

Figure S1. Wide Field immunofluorescence (IF) of STAT5B (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for control patient pancreata (patient # 6073, 6130 and 6153). Images serve to illustrate islet and exocrine STAT5B staining supporting the results in Fig. 1.

Figure S2. Wide Field immunofluorescence (IF) of STAT5B (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for T1D patient pancreata (patient # 6180, 6247 and 6264). Images serve to illustrate additional islet and exocrine STAT5B staining supporting the results in Fig. 1.

Figure S3. Wide Field immunofluorescence (IF) of GATA4 (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for control patient pancreata (patient # 6130 and 6153). Images serve to illustrate additional islet and exocrine GATA4 staining supporting the results in Fig. 2.

Figure S4. Wide Field immunofluorescence (IF) of GATA4 (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for T1D patient pancreata (patient # 6180, 6211 and 6262). Images serve to illustrate additional islet and exocrine GATA4 staining supporting the results in Fig. 2.

Figure S5. Wide Field immunofluorescence (IF) of GLIS3 (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for control patient pancreata (patient # 6009, 6130 and 6153). Images serve to illustrate additional islet and exocrine GLIS3 staining supporting the results in Fig. 3.

Figure S6. Wide Field immunofluorescence (IF) of GLIS3 (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for T1D patient pancreata (patient # 6180, 6211 and 6215). Images serve to illustrate additional islet and exocrine GLIS3 staining supporting the results in Fig. 3.

Figure S7. Wide Field immunofluorescence (IF) of WFS1 (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for control patient pancreata (patient # 6073, 6103 and 6153). Images serve to illustrate additional islet and exocrine WFS1 staining supporting the results in Fig. 4.

Figure S8. Wide Field immunofluorescence (IF) of WFS1 (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for T1D patient pancreata (patient # 6180, 6211 and 6247). Images serve to illustrate additional islet and exocrine WFS1 staining supporting the results in Fig. 4.

Figure S9. Wide Field immunofluorescence (IF) of EIF2AK3/PERK (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for control patient pancreata (patient # 6020, 6153 and 6160). Images serve to illustrate additional islet and exocrine EIF2AK3/PERK staining supporting the results in Fig. 5.

Figure S10. Wide Field immunofluorescence (IF) of EIF2AK3/PERK (**green**), insulin (**INS**), glucagon (**GCG**) and somatostatin (**SST**), showing double staining, individual channels (inset), and complete overlays for T1D patient pancreata (patient # 6211,6258 and 6264). Images serve to illustrate additional islet and exocrine EIF2AK3/PERK staining supporting the results in Fig. 5.

Figure S11. Donor metadata for the Unaffected/Control, T1D AAB+ and T2D. a) Body Mass Index (BMI kg/m²); b) Hemoglobin A1c (HbA1c mmol/mol); c) C-peptide pmol/L and d) Disease duration, years.