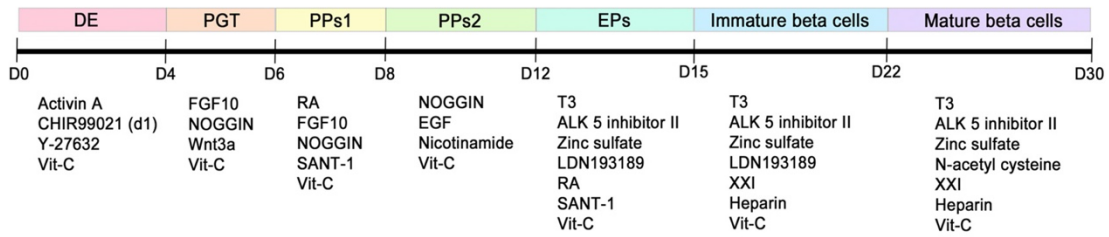


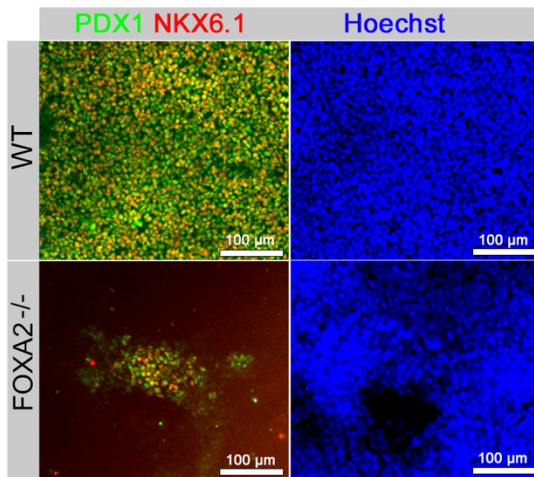
Supplementary Figure 1

A



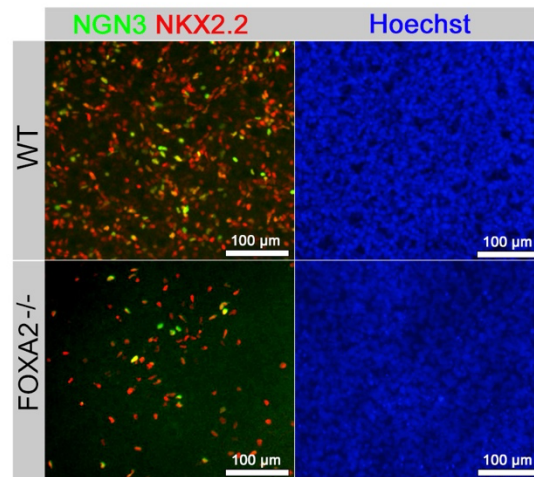
B

iPSC-derived PPs

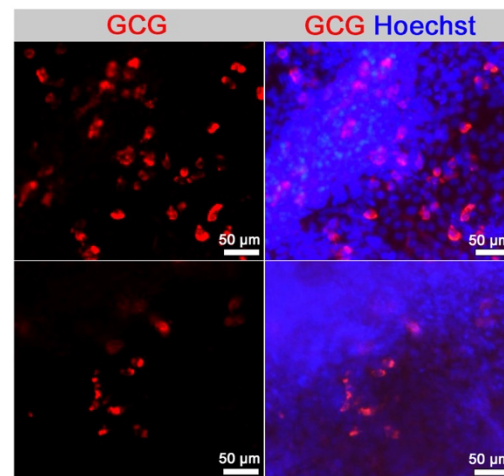
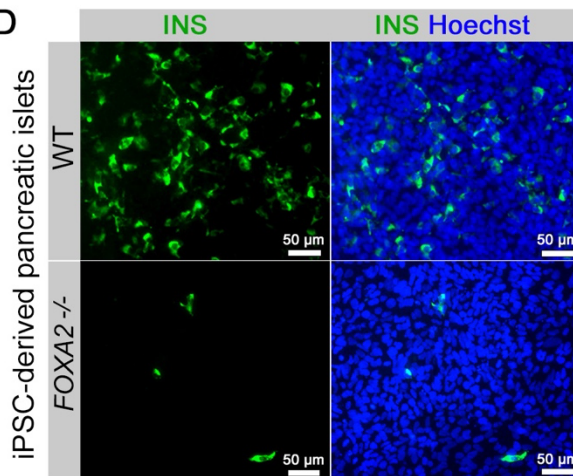


