



SUPPLEMENTARY FIG. S7. Generation of pancreatic β -cell-specific miR-15a/16^{-/-} mice. To generate mice specifically deficient in miR-15a/16 only in the pancreatic β -cells, we crossed miR-15a/16^{-/-} mice (B6.129S-Mirc30^{tm1.1Rd/J}) (The Jackson Laboratory, Bar Harbor, ME) with the pancreatic β -cell-specific cre mice (B6.Cg-Tg(Ins2-cre)^{25Mgn/J}) (The Jackson Laboratory). Homologous recombinant was identified by PCR analysis of tail genomic DNA. **(A)** Represent the pancreatic β -cell-specific cre (Ins2-cre) allele about 100 bp in size, and **(B)** represent the miR-15a/16 deleted (Mirc30 fl/fl) allele—650 bp in size. In our studies, we only used the Ins2-cre positive and also homozygous for Mirc30 allele; that is, we only used #1, #2, and #5 animals of six animals from the figure. We used B6.Cg-Tg(Ins2-cre)^{25Mgn/J} as wild-type (WT) control for our study. Screening of pancreatic β -cell-specific cre mice with the primers 5'-GCG GTC TGG CAG TAA AAA CTA TC-3' and 5'-GTG AAA CAG CAT TGC TGT CAC TT-3' amplifies ~100 bp products from the wild-type allele. The primers 5'-TCA GTT AAC CAA TAA AAA GGT CAG C-3' and 5'-GCC TGG GTC TCA CCA TGT AG-3' amplify a 650-bp product from the deleted allele in the miR-15a/16 (pancreatic β -cell-specific) mice.