SUPPLEMENTARY FIGURES

Figure S1: Efficient transduction of human adult islets with SV40LT expressing lentiviral vector

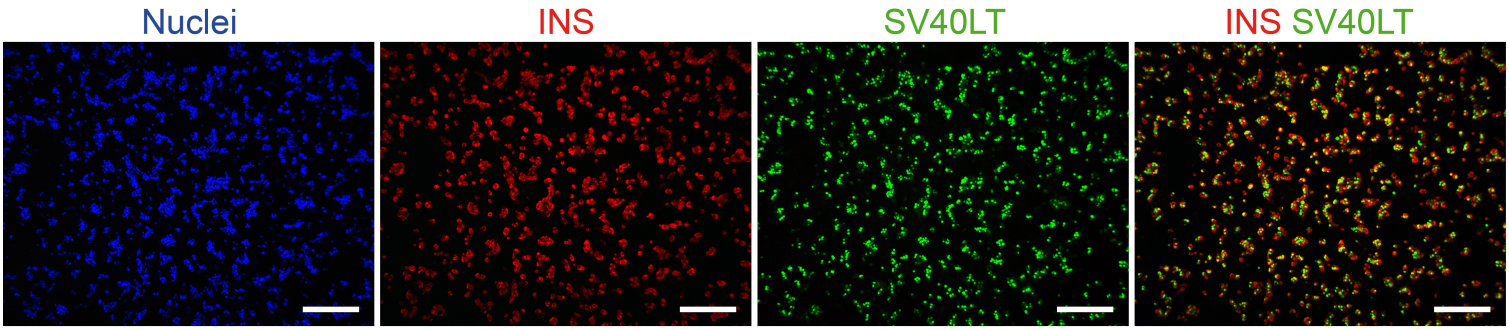
Human adult islets preparations were partially dissociated, transduced with an SV40LT-expressing lentiviral vector and analyzed one week after transduction. Many insulin (INS)-positive cells (red) co-stained for SV40LT (green). Nuclei were stained with Hoechst 33342 fluorescent stain (blue). Scale bar: 200 μm

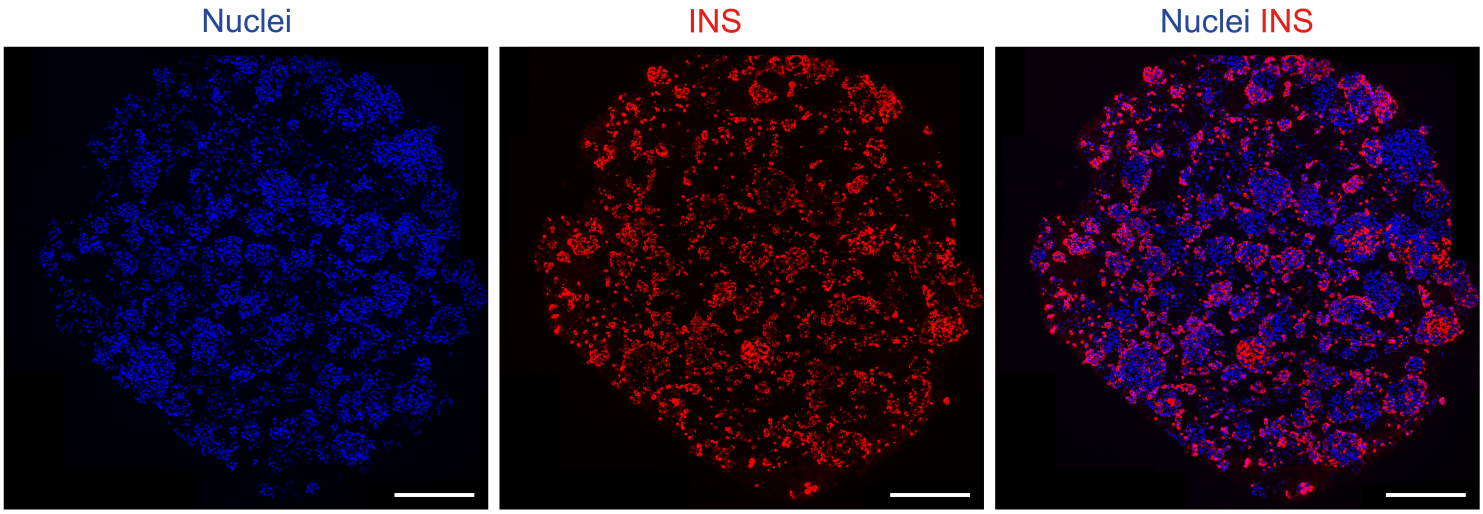
Figure S2: Beta cell composition of a human adult islet preparation

A fraction of the human islet preparation that was used for real time PCR was analyzed by immunohistochemistry in order to evaluate the relative size of the beta cell population in a human islet preparation. Insulin (INS)-positive cells (red) constituted approximately 40% of the total cell number, as measured by nuclei staining with Hoechst 33342 fluorescent stain (blue). Scale bar: 300 μm

Figure S3: Immunofluorescence analysis of EndoC-βH1 cells.

