Supplemental Table 1. Oligonucleotide primers used for RT-PCR

Gene	Forward Primer	Reverse Primer
MafA cds (endogenous + transgene)	CTTCAGCAAGGAGGAGGTCATC	GCGTAGCCGCGGTTCTT
Endogenous MafA (primers in 3' UTR)	CGGGAACGGTGATTGCTTAG	GGAGGTTGGGACGCAGAA
MafB	GAAGGCCGCGAGGCTTAT	GGCCCTGGCACTCACAAA
Neurog3	GCGCTCACCATCCAAGTGT	CTCGGCAGTCACCCACTTCT
Insm1	TTCGCTGTGTTCATGGTCTAGAA	AACAACCCGTACGCTACAGACA
NeuroD1	AAAGCCACGGATCAATCTTCTC	GCGAATGGCTATCGAAAGACA
Insulin	CTTCAGACCTTGGCGTTGGA	ATGCTGGTGCAGCACTGATC
Glucagon	GAATGAAGACAAACGCCACTCA	CGGCGGGAGTCGAGGTA
Somatostatin	ATGCTGTCCTGCCGTCTC	TTCTCTGTCTGGTTGGGCTC

Supplemental Table 2. Microarray data show significant reduction in hormones and endocrine transcription factor expression in *TT^{endo}* animals. P0 RNA from control (n=4) and *TT^{endo}* (n=3) pancreas was biotinylated and hybridized to Affymetrix array MG430 2.0. Gene expression data from each array was normalized using the MAS5 algorithm via the Affymetrix gene-expression console. Normalized and scaled data was used to quantify relative gene expression. The results showed specific inhibition of endocrine hormone and transcription factor expression in pancreas from pups expressing MafA^{Myc} from E7.5 to P0. Furthermore, expression of some of the genes for secretory granule proteins was altered, while the expression of genes for acinar/duct proteins was unaltered.

Supplemental Table 2

Genes	Mean Controls	Mean TT^{endo}	Relative Expression	p.value
Hormones				
Somatostatin, Sst	4552	377	0.08	3.00E-05
IAPP	8659	869	0.10	1.10E-04
Insulin I, Ins1	24558	2944	0.12	1.00E-05
Insulin II, Ins2	21835	2669	0.12	1.00E-05
Glucagon, Gcg	13258	1707	0.13	6.00E-05
Peptide YY, Pyy	6312	1358	0.22	1.20E-04
Ghrelin, Ghrl	645	263	0.41	8.30E-04
Ppy	1421	659	0.46	4.01E-03
Acinar/duct enriched genes				
Amylase 2,	30177	29278	0.97	0.12
Elastase 2A	32596	321545	0.99	0.24
Elastase 3	31261	31317	1.00	0.83
Elastase 1 Ela1	21576	21630	1.00	0.94
ChymotrypsinogenB1	31315	31388	1.00	0.82
Sox9	373	414	1.11	0.11
Hnf1β	263	245	0.93	0.23
Muc1	1409	1679	1.19	0.26
Carbonic anhydrase2	228	246	1.08	0.50
Secretory Granule genes				
ChromograninA	3978	4429	1.11	0.41
Synaptophysin, Syp	209	226	1.08	0.50
Synaptotagmin-like 4	545	215	0.39	1.01E-03
Secretogranin III	1424	590	0.41	1.96E-03
ChromograninB	2935	1513	0.52	0.02
Transcription Factors				
Neurod1	692	177	0.26	8.00E-05
Pax6	391	128	0.33	3.60E-04
Isl1	1087	473	0.44	2.74E-03
MafB	394	196	0.50	2.00E-05
Insm1	312	197	0.63	0.01
Arx	186	119	0.64	6.40E-04
Nkx2-2	278	189	0.68	2.27E-03
Pdx1	301	211	0.70	2.16E-03
Neurog3	390	331	0.85	0.01