Supplemental Data

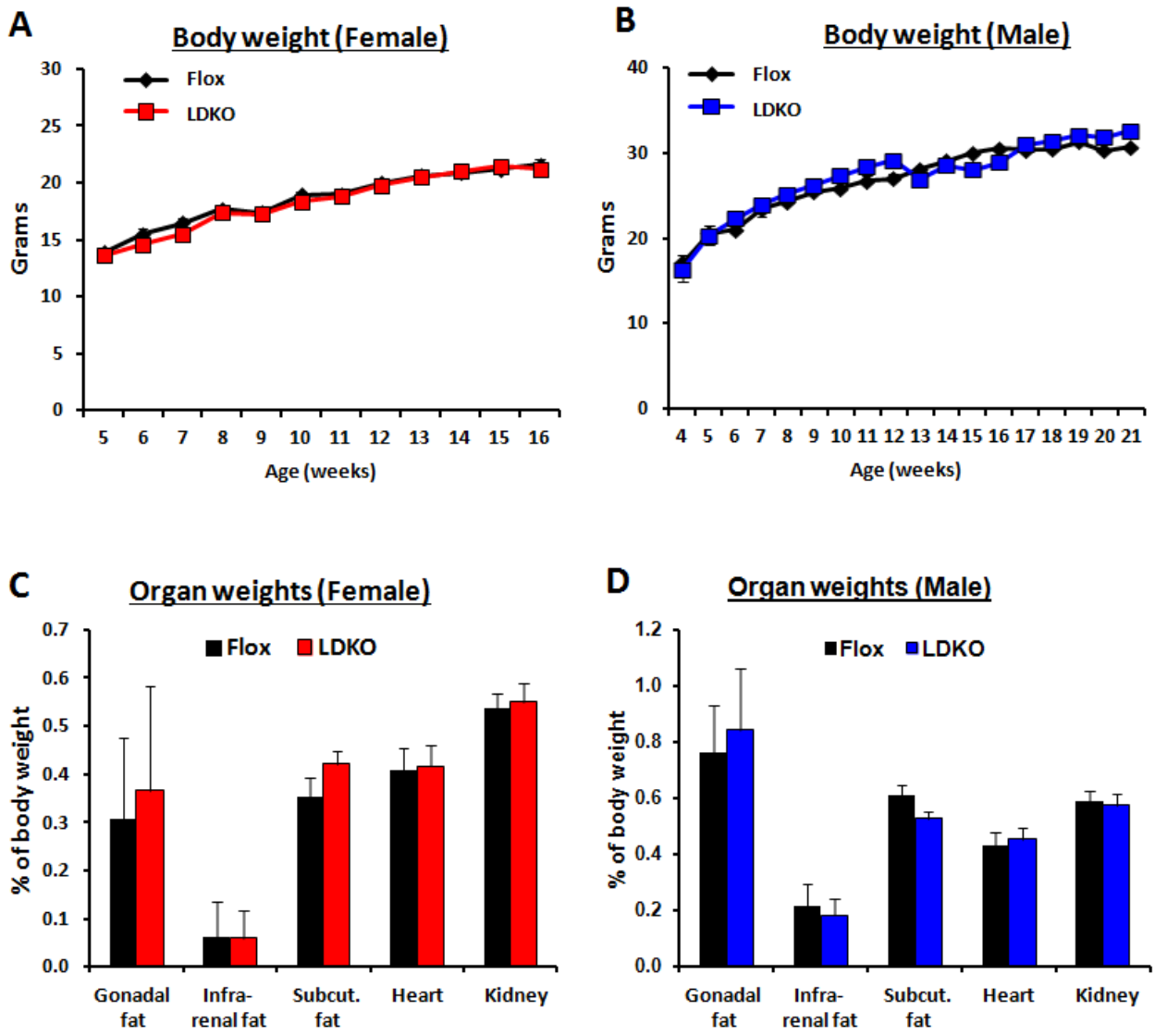

Figure S1. Body weight and organ mass. **(A and C)** Female body weight (n>6) and organ weights (n=5 flox, n=8 LDKO), and **(B and D)** male body weight (n>6) and organ weights (n=5 flox, n=9 LDKO). Data expressed as mean ± SEM.

