SUPPLEMENTARY DATA

Supplementary Table 1. Primer sequence for conventional PCR

Gene	Forward primer (5'-3')	Reverse primer (5'-3')	Product length (bp)
Insulin	TGTCAAGCAGCACCTTTGTG	TATTCATTGCAGAGGGGTAGG	297
Amylase	TGTTGGTGTCCGTATTTATGTG	CATCAAGTCTGAACCCTGCTAC	329
TBRII	GAAGGAAAAGAAAAGGG	CCAGCACTCGGTCAAAG	1195
CycloA	ATTCCAGGATTCATGTGCCAG	TGTCCACAGTCGGAAATGGTGA	320

All targets were amplified for 30 cycles.

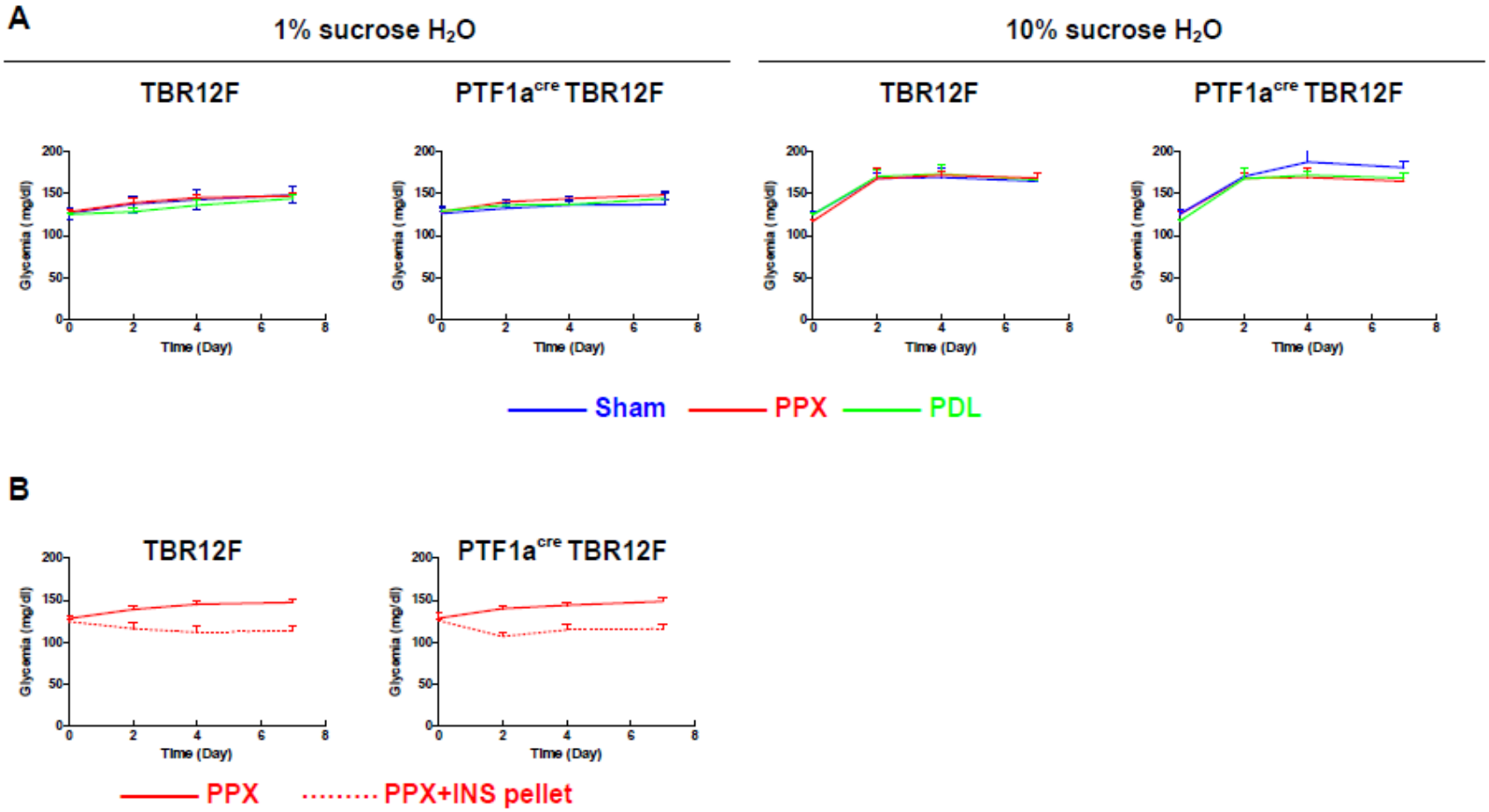
Supplementary Table 2. Qiagen primer for Quantitative PCR

Gene	Catalog number
CycloA	QT00247709
CD45	QT00139405
Ngn3	QT00262850
IL6	QT00098875
IFNgamma	QT01038821
TNF	QT00104006

Real-Time PCR Reactions were performed at least in triplicates with QuantiTect SYBR Green PCR Kit (Qiagen) using a LightCycler 1.5 Instrument (Roche, Branchburg, NJ). Specificity of the amplified products was determined by melting peak analysis. Quantification for each gene of interest was performed with the $2^{-\Delta\Delta Ct}$ method. Values of various genes were normalized against CycloA, which proved to be stable across the samples. Relative enrichment of Ngn3 from samples was normalized to duodenum (=1), relative enrichment of CD45 from samples was normalized to spleen (=1) and relative en- richment of IL6, IFNgamma and TNF from pancreatic samples was normalized to sham operated TBR12F mice (=1).