EndoC-βH1 cells stained negative for glucagon (GCG), amylase (AMYL) and SOX9. Cells that co-expressed INS and somatostatin (SST) were rarely seen. Scale bar: 25 μm


Nuclei
INS
SV40LT
INS SV40LT


Nuclei
INS
Nuclei INS

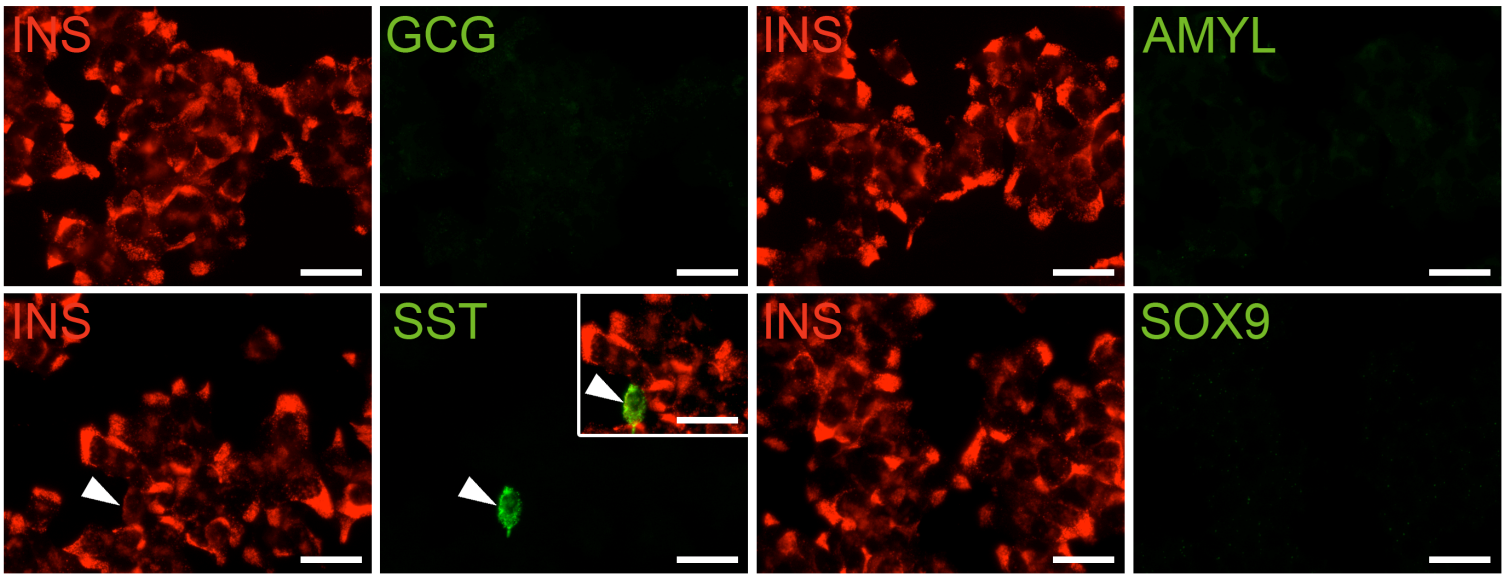

INS
GCG
INS
AMYL
INS
SST
INS
SOX9

Table 1: Taqman gene expression assay probes.

Hs02741908_m1	INS
Hs00169095_m1	IAPP
Hs00174967_m1	GCG
Hs00356144_m1	SST
Hs00426216_m1	PDX1
Hs01651425_s1	MAFA
Hs00232355_m1	NKX6-1
Hs00240871_m1	PAX6
Hs00159598_m1	NEUROD1
Hs01096908_m1	SLC2A2
Hs00277220_m1	GCK
Hs00265026_s1	KCNJ11
Hs00165861_m1	ABCC8
Hs00175619_m1	PCSK1
Hs00545183_m1	SLC30A8
Hs00374262_m1	RAB3A
Hs00268296_m1	SNAP25
Hs00609534_m1	GAD2
Hs00160947_m1	PTPRN
Hs00156992_m1	CPA1
Hs00357011_m1	CFTR
Hs99999904_m1	PPIA