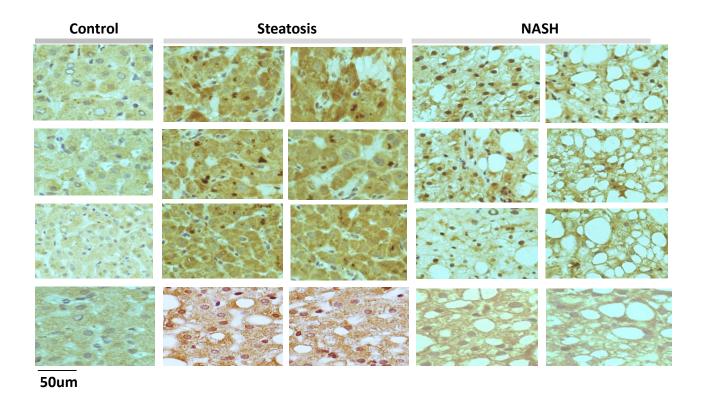
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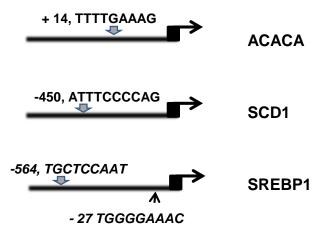
## **Supplemental Information**

Elimination of Age-Associated Hepatic Steatosis and Correction of Aging Phenotype by Inhibition of cdk4-C/EBP $\alpha$ -p300 Axis

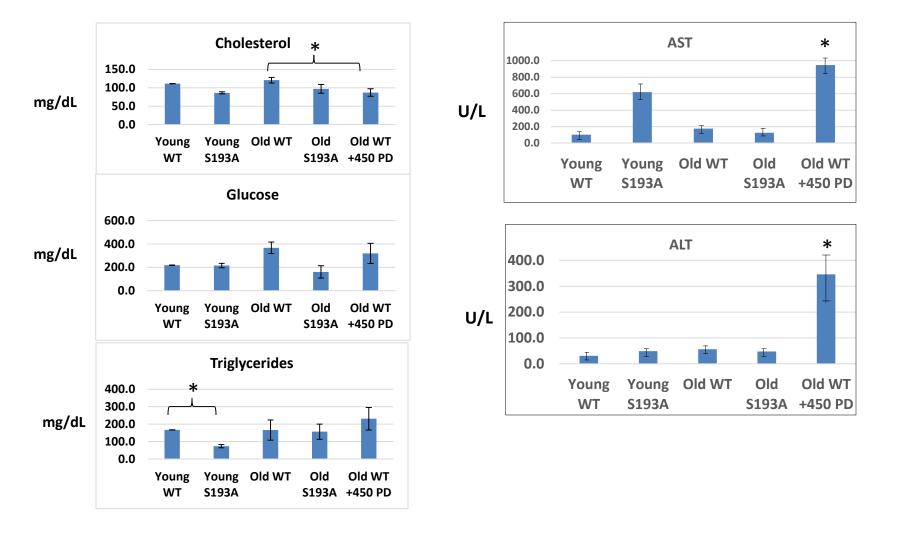
Phuong Nguyen, Leila Valanejad, Ashley Cast, Mary Wright, Jose M. Garcia, Hashem B. El-Serag, Rebekah Karns, and Nikolai A. Timchenko



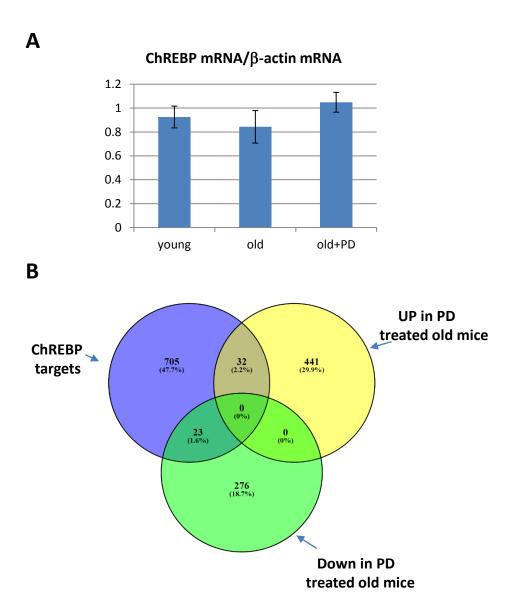
**Figure S1**. cdk4 staining of livers of additional patients with steatosis and NASH. This figure is related to Figure 1.



**Figure S2**. Locations and sequences of C/EBP $\alpha$  consensuses within the ACACA, SCD1 and SREBP1 promoters. This figure is related to Figure 3.

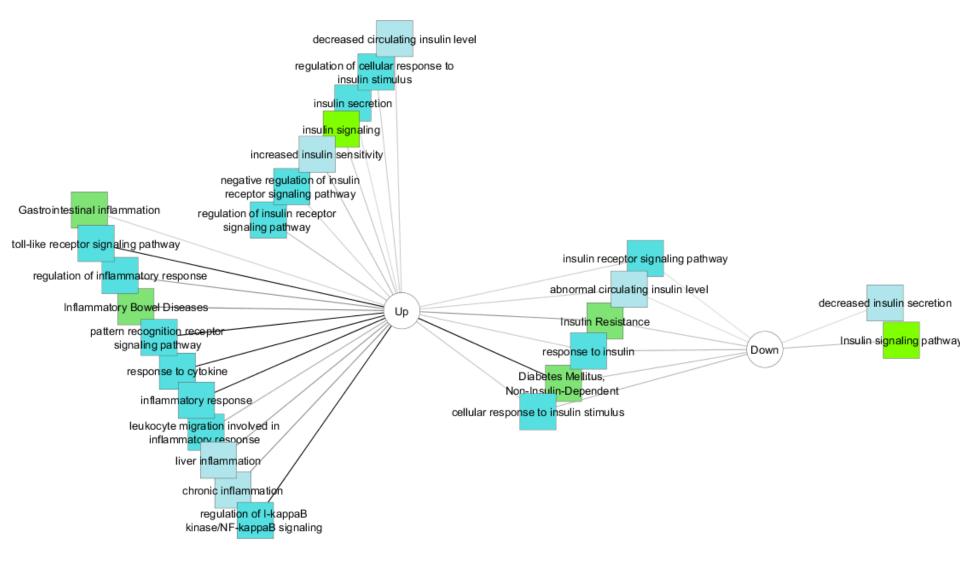


**Figure S3.** Levels of cholesterol, glucose, triglycerides and ALT and AST in the blood of young, old WT and S193A mice and in the blood of WT mice treated with high dose of PD-0332991 for two weeks. This figure is related to Figure 4.



**Figure S4.** Expression of ChREBP mRNA (A) and its down-stream targets (B) in old mice treated with cdk4 inhibitor PD-0332991. **A)** Levels on ChREBP mRNA were determined using QRT-PCR and calculated as ratios to b-actin mRNA. Although there are some differences, they are not statistically significant. **B)** Bio-Statistical analysis of expression of targets of ChREBP determined in RNA-Seq analysis.

2.2% of targets are up-regulated and 1.6% are down-regulated in livers of old mice treated with cdk4 inhibitor PD-0332991. This figure is related to Figure 7.



**Figure S5.** Alterations of genes involved in insulin resistance and inflammation in old mice treated with inhibitor of cdk4 PD-0332991. Bio-statistical analyses of differentially expressed genes determined by RNA-Seq analysis. Up and down-regulated pathways are shown. This figure is related to Figure 7.