



**SUPPLEMENTARY FIG. S3.** H and E staining of human xenografts. (A, B) H and E staining of human xenografts produced by the injection of the cloned CD34+ LCSC exhibits the typical histologic features of HLC; HLCs typically grow in a nested pattern with large tumor nodules separated by thick fibrous bands (A, double *white arrow*). The neoplastic cells in hepatocellular carcinomas (HCCs) can synthesize and store various components of hepatocytes, such as lipids (B, *black head arrow*), and other cytoplasmic constituents. Scale bar: 100  $\mu\text{m}$ .