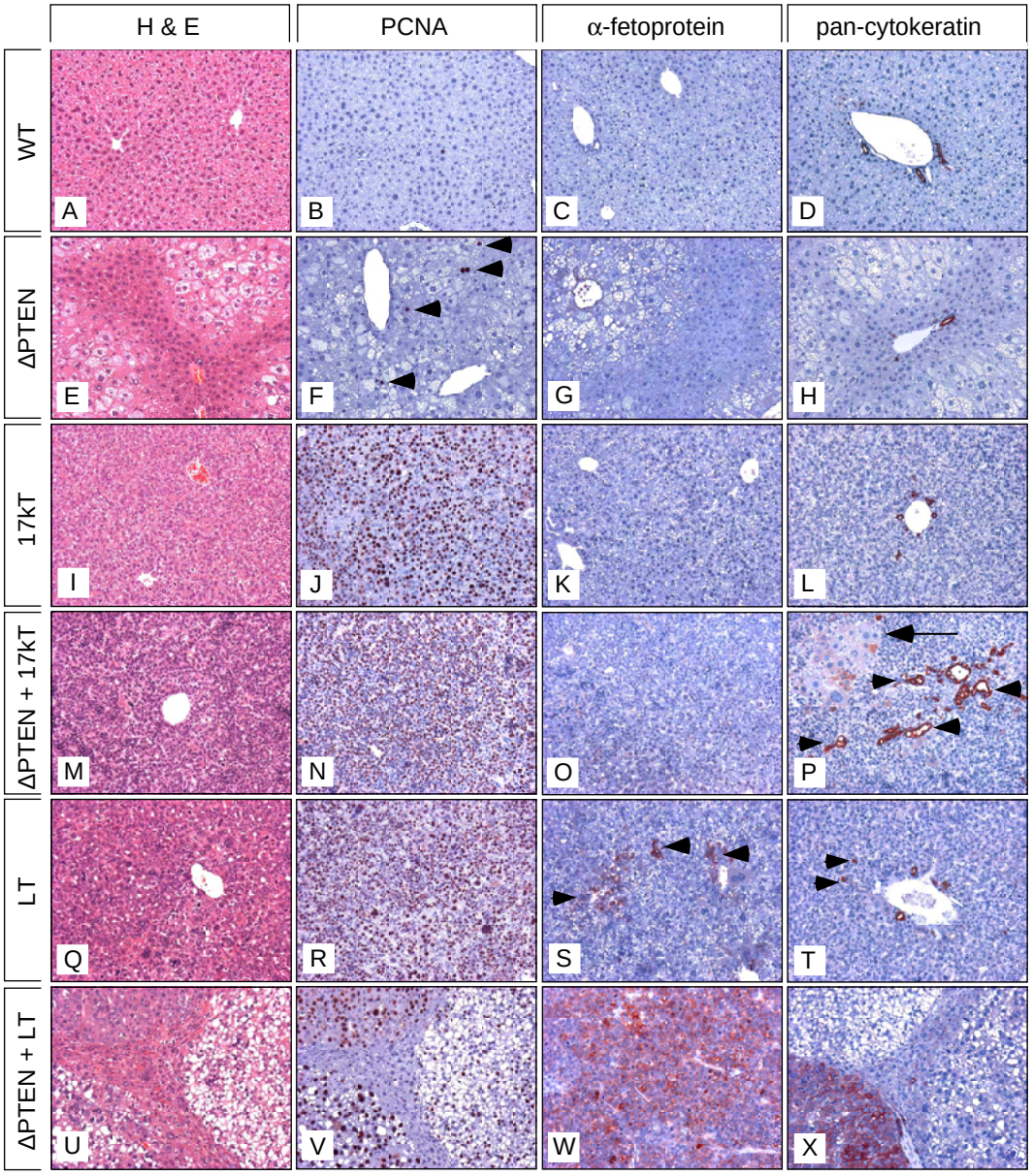

Figure S7. Loss of PTEN accelerates 17kT-induced hyperplasia and LT-dependent HCC by increasing hepatocyte proliferation, but not by further altering hepatocyte differentiation. Histopathology and IHC analysis of liver sections from WT, 17kT and LT mice provided with 10μg/ml dox for 4 weeks: H & E staining (A, E, I, M, Q and U) and IHC for PCNA (B, F, J, N, R, V),α-fetoprotein (C, G, K, O, S, W) and pan-cytokeratin (D, H, L, P, T, X). Note areas of focal lipid accumulation (E) and mild increase in number of PCNA-positive hepatocytes in PTEN-deficient livers (arrowheads) (F), uniform distribution of PCNA-positive hepatocytes in hyperplastic 17kT livers with (J) and without (N) PTEN, in hyperplastic LT livers with PTEN (R) and in nodules of tumor-laden LT mice without PTEN (V). afp-positive hepatocytes are absent from 17kT livers with (K) and without (O) PTEN, while small clusters of afp-positive hepatocytes can be seen in LT livers in the presence of PTEN (arrowheads) (S) and in nodules in the absence of PTEN (W). CK staining is restricted to epithelial cells of the bile ducts in WT (D) and PTEN-deficient (H) livers and in 17kT livers with PTEN (L). However, necrotic areas (arrow) and the aberrant expansion of CK-positive cells with ductular morphology (arrowheads) are evident in 17kT livers indicative of ongoing repair (P). After 4 weeks of dox, rare solitary CK-positive cells can be seen throughout the parenchyma in LT-expressing livers with PTEN (arrowheads)(T) and in a subset of nodules in LT-expressing livers without PTEN (X). AEC chromagen (red/brown); hematoxylin counterstain (blue). Magnification x 112.