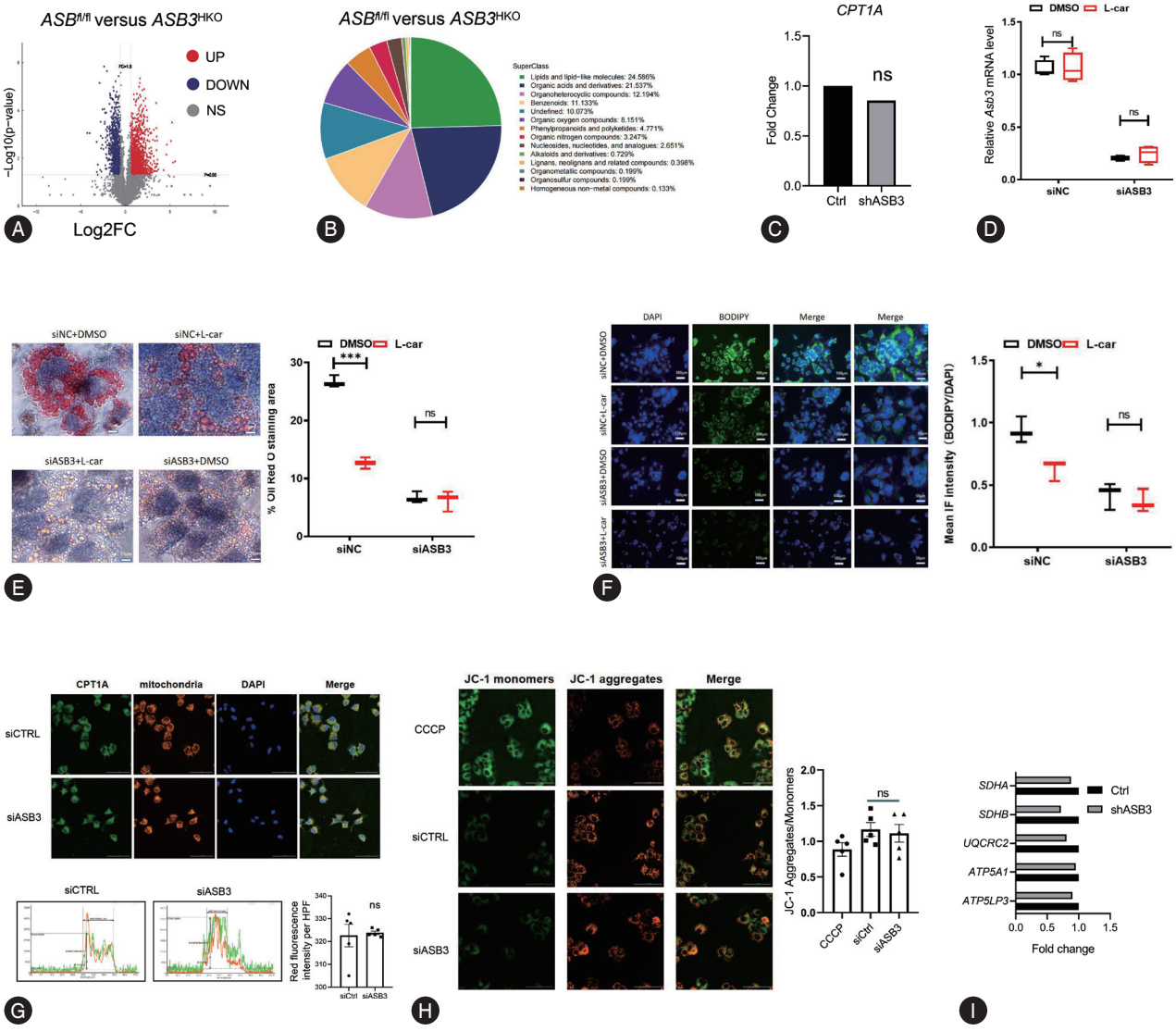

Supplementary Figure 4. Metabolomic profiling and mitochondrial function assay in ASB3L KO and ASB3L KO mice. (A, B) Volcano plots (A) and global component analysis (B) of liver metabolites in the liver tissue of ASB3fl/fl vs. ASB3HKO (n=6 per group). (C, D) Cpt1a mRNA level in ASB3 shRNA Huh7 cells (shASB3) vs. scramble shRNA Huh7 cells (Ctrl). Representation picture and quantification of Oil Red O staining (E) and BODIPY (F) in siNC- or siASB3-transfected hepatocytes treated with L-carnitine (n=3 per group). (G, H) CPT1A (green) and Mito-tracker CMXRos (red) colocalization (G), and JC-1 monomers (green) and aggregates (red) fluorescence ratio (H) in NC or ASB3 knockdown Huh7 cells exposed to 1 mM FFA for 8 hours. n=5–6. (I) genes associated with mitochondrial respiratory chain in NC Huh7 cells or shASB3 Huh7 cells exposed to 1 mM FFA for 8 hours. *P<0.05, ***P<0.001, ns, no significance.