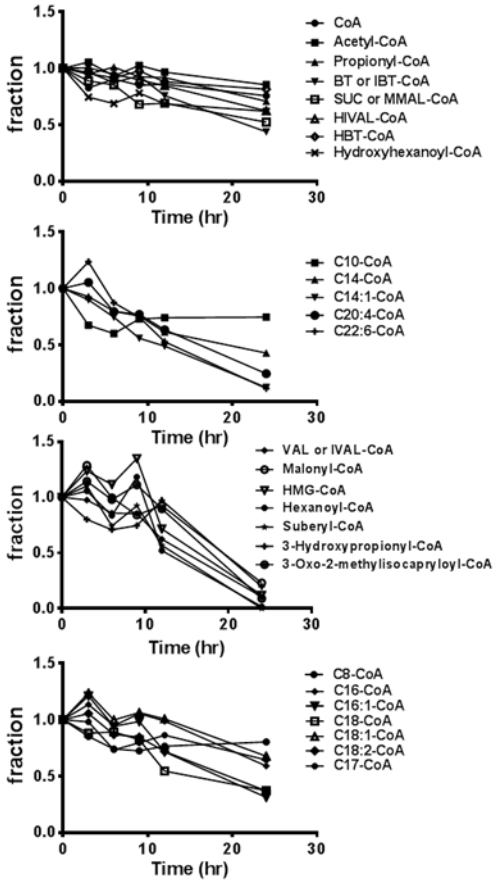
A.




B.

| Time (hr) | 0 | 3 | 6 | 9 | 12 | 24 |
|---|---|---|---|---|---|---|
| CoA | 1.00 | 0.83 | 0.90 | 0.85 | 0.86 | 0.76 |
| Acetyl-CoA | 1.00 | 1.05 | 0.93 | 1.03 | 0.97 | 0.85 |
| Propionyl-CoA | 1.00 | 0.95 | 1.01 | 0.92 | 0.92 | 0.71 |
| BT or IBT-CoA | 1.00 | 0.96 | 0.87 | 0.93 | 0.76 | 0.44 |
| VAL or IVAL-CoA | 1.00 | 0.98 | 0.86 | 0.85 | 0.62 | 0.11 |
| Malonyl-CoA | 1.00 | 1.29 | 1.00 | 0.84 | 0.92 | 0.23 |
| SUC or MMAL-CoA | 1.00 | 0.89 | 0.85 | 0.68 | 0.69 | 0.52 |
| 3HVAL or 3HIVAL-CoA | 1.00 | 1.00 | 0.95 | 0.90 | 0.85 | 0.62 |
| HMG-CoA | 1.00 | 1.24 | 1.12 | 1.35 | 0.72 | 0.12 |
| HBT-CoA | 1.00 | 0.95 | 0.92 | 0.98 | 0.88 | 0.81 |
| Hexanoyl-CoA | 1.00 | 1.06 | 0.84 | 1.18 | 0.52 | 0.02 |
| Suberyl-CoA | 1.00 | 1.10 | 0.74 | 0.92 | 0.57 | 0.00 |
| 3-Hydroxypropionyl-CoA | 1.00 | 0.80 | 0.71 | 0.75 | 0.97 | 0.20 |
| Hydroxyhexanoyl-CoA | 1.00 | 0.74 | 0.69 | 0.78 | 0.69 | 0.62 |
| 3-Oxo-2-methylisocapryloyl-CoA | 1.00 | 1.14 | 0.98 | 1.11 | 0.90 | 0.09 |
| C8-CoA | 1.00 | 0.85 | 0.74 | 0.72 | 0.77 | 0.80 |
| C10-CoA | 1.00 | 0.67 | 0.60 | 0.73 | 0.74 | 0.75 |
| C14-CoA | 1.00 | 0.93 | 0.80 | 0.76 | 0.61 | 0.43 |
| C14:1-CoA | 1.00 | 0.90 | 0.75 | 0.56 | 0.49 | 0.12 |
| C16-CoA | 1.00 | 1.13 | 0.95 | 1.05 | 0.99 | 0.59 |
| C16:1-CoA | 1.00 | 1.21 | 0.94 | 0.98 | 0.72 | 0.31 |
| C18-CoA | 1.00 | 0.88 | 0.89 | 0.82 | 0.55 | 0.37 |
| C18:1-CoA | 1.00 | 1.24 | 1.00 | 1.06 | 1.01 | 0.68 |
| C18:2-CoA | 1.00 | 1.05 | 0.87 | 0.85 | 0.72 | 0.37 |
| C20:4-CoA | 1.00 | 1.05 | 0.80 | 0.77 | 0.63 | 0.25 |
| C17-CoA | 1.00 | 0.98 | 0.73 | 0.80 | 0.86 | 0.64 |

Supplementary Fig. 2. **Degradation of acyl-CoA from liver extract in ammonium acetate buffer at 4 °C.** The liver extract were injected at 0, 3, 6, 9, 12 and 24 hrs after re-constitution of the dry pellet into ammonium acetate buffer (50 mM, pH=6.8) with (medium to long chain acyl-CoA) or without 20% acetonitrile (short chain acyl-CoA). *A*, The sample was kept in the autosampler at 4 °C. The MS signal is normalized to time 0. *B*, A table summary of remaining fractions at different time points.