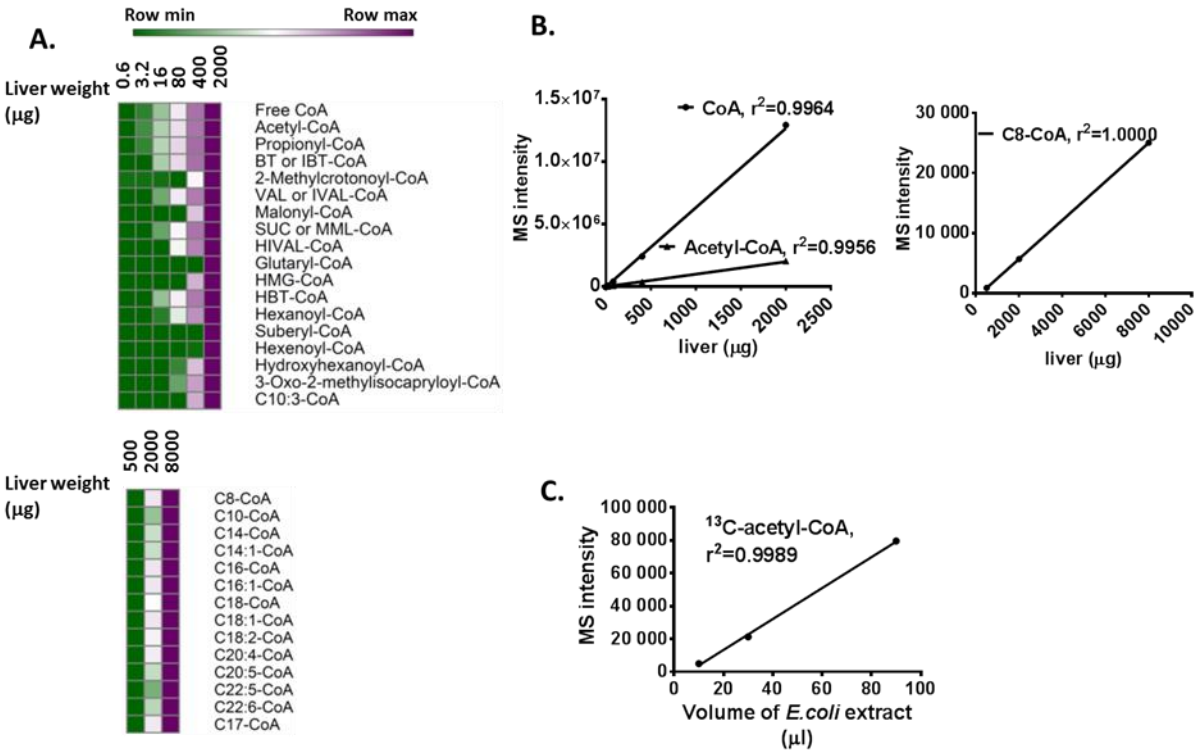

Supplementary Fig. 1. **Dynamic range of acyl-CoA quantitation.** For short chain acyl-CoA analysis, the liver extract was diluted 5 times with a dilution factor of 5 to give 6 samples equivalent to a CoA extract from 0.6, 3.2, 16, 80, 400 and 2000 µg of liver tissue injected on the column, and for medium to long chain acyl-CoA analysis, the liver extract was diluted 2 times with a dilution factor of 4 to give 3 samples equivalent to an extract from 500, 2000 and 8000 µg of liver tissue injected on the column. *A*, The relative MS intensity (log2) of acyl-CoA. *B,* The linear MS intensity response of free CoA, acetyl-CoA, and C8-CoA as the amount of liver tissue increases. *C*, Different amounts of ^{13}C labeled *E. coli* extract were spiked into the 4mg of liver extract, and the recovered ^{13}C labeled acetyl-CoA signal shows a strong positive correlation. R squared values were calculated based on weighted nonlinear fitting.