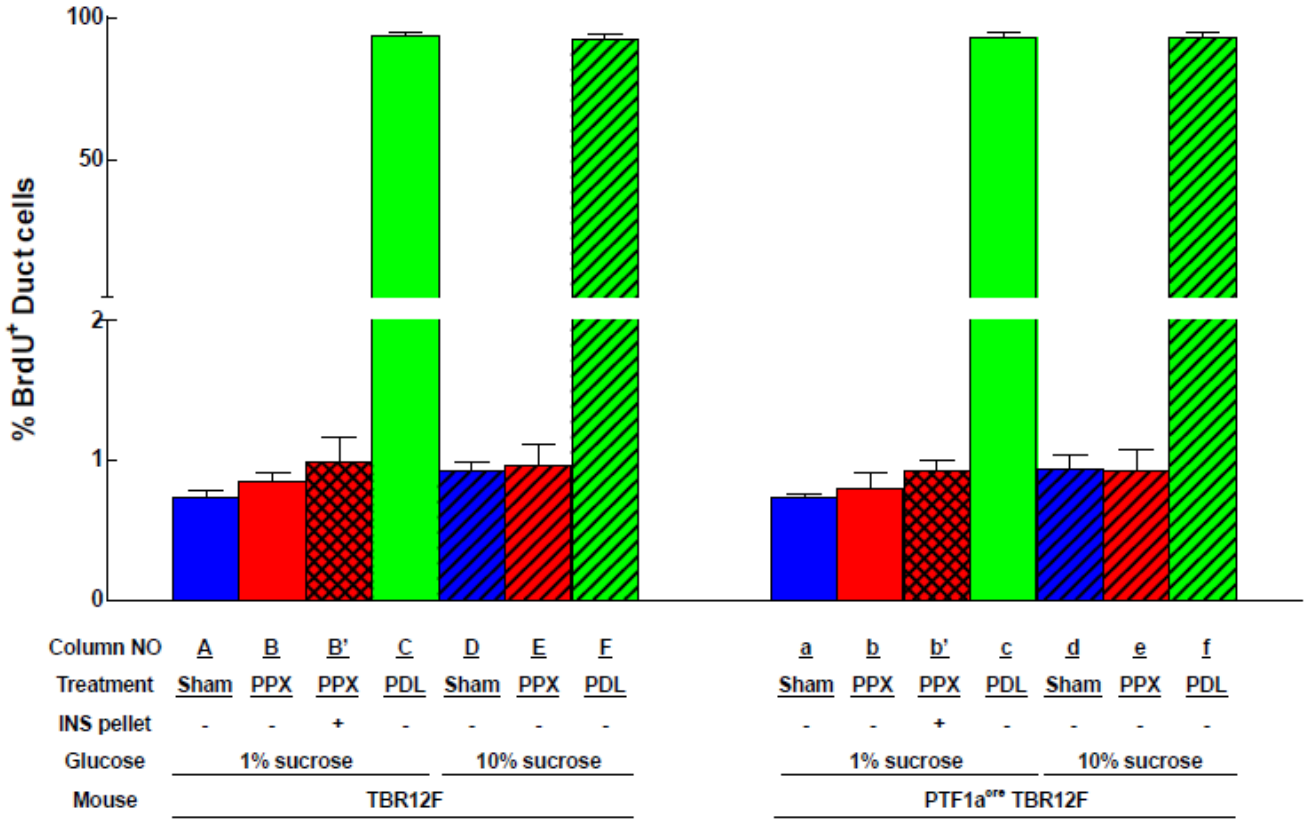
SUPPLEMENTARY DATA

Supplementary Figure 1. Blood glucose levels in the current study. (A) Two-hour fasting blood glucose levels were monitored during the week after surgery, showing normoglycemia in all experimental conditions. Sham: blue line; PPX: red line; PDL: green line. (B) Two-hour fasting blood glucose levels were monitored during the week after treatment, showing absence of significant hypoglycemia with implantation of insulin pellets. PPX: solid red line; PPX+INS pellet: dotted red line.



SUPPLEMENTARY DATA

Supplementary Figure 2. Quantification of proliferating ducts. $BrdU^+$ duct cell percentage was quantified in each experimental condition (1% sucrose: control sham solid blue, control PPX solid red, control PDL solid green; 10% sucrose, corresponding to the color in control from various treatments but diagonal lines instead of solid; insulin pellet treatment after PPX, cross-hatched red). Duct cells were determined by DBA staining (not shown). Significance was considered when $P<0.05$.



NS: no significance: A and B; B and B'; C and F; a and b; b and b'; c and f; C and c; F and f