C

iPSC-derived EPs



D

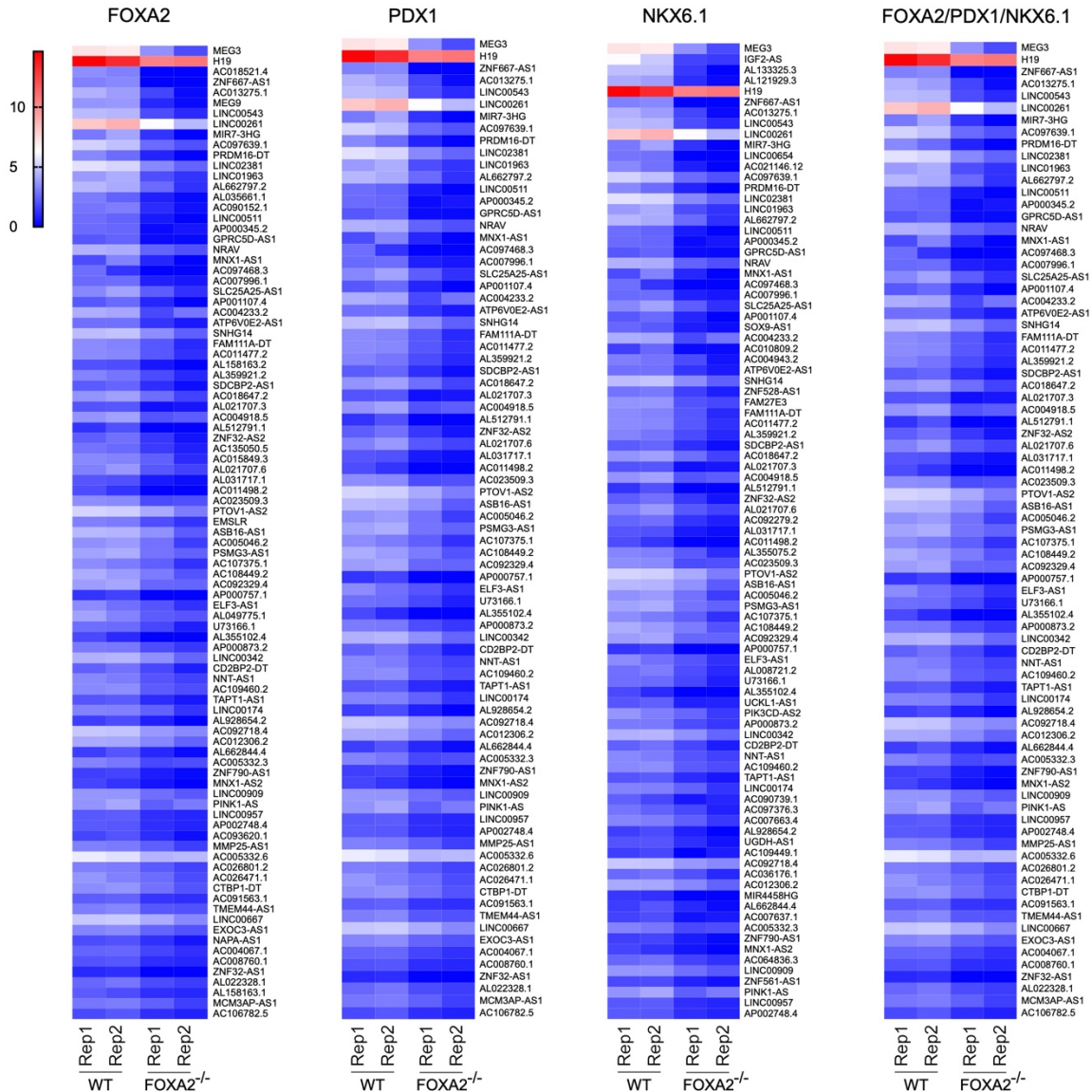


Supplementary Figure 1. Differentiation of FOXA2 knockout iPSCs into pancreatic islets.

(A) A diagram showing the differentiation protocol used in this study. *FOXA2*^{-/-} iPSCs and WT-iPSCs were differentiated into pancreatic progenitors (PPs) (B), endocrine progenitors (EPs) (C), and pancreatic islet cells (D).

