Supplemental table 1: Antibodies used for immunoblotting

Antibodies		**Provider**
Primary antibodies	***Dilutions***	
IRS-1 (H-165)	2 µg/500 µg of protein for IP	Santa Cruz Biotechnology (Santa Cruz, CA, USA)
IRS-2 (A-19)	2 µg/500 µg of protein for IP	Santa Cruz Biotechnology
Total Akt	2 µg/500 µg of protein for IP and 1:1000 for WB	Santa Cruz Biotechnology
actin	1:200	Santa Cruz Biotechnology
PGC-1	1:200	Santa Cruz Biotechnology
CRTC2	1:200	Santa Cruz Biotechnology
histone H1	1:200	Santa Cruz Biotechnology
IRS-1	1:1000	Millipore (Nepean, ON, Canada)
IRS-2	1:1000	Millipore
phospho-tyrosine (4G10)	1:5000	Millipore
S6 ribosomal protein	1:1000	Cell Signaling Technology (Beverly, MA, USA)
phospho-S6 ribosomal protein (Ser240/244)	1:5000	Cell Signaling Technology
phospho-Akt (Ser473)	1:1000	Cell Signaling Technology
phospho-Akt (Thr308)	1:1000	Cell Signaling Technology
CREB	1:1000	Cell Signaling Technology
Foxo1	1:1000	Cell Signaling Technology
phospho-GSK-3 (Ser21/9)	1:1000	Cell Signaling Technology
Secondary Antibodies		
anti-goat immunoglobulin G conjugated to horseradish peroxidase	1:10000	Santa Cruz Biotechnology
anti-mouse immunoglobulin G conjugated to horseradish peroxidase	1:10000	Cedarlane (Burlington, ON, Canada)
anti-rabbit immunoglobulin G conjugated to horseradish peroxidase	1:20000	Cedarlane

Supplemental table 2: Primers Sequences for Real-Time PCR

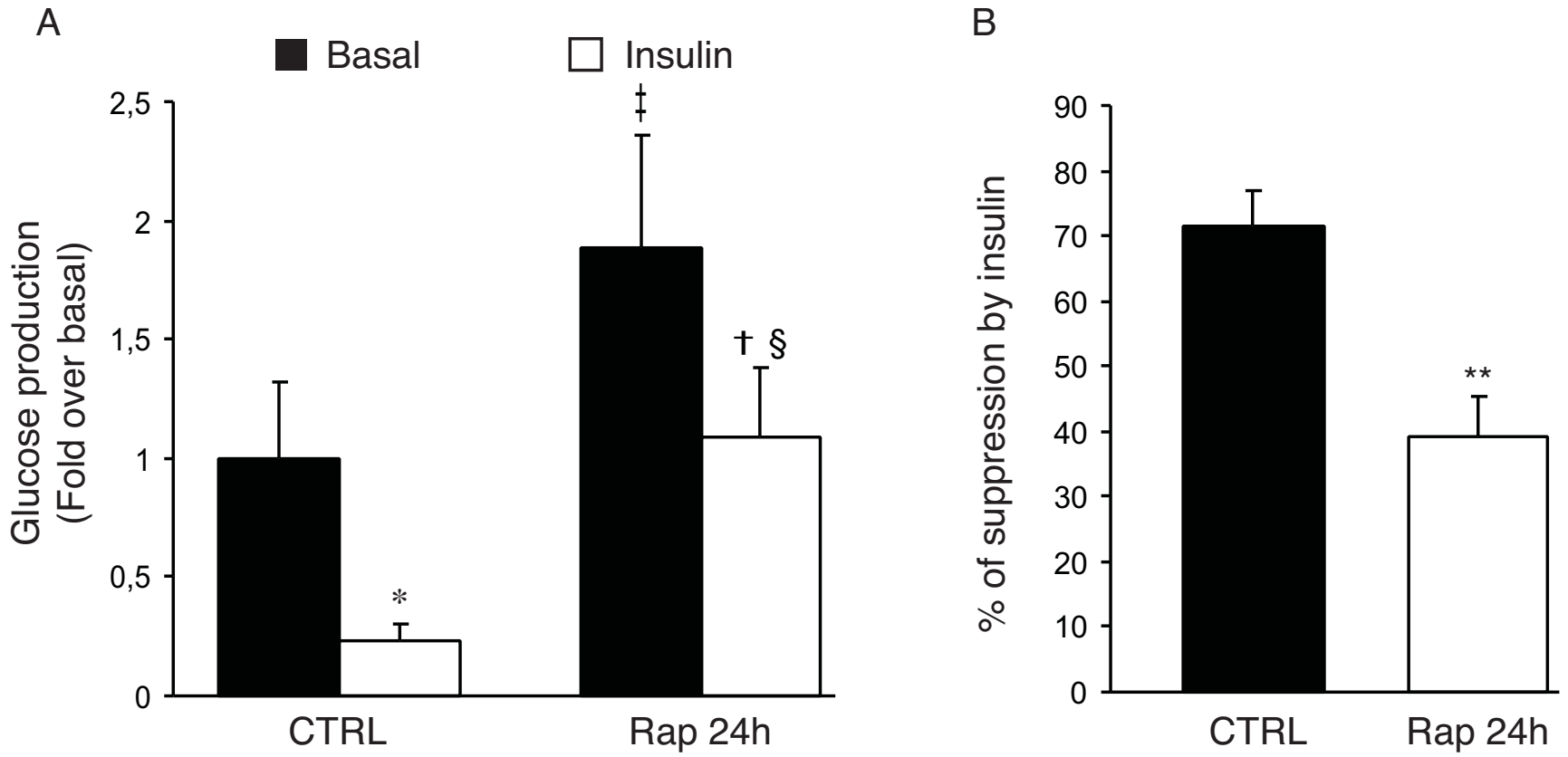
Rat	Forward	Reverse
LPL	AACCTTTGTGGTGATCCATGGA	CGAAATCCGCATCATCAGGA
MGL	CTAATTTCACCTCTGATCCT	AGGACAGAGTTGGTCACTTC
FAT/CD36	AGTAATCTCAAATAACTGTACGTCG	CTGCAAGCACAGTATGAAATCATAA
FATP1	TCTGCGGCGCTTCGATGGCTAT	TTGTGGGGGTCTGCAATGGC
HSL	CCTGCTGACCATCAACCGAC	CCTCGATCTCCGTGATATTCCAGA
ATGL	CACTTTAGCTCCAAGGATGA	TGGTTCAGTAGGCCATTCCT
PPARγ1	ATATAAGGGACTCGAGGAGG	TCAGCAACCATTGGGTCAG
PPARγ2	GGTGAAACTCTGGGAGATCC	TGAGGGAGTTTGAAGAGTCTTC
PEPCK	TGGGTGATGACATTGCCTGG	TGGGTGATGACATTGCCTGG
G6Pase	CGACTCGCTACCTCCAAGTG	TCCCTGGTCCAGTCTCACAG
Lipin1	AGCAGCCTCTTCTCCGCCTT	GCTTCTCTTCAGCAAGGGGA
PGC-1α	TCCTGTTACTATTATGAATCAAGCC	TCCTGTTACTATTATGAATCAAGCC
36B4	TAAAGACTGGAGACAAGGTG	GTGTAGTCAGTCTCCACAG

