

Figure S1. Fluorescence imaging of Pdx1- and Ptf1a- lineage tracing mice (A-B) Pancreas sections were immunostained for amylase (A) or biotin-DBA (B) and assessed for direct green/red fluorescence at E16.5, P1, P7 and P28. Arrows point to green-only DBA+ duct cells. Scale bars are 50µm.

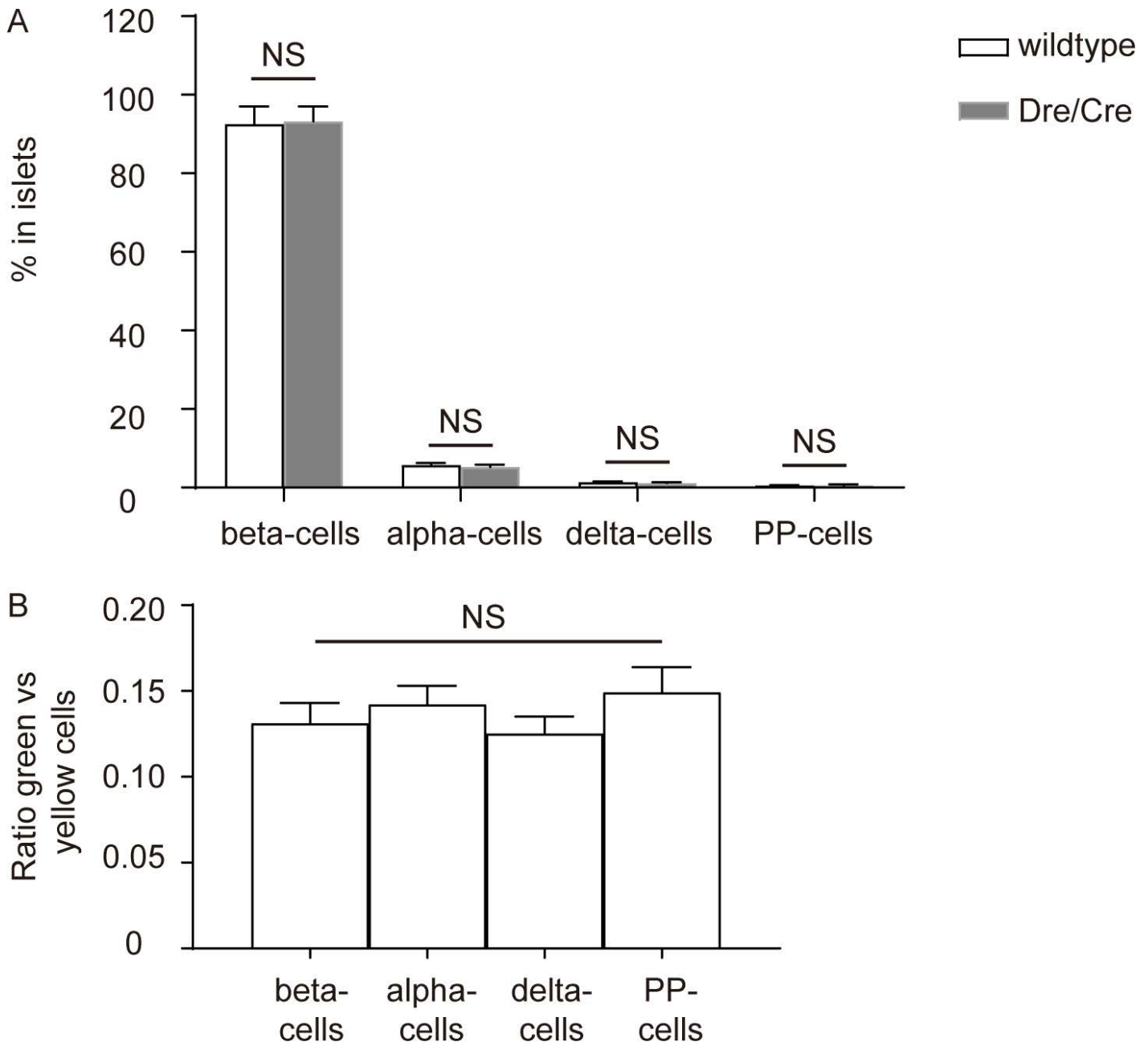


Figure S2: Percentage of different endocrine cell types in Pdx1- and Ptf1a- dual lineage tracing mice (A) The percentage of beta-cells, alpha-cells, delta-cells and PP-cells in Pdx1- and Ptf1a- dual lineage tracing mice and control wildtype mice at P28 was assessed. (B) The ratio of green (Pdx1+Ptf1a- lineage) versus yellow (Pdx1+Ptf1a- lineage) cells in total beta-cells, alpha-cells, delta-cells and PP-cells was assessed. N=5. NS: non-significant.

