

**Supplementary Figure 5.** HSC-specific JCAD depletion mitigated liver fibrosis especially in the perisinusoidal area. (A) Second harmonic generation/two-photon excitation fluorescence (SHG/TPEF) microscopy technology detection schematic diagram. (B) Heatmap for collagen fiber quantitation on a continuous scale by SHG/TPEF microscopy. (C) Zonal fibrosis quantitation, as a percentage change of fibrosis area, reveals marked fibrosis reduction in the perisinusoidal area (n=3). All datawere expressed as mean±SD. <sup>\*\*\*</sup>P<0.05, and 0.01 vs. WT-Sham mice; <sup>#</sup>P<0.05vs. WT-BDL mice.