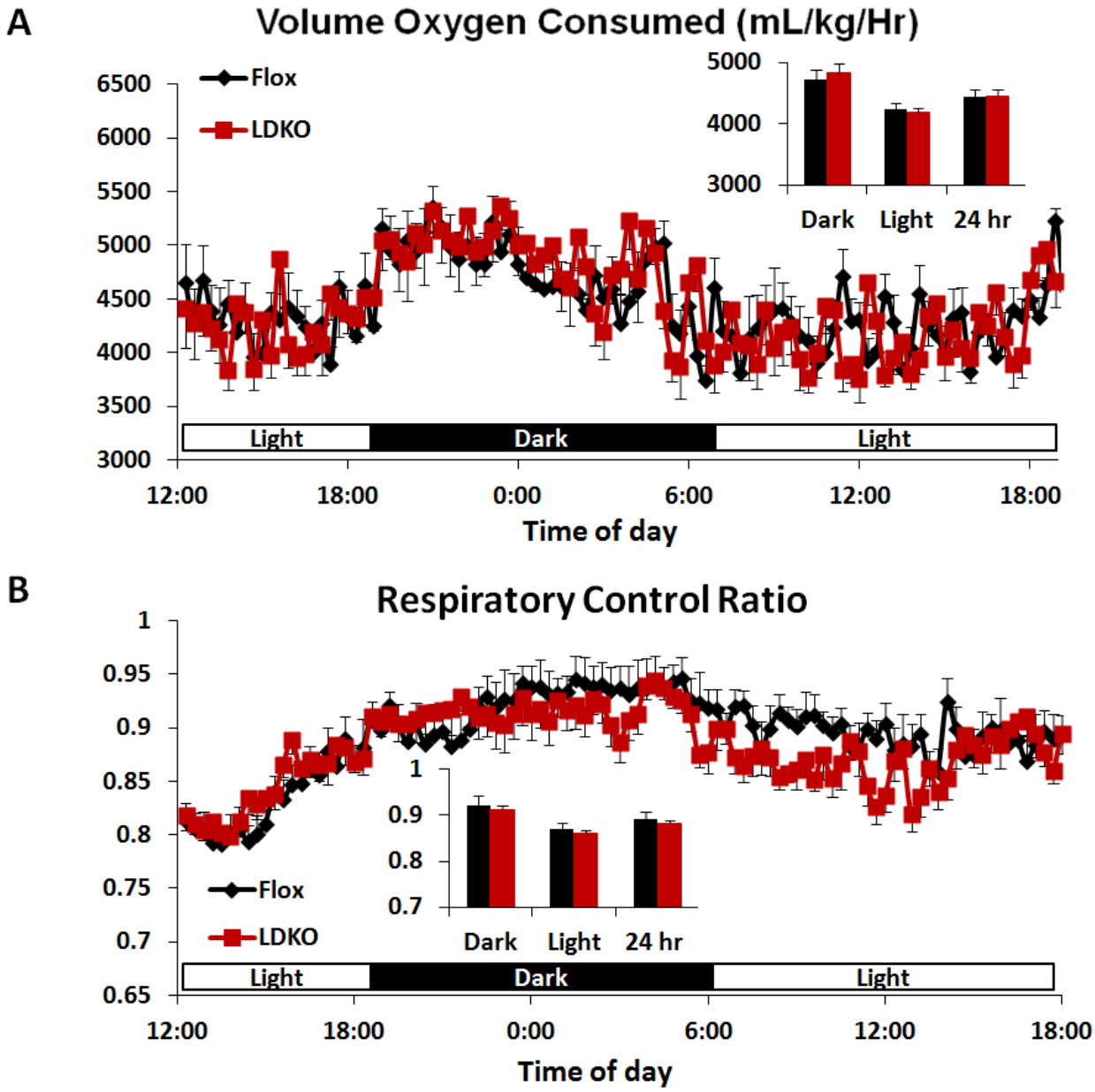

Figure S2. Diurnal respirometry. Indirect calorimetry was used to determine **(A)** VO_2 and **(B)** RER in 22 week-old female flox and LDKO mice at the fed state. Data expressed as mean ± SEM (n=8).