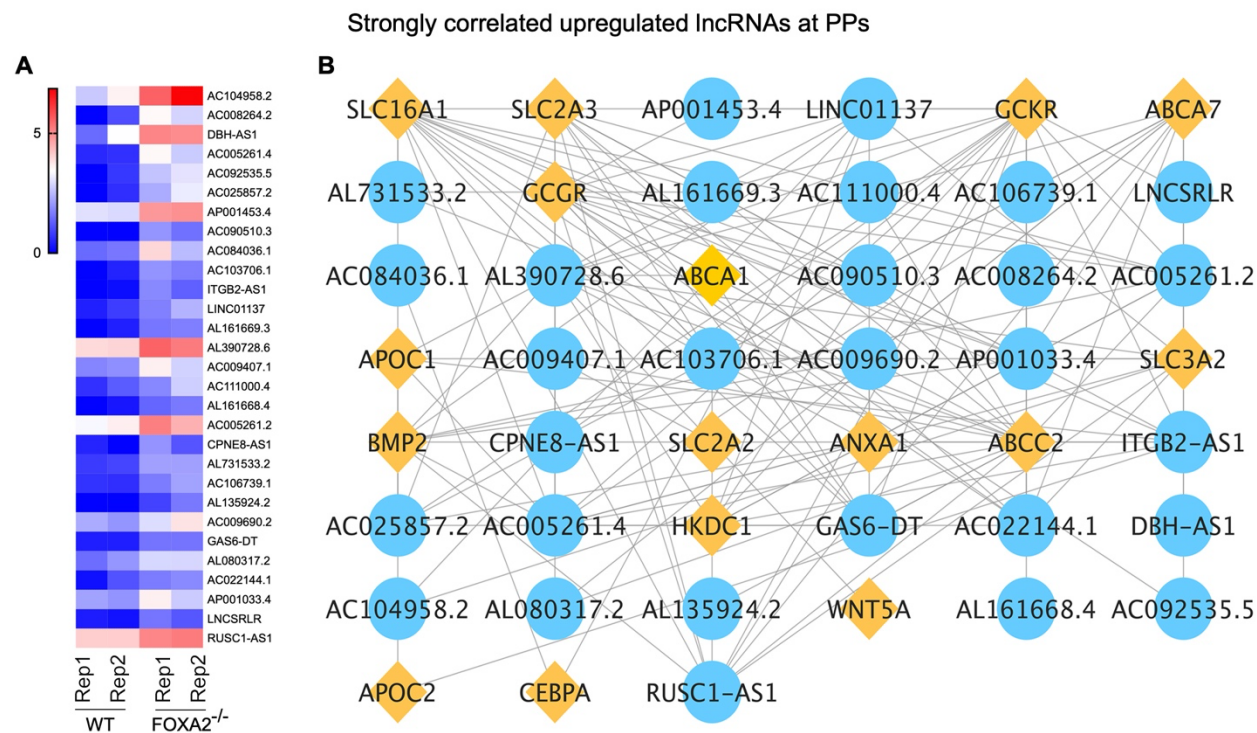
Supplementary Figure 2

Strongly correlated downregulated lncRNAs at PPs



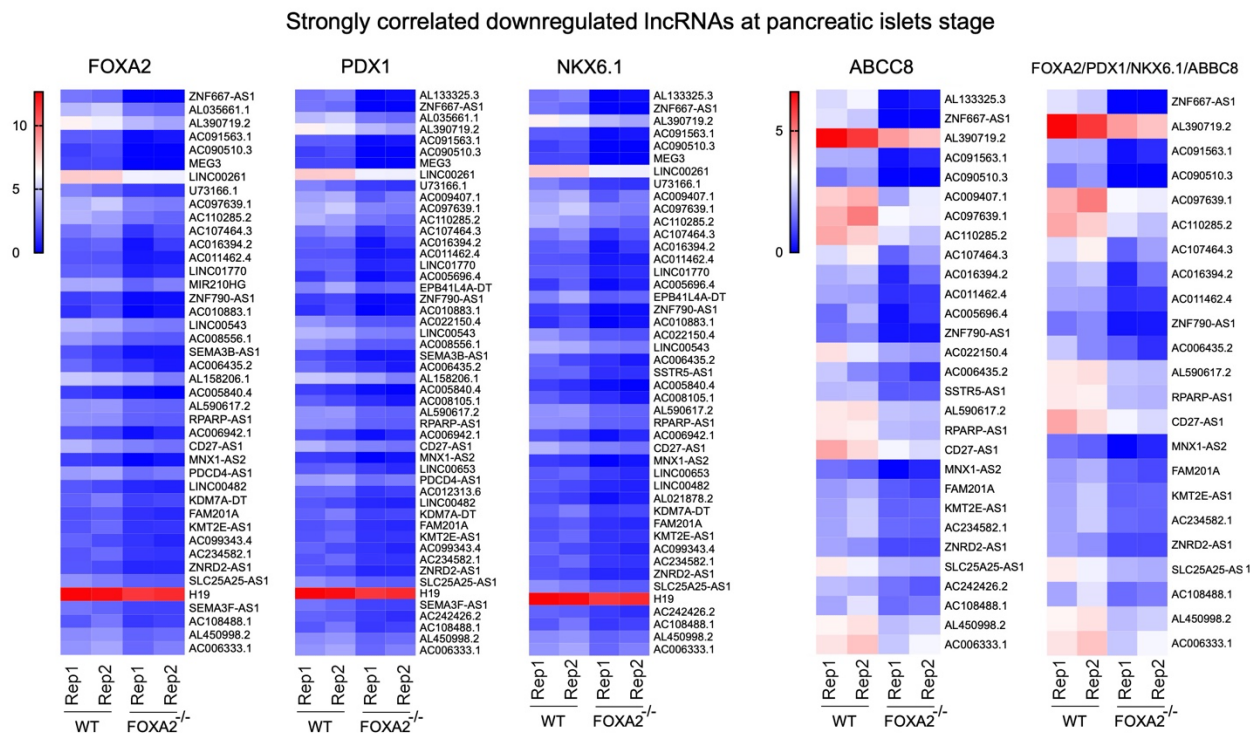
Supplementary Figure 2. Heatmaps for the correlated downregulated lncRNAs in pancreatic progenitors. Separate heatmaps are displayed for the correlation of lncRNAs with FOXA2, PDX1, and NKX6.1, as well as a heatmap for lncRNAs that are commonly correlated with FOXA2, PDX1, and NKX6.1.

