



Figure 1 Multimodal imaging of mouse liver tissue. **A**, H&E staining imaging of central vein and portal vein region. **B**, Representative color overlay image in the same region on a serial frozen-hydrated section using $(\text{H}_2\text{O})_n$ -GCIB-SIMS at spatial resolution of 1.6 μm , Blue, PI 38:4; Magenta, Taurocholic acid ; Yellow, PS 40:6; Green, HEME B. **C**, Representative color overlay image of lanthanides antibodies from the region highlighted in the red box using C_{60} -SIMS at spatial resolution of 1 μm , Red, CD45 and CD11b; Yellow, GFAP; White, LYVE-1; Magenta, F4/80 and CD68; Cyan, EGFR and Na/KATPase; Green, GS; Blue, Nuclei. Scale bar 100 μm .