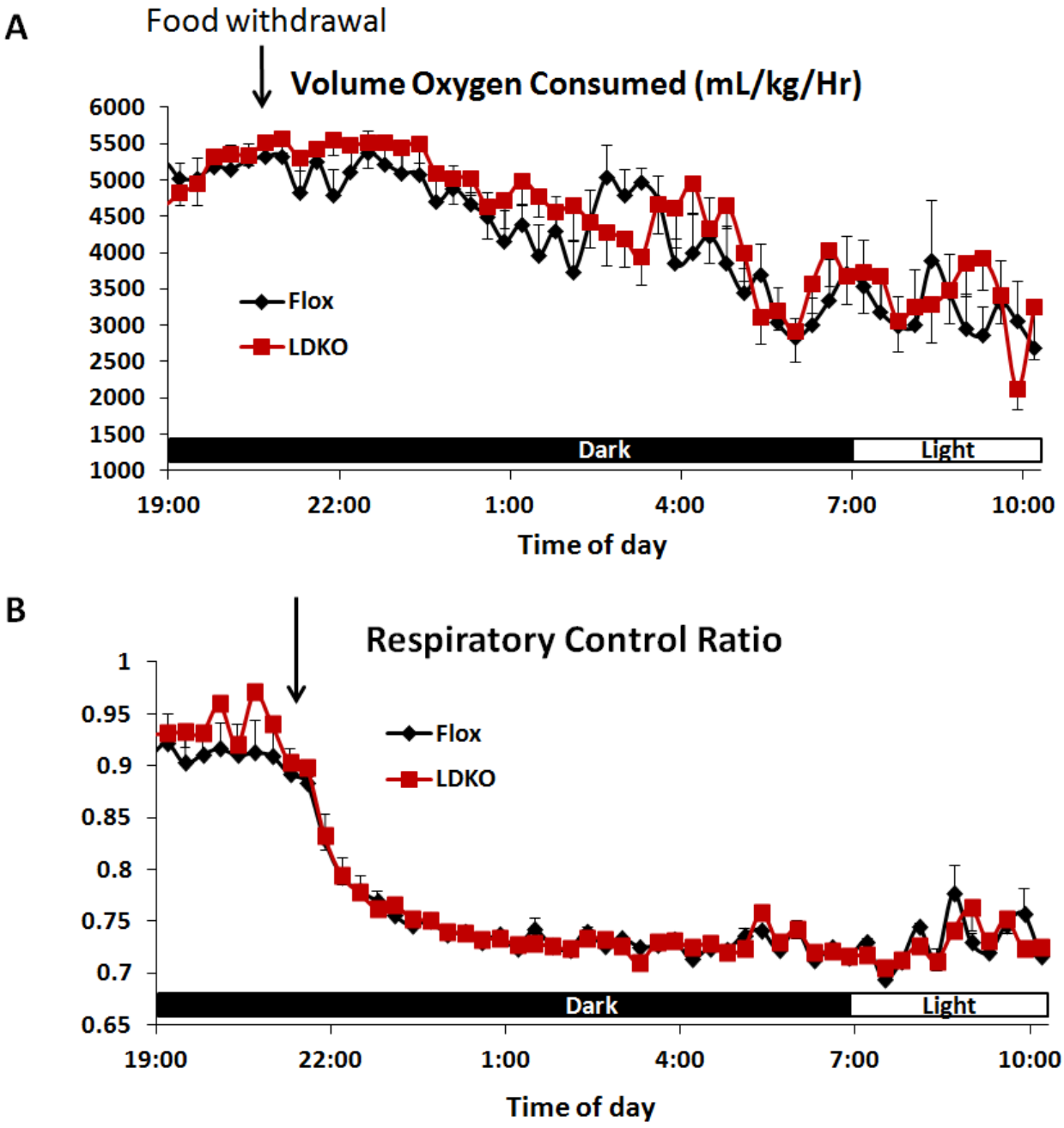

Figure S3. Respirometry changes in response to fasting. Indirect calorimetry measurements were used to determine **(A)** VO_2 and **(B)** RER in 22 week-old female flox and LDKO mice at the fasted state. Data expressed as mean ± SEM (n=4).