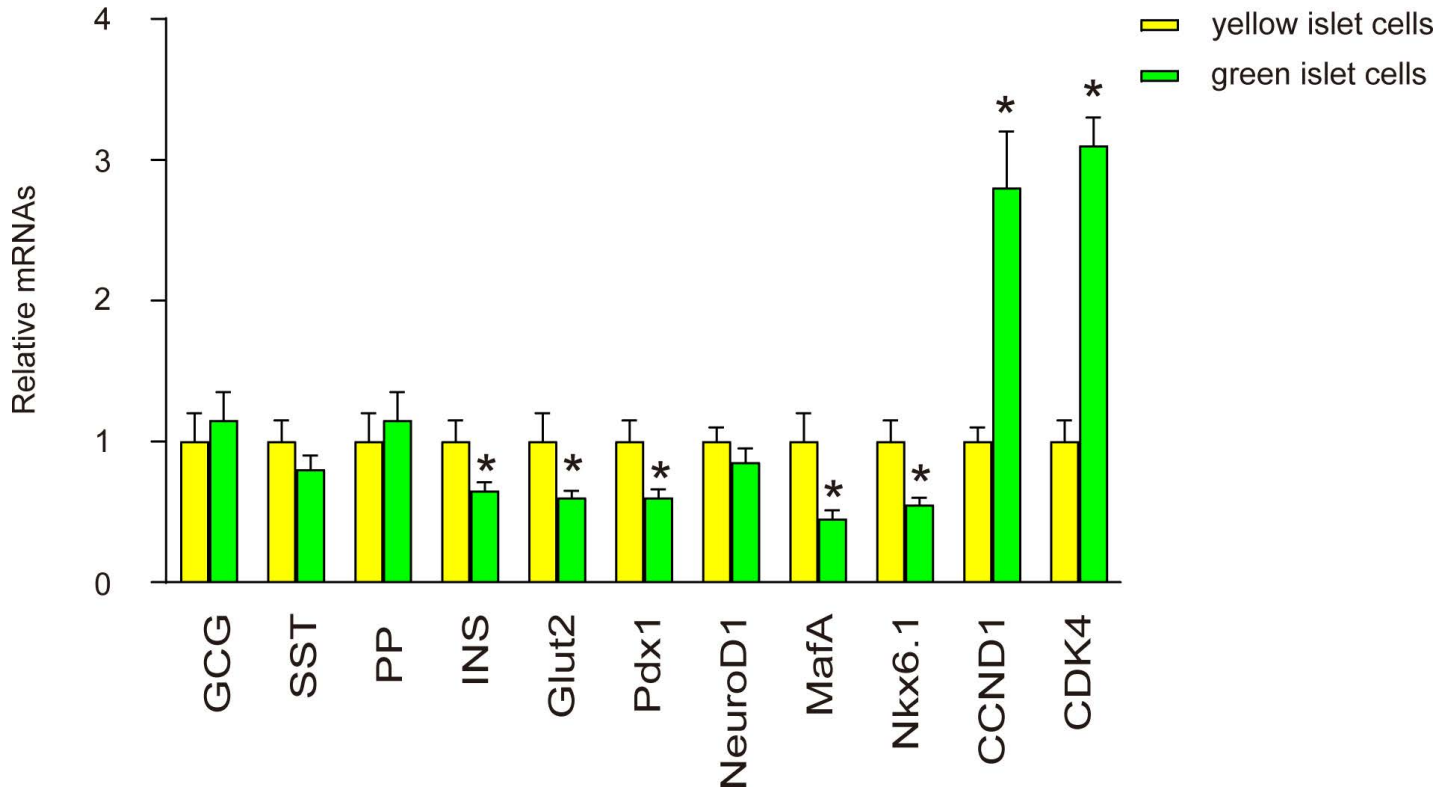


Figure S3. Differential expression of Ptf1a may contribute to a developmental origin of beta-cell heterogeneity RT-qPCR for glucagon (GCG), somatostatin (SST), pancreatic polypeptide (PP), insulin (INS), Glut2, Pdx1, MafA, Nkx6.1, CCND1 and CDK4 in sorted Pdx1+Ptf1a- lineage islet cells (green-only) compared with Pdx1+Ptf1a+ lineage islet cells (yellow) at the time point between E17 and P1. \*p<0.05. N=5.