

Figure S1. GCN5 regulates mitochondrial and fatty acid oxidation genes in primary skeletal muscle cells. (A) Expression of GCN5 decreases mitochondrial genes, (B) transcriptional regulators and (C) fatty acid utilization and in primary myotubes. Mouse primary myotubes were transduced with adenoviruses expressing either GFP or GCN5 for 71 hours. Total RNA was extracted and analyzed for the indicated gene expression using quantitative RT-PCR. Error bars represent s.e.m. Statistical analyses were performed using Student's *t*-test. * $P < 0.05$, ** $P < 0.005$.

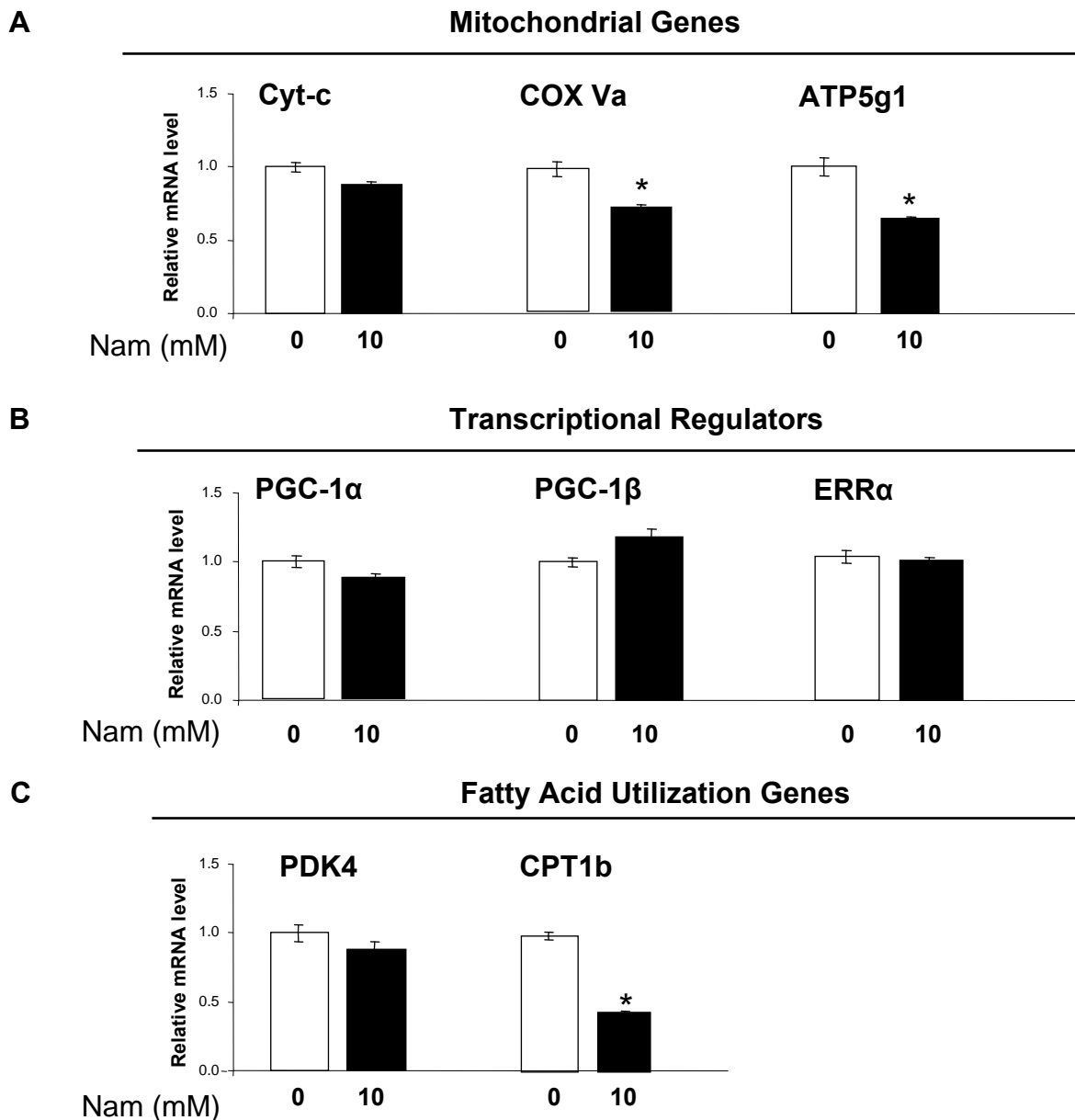


Figure S2. Nicotinamide regulates mitochondrial and fatty acid oxidation genes in primary skeletal muscle cells. (A) Effect of nicotinamide on mitochondrial genes, (B) transcriptional regulators and (C) fatty acid utilization in primary myotubes. Mouse primary myotubes were treated with nicotinamide for 12 hours and total RNA was extracted and analyzed for the indicated gene expression using quantitative RT-PCR. Error bars represent s.e.m. Statistical analyses were performed using Student's *t*-test. * $P < 0.05$, ** $P < 0.005$.

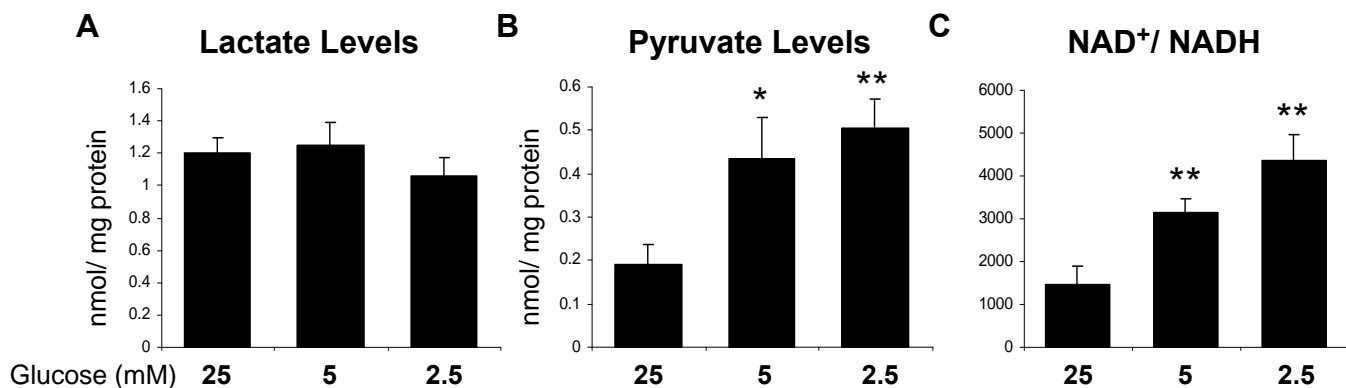


Figure S3. Low glucose increases the NAD⁺/NADH ratio in skeletal muscle cells. (A) Effect of glucose concentrations on lactate levels, (B) pyruvate levels and (C) NAD⁺/NADH ratios. C₂C₁₂ myotubes were incubated with different concentrations of glucose as described in Fig. 6. Cells were harvested and deproteinized extracts were used to determine lactate and pyruvate concentrations as described in Materials and Methods. Error bars represent s.e.m. Statistical analyses were performed using Student's *t*-test. * $P < 0.05$, ** $P < 0.005$, 2.5 and 5 versus 25 mM Glucose.