

and intracellular signaling in pancreatic beta-cell lines. *J Biol Chem.* 2007; 282:19575-19588.

41. Lovis P, Gattesco S, Regazzi R. Regulation of the expression of components of the exocytotic machinery of insulin-secreting cells by microRNAs. *Biol Chem.* 2008; 389:305-312.

42. Hatzia Apostolou M, Polyta rchou C, Aggelidou E, Drakaki A, Poultsides GA, Jaeger SA, et al. An HNF4alpha-miRNA inflammatory feedback circuit regulates hepatocellular oncogenesis. *Cell.* 2011; 147:1233-1247.

43. Friedman DB, Johnson TE. A mutation in the age-1 gene in *Caenorhabditis elegans* lengthens life and reduces hermaphrodite fertility. *Genetics.* 1988; 118:75-86.

44. Kenyon C, Chang J, Gensch E, Rudner A, Tabtiang R. A *C. elegans* mutant that lives twice as long as wild type. *Nature.* 1993; 366:461-464.

45. Yin D. Biochemical basis of lipofuscin, ceroid, and age pigment-like fluorophores. *Free radical biology & medicine.* 1996; 21:871-888.

46. Brenner S. The genetics of *Caenorhabditis elegans*. *Genetics.* 1974; 77:71-94.

SUPPLEMENTARY DATA

Please check the full text version for Table S1. Identification of significantly differentially expressed miRNAs from card set A in the liver of *Wrrn* mutant mice compared to wild type mice and Table S2. Identification of significantly differentially expressed miRNAs from card set B in the liver of *Wrrn* mutant mice compared to wild type mice.

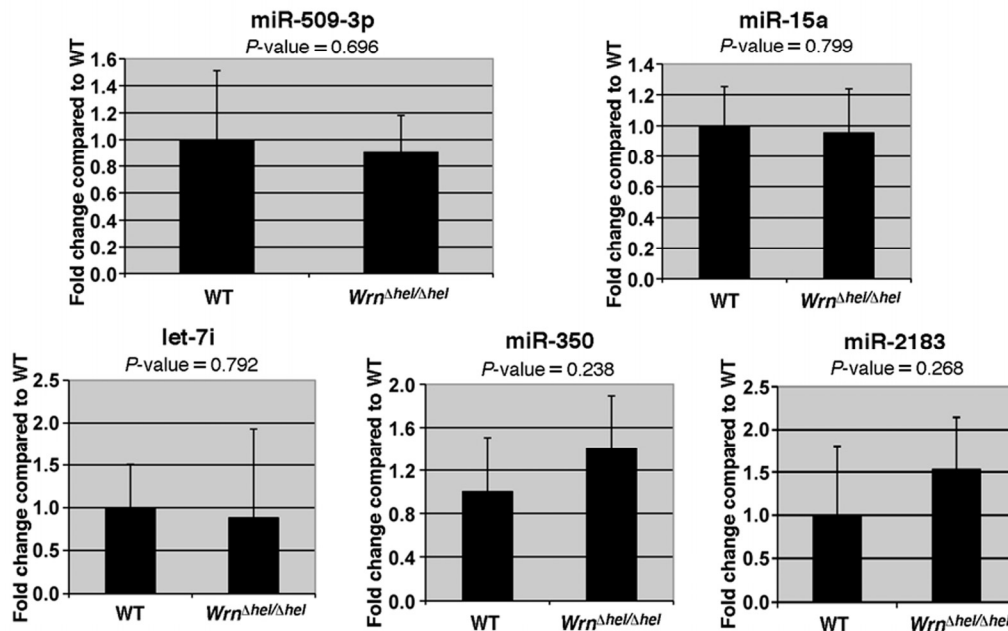


Figure S1. Figure S1. Expression levels of miRNAs from Table 1 in the liver of *Wrrn*^{Δhel/Δhel} mice compared to wild type mice. Total RNA from four mice (at three months of age) of each genotype was used for the quantitative RT-PCR analyses. The levels of the indicated miRNAs in the *Wrrn*^{Δhel/Δhel} mice are relative to the wild type (WT) animals. The P-values (unpaired Student's *t*-test) are also indicated above each graph.