

**SUPPLEMENTARY FIG. S4.** Tumorigenicity by sorted CD34+ PLC. (**A**). The tumors were formed within 2 months after the transplantation of sorted CD34+ PLC into mice; H and E staining of human xenografts exhibited the typical histologic features of HLC, including polygonal cells with pleomorphic nuclei in cells with distinct cell borders; the increased N:C ratios; the presence of endothelial cells lining the sinusoids (single *black arrow*); the large foci of necrosis (double *black arrows*) and dilated blood vessels (single *white arrow*); the thick fibrous band (double *white arrows*); various components of hepatocytes such as lipids and other cytoplasmic constituents (*black head arrow*). (**B**) Human liver-specific proteins, hepatocyte-specific antigen-Hep Par1, CK19, alpha 1-antitrypsin (α1-AT), and liver cancer marker, EpCAM were expressed in the tissues of aforementioned human xenografts. Scale bar 100 μm.