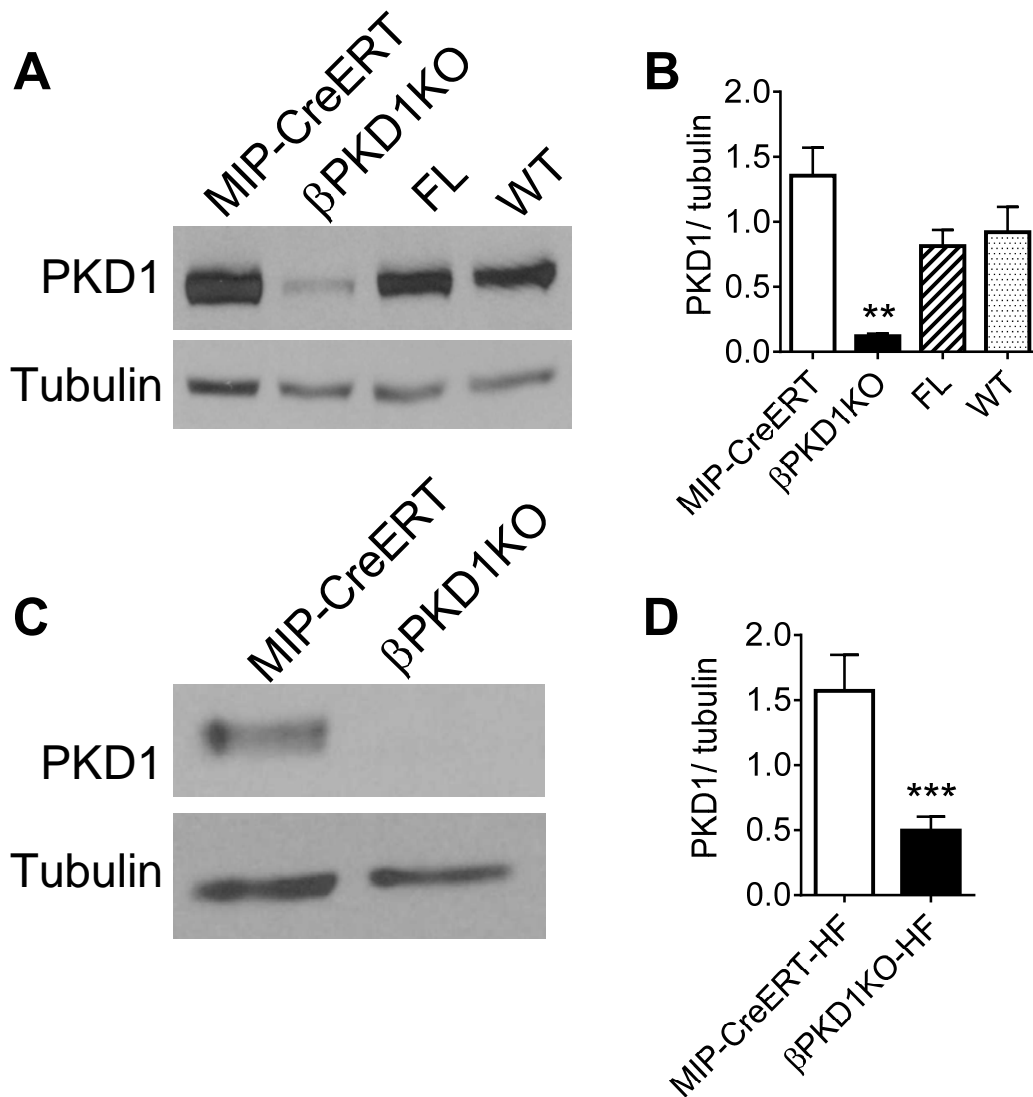


SUPPLEMENTARY DATA

Supplementary Figure 1: PKD1 protein levels in β PKD1KO and control mice.

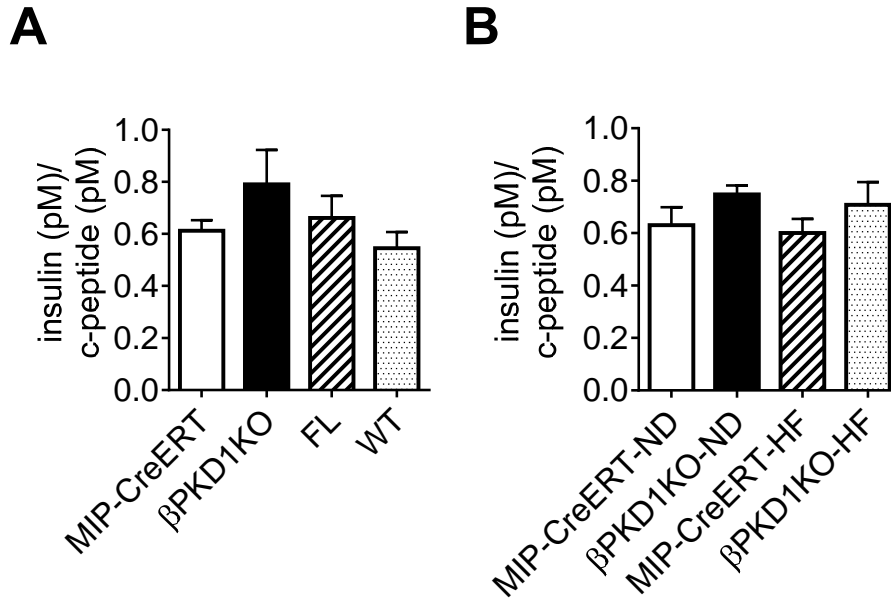
Representative Western blots (A&C) and quantification (B&D) of PKD1 and tubulin (as a loading control) protein expression in islet extracts from mice 3 weeks following tamoxifen injection (A&B) or after 12 weeks of high-fat diet (C&D). Data are mean \pm SEM of 4 to 9 animals in each group. ** $p < 0.01$ compared to WT following one-way ANOVA with Dunnett post hoc test (B) or *** $p < 0.001$ compared to MIP-CreERT following two-tailed Student's t-test (D).



SUPPLEMENTARY DATA

Supplementary Figure 2: Insulin clearance of chow and high-fat fed β PKD1KO and control mice.

Ratios of insulin on c-peptide levels measured during the steady state of the hyperglycemic clamp for chow fed animals 13 weeks following tamoxifen injections (A) or after 13 weeks on normal (ND) or high-fat (HF) diet (B). Data are mean \pm SEM of 7 to 12 animals in each group.



SUPPLEMENTARY DATA

Supplementary Figure 3: Islet morphometry in chow and high-fat diet fed β PKD1KO and MIP-CreERT mice.

Beta-cell area (A), islet mass (B), islet number per pancreas section (C) and islet size distribution (D) after 13 weeks on normal (ND) or high-fat (HF). Data are mean \pm SEM of 7 to 12 animals in each group. * $p < 0.05$ compared to MIP-CreERT-HF following two-way ANOVA with Tukey post hoc adjustment for multiple comparisons.