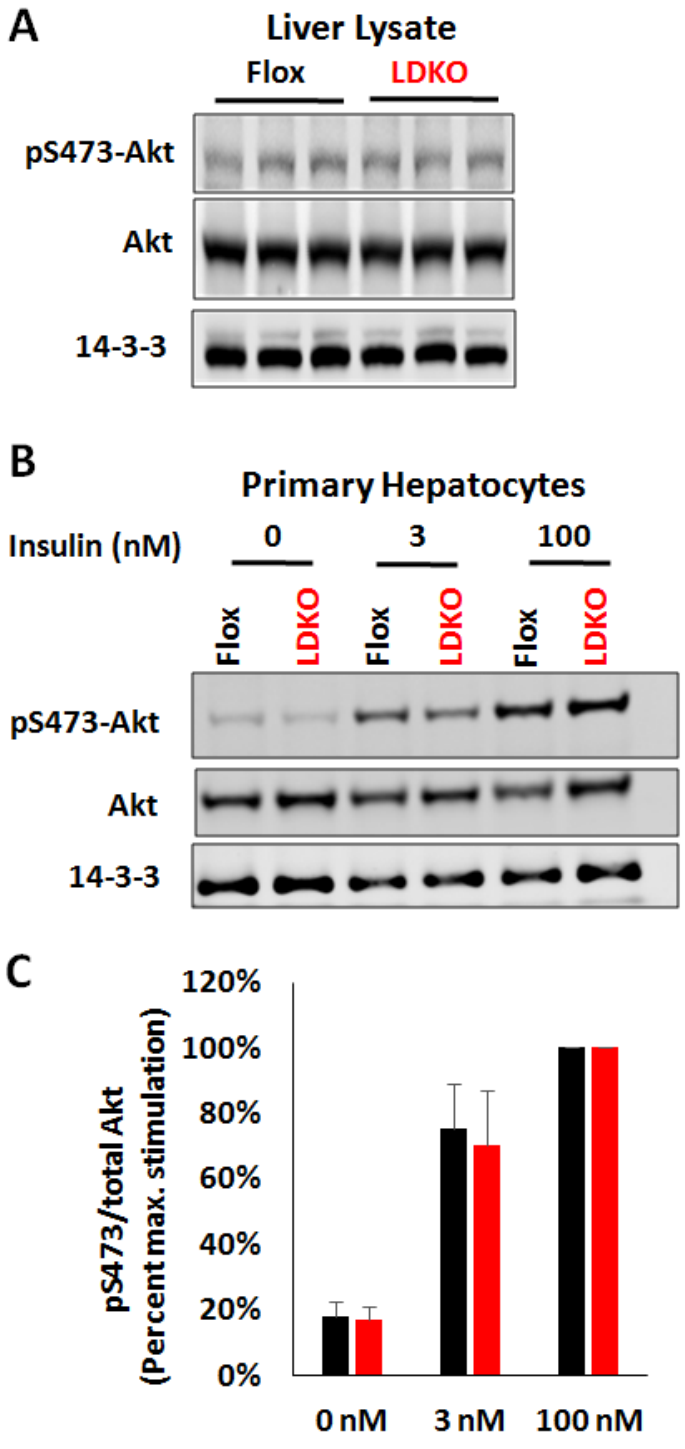

Figure S4. Insulin signaling through Akt. **(A)** Western blot analysis of Akt phosphorylation in liver tissue from LDKO and flox mice (n=3 mice). **(B)** Representative Western blot of whole cell lysates from primary hepatocytes stimulated with 3 or 100 nM insulin for 10 min. **(C)** Quantification of phospho-Akt/total Akt from (B) (n=4-5). Data expressed as mean ± SEM.

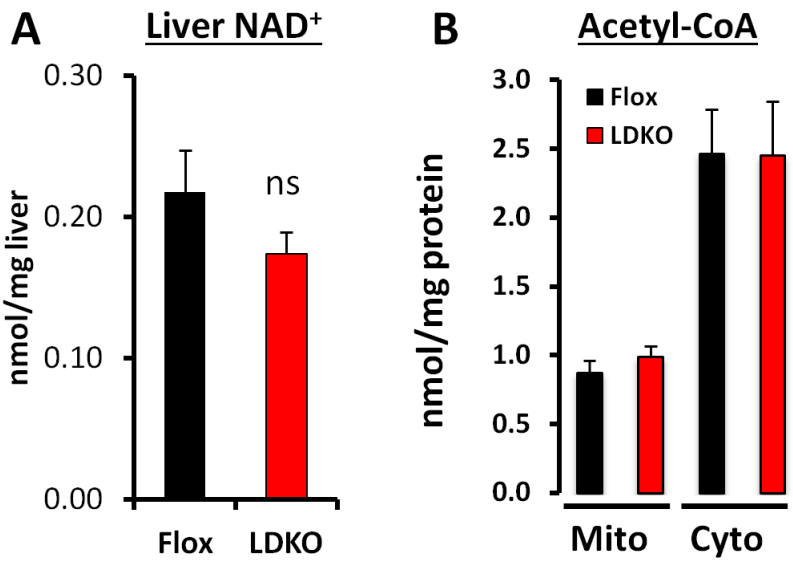

Figure S5. **(A)** NAD^+ level in liver lysates. **(B)** Acetyl-CoA levels in mitochondrial and cytoplasmic fractions of mouse liver (n=4). Data expressed as mean ± SEM. ns, non-significant.