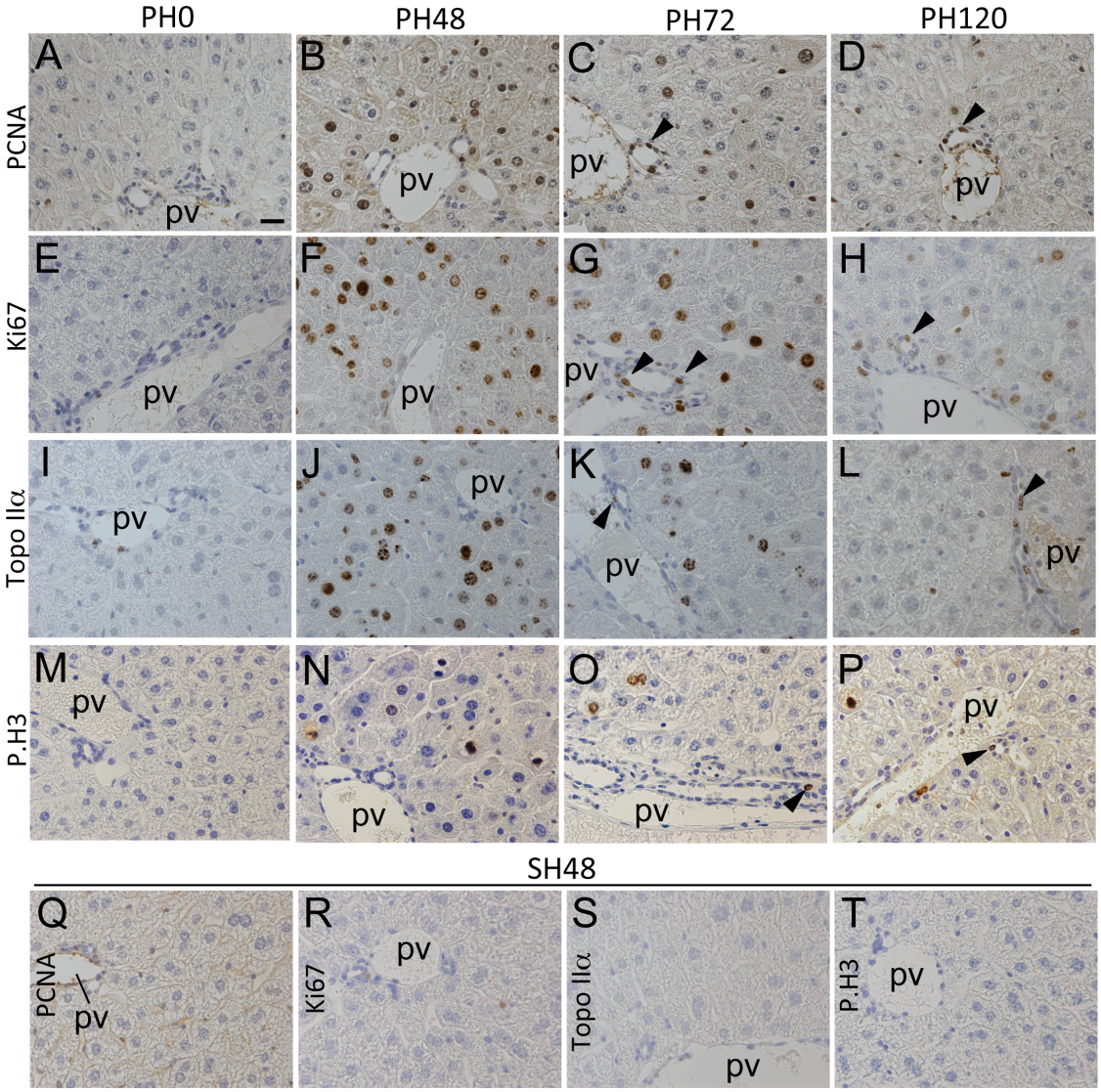
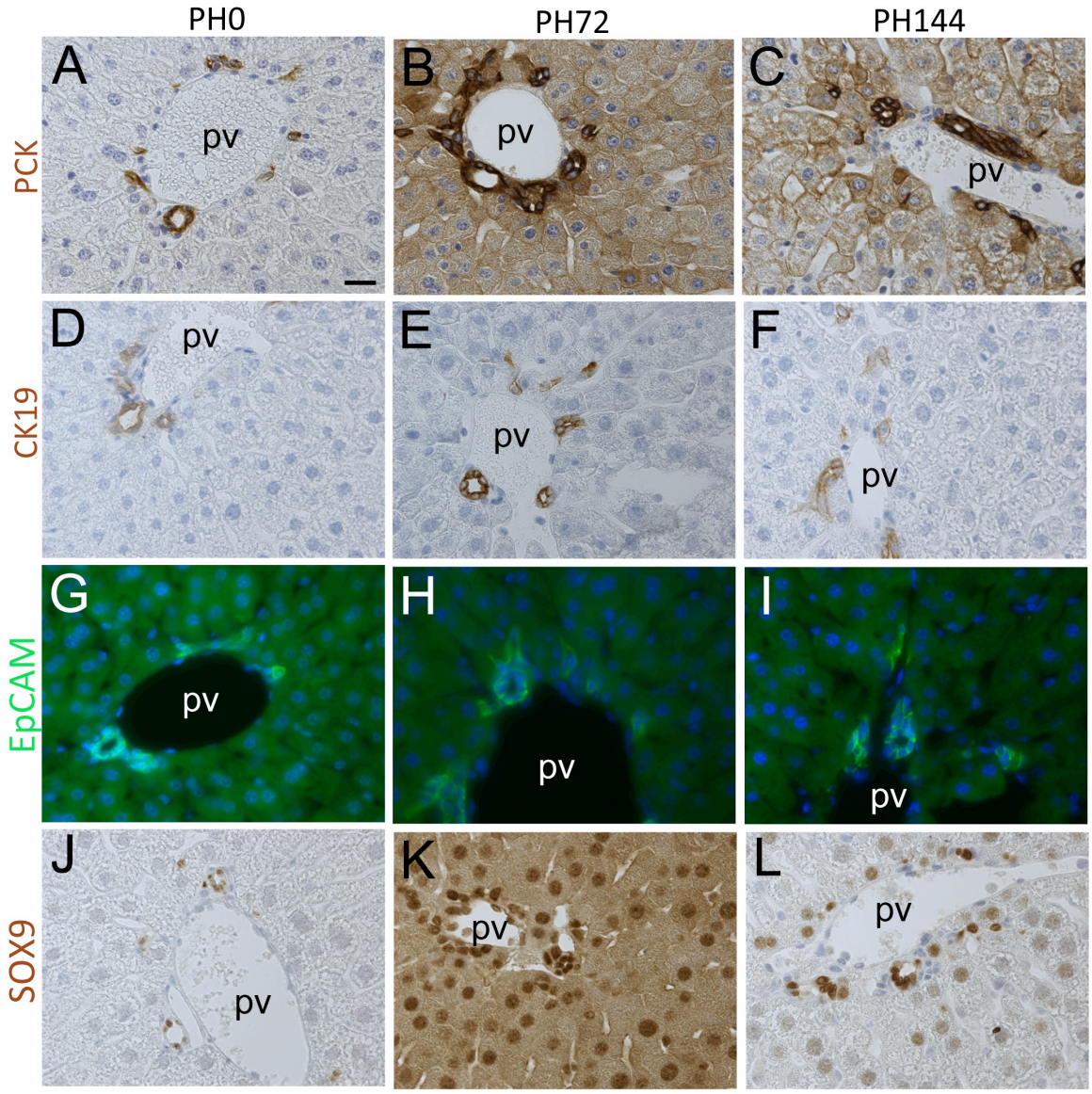


Supplementary Fig. 1. Immunohistochemical detection of PCNA, Ki67, topoisomerase IIα, and P.H3 during liver regeneration. After immunohistochemistry of each antigen, sections were counterstained with hematoxylin. A-D, Q, PCNA immunohistochemistry. E-H, R, Ki-67 immunohistochemistry. I-L, S, topoisomerase IIα immunohistochemistry. M-P, T, P.H3 immunohistochemistry. Both hepatocytes and biliary epithelial cells are negative for each antigen at PH0 and SH48 (A, E, I, M, Q-T). Many nuclei of hepatocytes are strongly positive for PCNA, Ki67 and topoisomerase IIα at PH48 (B, F, J), and their positive nuclei gradually decrease in number at PH72 and PH120 (C, D, G, H, K, L). Biliary cell nuclei are positive at PH72 and PH120 for PCNA, Ki67 and topoisomerase IIα (arrowheads; C, D, G, H, K, L). Mitotic figures of hepatocytes are positive for P.H3 at PH48 (N). A few nuclei of biliary epithelial cells are positive at PH72 and PH120 (arrowheads; O, P). pv, portal vein. Bar indicates 20 μm.



Supplementary Fig. 2. Immunohistochemical analyses of expression of cytokeratins, CK19, Ep-CAM and SOX9 during liver regeneration. After immunohistochemistry with peroxidase, sections were counterstained with hematoxylin (A-F, J-L). A-C, cytokeratins immunohistochemistry using polyclonal anti-calf keratin antiserum (PCK). D-F, CK19 immunohistochemistry. G-I, Ep-CAM immunofluorescence. J-L, SOX9 immunohistochemistry. Although polyclonal anti-cytokeratins antiserum reacts only with biliary epithelial cells at PH0 (A), the positive immunoreaction is detectable in hepatocytes at PH72 and PH144 (B, C). CK 19 and Ep-CAM are expressed in biliary epithelial cells and ductular cells throughout liver regeneration (D-I). SOX9 immunoreactivity is detectable in nuclei of biliary epithelial cells and ductular cells at PH0 (J), but is also observed in those of many hepatocytes at PH72 (K). At PH144, nuclei of periportal hepatocytes are still weakly positive in addition to those of biliary epithelial cells (L). pv, portal vein. Bar indicates 20 μm.