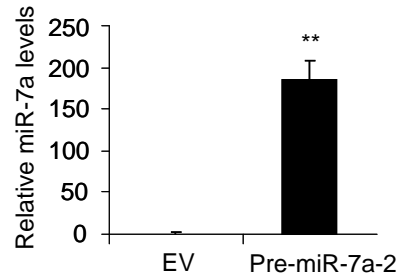
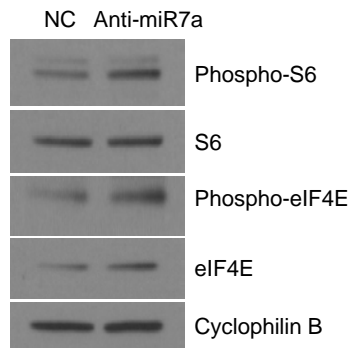


SUPPLEMENTARY DATA

Supplementary Figure 1. Increased mature miR-7a expression in miR-7a-2 precursor transfected HEK-293T cells. Quantitative RT-PCR analysis for mature miR-7a levels in 293T cells transfected with plasmids encoding either miR-7a precursor (pre-miR-7a-2) or empty vector (EV). n=3, **P<0.01.

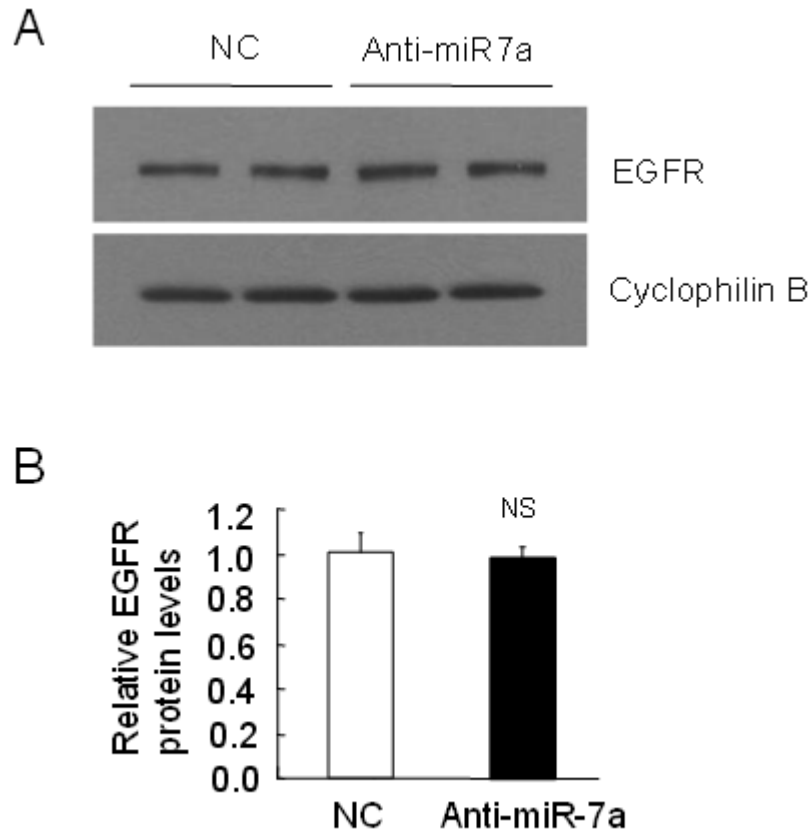


Supplementary Figure 2. Effect of anti-miR-7a antagonism on expression of Phospho and total S6 and eIF4E in human islets. Representative western blot analysis of lysates prepared from control (NC) or anti-miR-7a oligonucleotide transfected human islets. Data from one human donor islet preparation.



SUPPLEMENTARY DATA

Supplementary Figure 3. Inhibition of miR-7a did not increase expression of EGFR in Min6 beta cells. A: Western blot analysis of EGFR protein level in anti-miR7a treated Min6 cells compared with control oligonucleotide (NC) treated cells, B: Quantification analysis of (A). n=4, P=NS.



SUPPLEMENTARY DATA

Supplementary Figure 4. Inhibition of miR-7a elevated Pax6 protein levels in Min6 beta cells and mouse islets. A: Representative western blot analysis of Pax6 protein levels in anti-miR7a treated Min6 cells compared with control oligonucleotide (NC) treated cells. B: Quantification analysis of (A), n=4, **P<0.01 relative to NC. C: RT-QPCR analysis of relative gene expression level of Pax6 in anti-miR-7a transfected Min6 cells, P=NS. n =4. D: Representative western blot analysis of Pax6 protein levels in anti-miR7a treated mouse islets compared with control oligonucleotide (NC) treated islets. E: Quantification analysis of (D), n=3.