Supplementary Figure 3



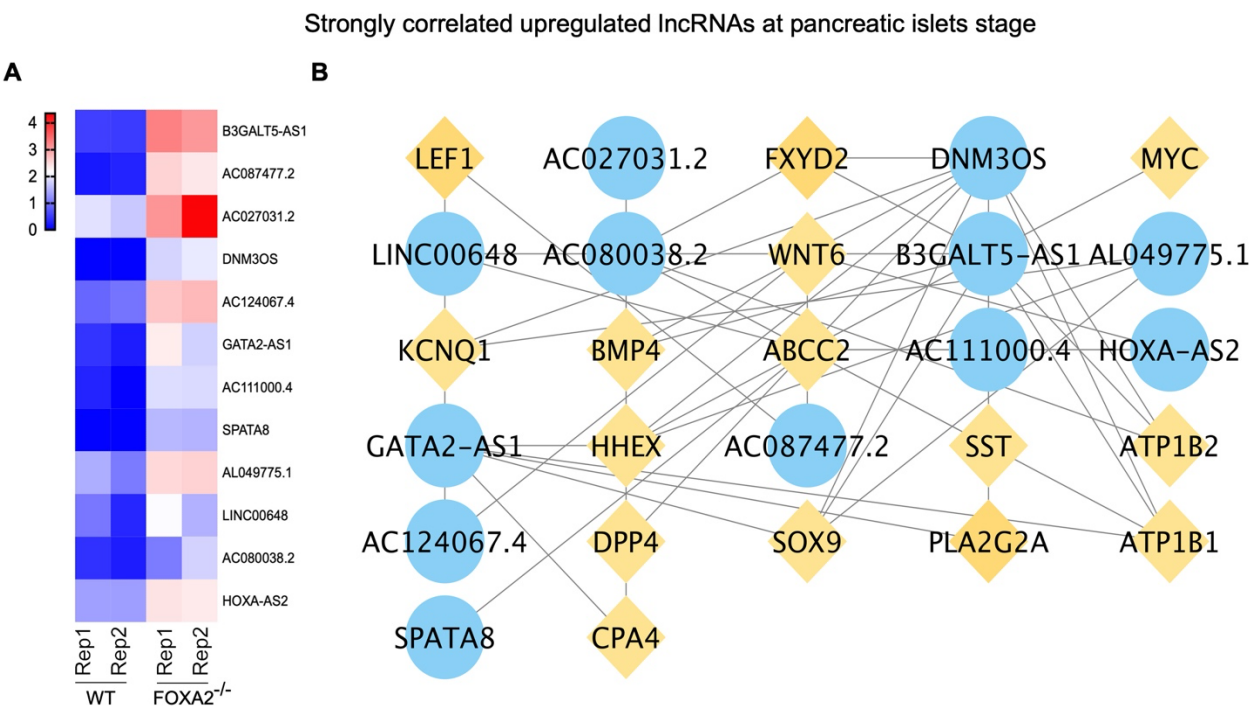
Supplementary Figure 3. Strongly upregulated lncRNAs with a Pearson correlation coefficient (PC) >0.3 in the pancreatic progenitors derived from iPSCs lacking FOXA2. The upregulated lncRNAs are presented in a heatmap (A), and their correlation with stage-specific DEGs is depicted in a network (B).

Supplementary Figure 4



Supplementary Figure 4. Heatmaps for the downregulated lncRNAs that are correlated in the pancreatic islets. Separate heatmaps are displayed for the correlation of lncRNAs with FOXA2, PDX1, NKX6.1, and ABCC8, as well as a heatmap for lncRNAs that are commonly correlated with FOXA2, PDX1, NKX6.1 and ABCC8.

Supplementary Figure 5



Supplementary Figure 5. Strongly upregulated lncRNAs with a Pearson correlation coefficient (PC) >0.3 in the pancreatic islets derived from iPSCs lacking FOXA2. The upregulated lncRNAs are presented in a heatmap (A), and their correlation with stage-specific DEGs is depicted in a network (B).