

Table S4. Immunoblot quantitation of pAMPK Thr¹⁷², PAS at 160 kDa, pCaMKII Thr²⁸⁶, pACC Ser²¹², pIRS1 Tyr⁶¹², pAkt Thr³⁰⁸, and pAkt Ser⁴⁷³ abundance in tibialis anterior muscles one week following intramuscular injection of empty vector control (Empty) or inactive Myo1c (K111A-Myo1c) DNA constructs. Mice were anesthetized and muscles were stimulated to contract in situ for 15 min (Ctx) or sham operated (Basal) (Upper panel). Additional mice were injected with maximal insulin (16.6 U/kg insulin) and glucose to prevent hypoglycemia (Ins+Glu) or saline (Saline), and 15 min after injection, muscles were harvested to assess proteins abundance (Lower panel). Protein abundance is expressed relative to the average of Empty vector control (Basal or Saline). Data are means \pm S.E., * P < 0.05, ** P < 0.01 vs. Basal or Saline. N = 10-11 / group.

Immunoblot	Empty vector		K111A-Myo1c	
	Basal	Ctx	Basal	Ctx
pAMPK Thr ¹⁷²	1.00 \pm 0.05	2.03 \pm 0.17 **	1.06 \pm 0.07	2.32 \pm 0.29 **
PAS at 160 kDa	1.00 \pm 0.14	1.84 \pm 0.23 *	0.83 \pm 0.13	2.23 \pm 0.34 **
pCaMKII Thr ²⁸⁶	1.00 \pm 0.06	1.21 \pm 0.09	0.95 \pm 0.06	1.19 \pm 0.09 *
pACC Ser ²¹²	1.00 \pm 0.08	2.20 \pm 0.28 **	0.90 \pm 0.08	2.43 \pm 0.20 **
	Saline	Ins + Glu	Saline	Ins + Glu
pIRS1 Tyr ⁶¹²	1.00 \pm 0.03	3.09 \pm 0.17 **	1.09 \pm 0.06	3.26 \pm 0.33 **
pAkt Thr ³⁰⁸	1.00 \pm 0.06	7.19 \pm 0.39 **	1.00 \pm 0.05	6.79 \pm 0.58 **
pAkt Ser ⁴⁷³	1.00 \pm 0.12	8.71 \pm 0.51 **	0.96 \pm 0.06	8.30 \pm 0.53 **
PAS at 160 kDa	1.00 \pm 0.11	3.83 \pm 0.74 **	1.52 \pm 0.16	3.61 \pm 0.39 **