

improved by mTORC1 inhibition with PRAS40. **(B)** Glucose uptake measured is increased in PRAS40 NRCMS. Increase in Glucose Uptake is blocked by Akt inhibition (10 μ M. Akt V Inhibitor) *p<0.05 vs Control. #p<0.05 vs Control. Error bars indicate means \pm sem. **(C)** Immunoblot confirming succesful pharmacological Akt inhibition

Supplemental Table 1

18s Forward	5'-CGAGCCGCCTGGATACC-3'
18s Reverse	5'-CATGGCCTCAGTTCCGAAAA-3'
ANP Forward	5'-TGGGTCTTGTTAGGGCTCAAACCT-3'
ANP Reverse	5'-TGAAACTCAAGGGACACCCATCGT-3'
BNP Forward	5'-AATGGCCCAGAGACAGCTCTTGAA-3'
BNP Reverse	5'-CTTGTGCCCAAAGCAGCTTGAGAT-3'
mPRAS40 Forward	5'-CGGAGAGCACAGACGACGGC-3'
mPRAS40 Reverse	5'-GCACCGACACGGGCAGAGAC-3'
ATP Synthase Beta 1 For	CGTGAGGGCAATGATTTATACCAT
ATP Synthase Beta 1 Rev	TCCTGGTCTCTGAAGTATTCAGCAA
Cytochrome C For	ACCAAATCTCCACGGTCTGTT
Cytochrome C Rev	GGATTCTCCAAATACTCCATCAG
Acadm For	GGAAATGATCAACAAAAAAGAAGTATTT
Acadm Rev	ATGGCCGCCACATCAGA
Cpt1b For	TCTAGGCAATGCCGTTTAC
Cpt1b Rev	GAGCACATGGGCACCATAC
Acadv1 For	ATCTCTGCCAGCGACTTT
Acadv1 Rev	TTCTGGCTTGTCAGAACTG
CPT2 For	AGTATCTGCAGCACAGCATCGTA
CPT2 Rev	GGCTTCTGTGCACTGAGGTATCT

HK2 For	TGCTACAGGTCCGAGCCA
HK2 Rev	ATGCTGTCGTCACACGTGC
PKD4 For	CCGCTGTCCATGAAGCA
PKD4 Rev	GCAGAAAAGCAAAGGACGTT
Acss2 For	CTGTGGAGGAGCCACGGGAGTT
Acss2 Rev	TGGAGGAATGGGCCAGGGCAT
PFK For	CGTTGAGGTAGGAATACTTCTGCA
PFK Rev	ACCTCTTCCGAAAGGAGTGGA
SC5D For	ccaatggctggattcatct
SC5D Rev	gtccacagggtgaaaagcat
MVK For	gggacgatgtcttcttgaa
MVK Rev	gaacttggtcagcctgcttc
UCP3 For	TTTGGAGCTGGCTTCTGTG
UCP3 Rev	AAGGCCCTCTTCAGTTGCTC
MTE1 For	GACCTCCCCAAGAGCATAGA
MTE Rev	TCCTTGTAGGAGATGGTGTTC
IDH2 For	CCCTATTGCCAGCATCTTTG
IDH2 Rev	TGTCCAGGAAGTCTGTGGTG
PDHA1 For	GGGACGTCTGTTGAGAGAGC
PDHA1 Rev	TGTGTCCATGGTAGCGGTAA
PFKFB2 For	CGGGAATGGATCTACTACTGG
PFKFB2 Rev	GGAGAGCAAAGTGAGGGA TG
Glut1 For	GTCCTGCTCGTATTGCTGTG
Glut1 Rev	GCCTTTGGTCTCAGGGACTT
PPARα For	TCACAAGTGCCTGTCTGTGCG
PPARα Rev	CAGGTAGGCTTCGTGGATTC
CD36 For	GCCAAGCTATTGCGACATGA
CD 36 Rev	AAGGCATTGGCTGGAAGAAC

Supplemental Table 2

Application	Antibody	Dilution	Amplify	Company
Immunoblot	Actin	1:2000	no	Santa Cruz (sc-81178)
Immunoblot	p246PRAS40	1:1000	no	CST (#2640)