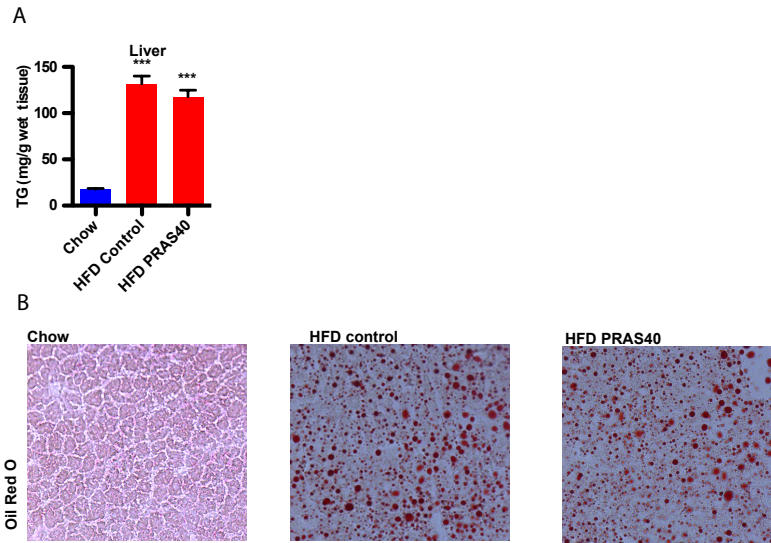


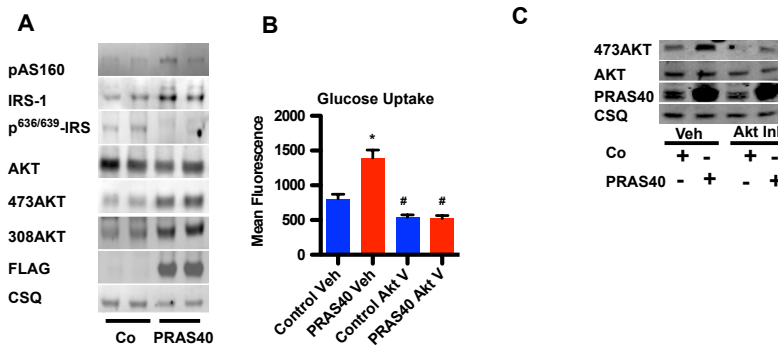
control *db/db*). CSA in control and PRAS40 mice (\*\**p*<0.01 versus control het; ##*p*<0.01 versus control *db/db*). (C) *Nppa* and *Nppb* levels (\*\**p*<0.01 versus control het; ##*p*<0.01 versus control *db/db*). (D) Immunoblots of whole heart lysates. Barplots depicting quantitation of Akt phosphorylation. \**p*<0.05 versus control. (E) Body weight and glucose levels in the indicated groups \*\*\**p*<0.01 vs hets. (F) Mason-Trichrome staining of liver sections in the indicated groups. Scale bar 150µm (G) Blood insulin levels in the indicated groups. \*\*\**p*<0.01 vs controls. n=5 in each group.

### Supporting Figure 4



**Supporting Figure 4.** (A) TG content in the liver \*\*\**p*<0.01 versus control chow. (B) Lipid accumulation evidenced by Oil Red O staining. Scale bar 150µm.

### Supporting Figure 5



**Supporting Figure 5.** (A) IRS-1 degradation is prevented and Akt phosphorylation is

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 $\mu$ 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**

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