Supplemental table 3: Effect of a 15-day rapamycin treatment on weight of various tissues.

	Control	***Rapamycin***
Absolute weight (g)		
Heart	0.882 ± 0.014	0.692 ± 0.017 ***
Liver	10.12 ± 0.320	7.70 ± 0.292 ***
EDL	0.139 ± 0.002	0.112 ± 0.004 ***
Soleus	0.133 ± 0.004	0.111 ± 0.005 **
Epididymal fat	2.217 ± 0.182	1.363 ± 0.102 *
Retroperitoneal fat	2.484 ± 0.374	0.836 ± 0.079 ***
Inguinal fat	3.720 ± 0.469	1.612 ± 0.058 ***
Brown fat	0.270 ± 0.023	0.173 ± 0.013 **
Relative tissue weight		
Heart	0.291 ± 0.005	0.306 ± 0.007
Liver	3.339 ± 0.072	3.411 ± 0.131
EDL	0.046 ± 0.001	0.049 ± 0.001
Soleus	0.044 ± 0.001	0.049 ± 0.003
Epididymal fat	0.742 ± 0.052	0.621 ± 0.049
Retroperitoneal fat	0.828 ± 0.111	0.382 ± 0.040 **
Inguinal fat	1.235 ± 0.142	0.732 ± 0.019 *
Brown fat	0.090 ± 0.006	0.078 ± 0.006

Weight data are average ± SEM (n=8 for control, n=6 for rapamycin). *P≤0.05, **P≤0.01, ***P≤0.001 versus control.

Supplemental Figure 1- Chronic rapamycin treatment increases glucose production in FAO hepatoma cells. FAO cells were treated with vehicle or rapamycin (25 nM) for 24h. A) Cells were serum deprived overnight with or without insulin (100 nM) and glucose production was assessed and expressed as fold over basal. B) Glucose production expressed as % of suppression by insulin. N = 5 independent experiments. *P≤0.05 for CTRL/Basal vs CTRL/Insulin, †P≤0.05 for RAP/Basal vs RAP/Insulin, ‡P≤0.05 for CTRL/Basal vs RAP/Basal and §P≤0.05 for CTRL/Insulin vs RAP/Insulin.



Supplemental Figure 2- Two days of rapamycin treatment increase hepatic glucose production in rats. Sprague-Dawley rats were treated with vehicle or rapamycin (2 mg/kg/day) for 2 days. Plasma glucose levels measured during a pyruvate tolerance test (PTT) on rats fasted for 12 h followed by 3 h of refeeding. The insert depicts the area under the curve (AUC) for each group. N = 5-6 animals. Black squares: CTRL; White squares: RAP. *P≤0.05.