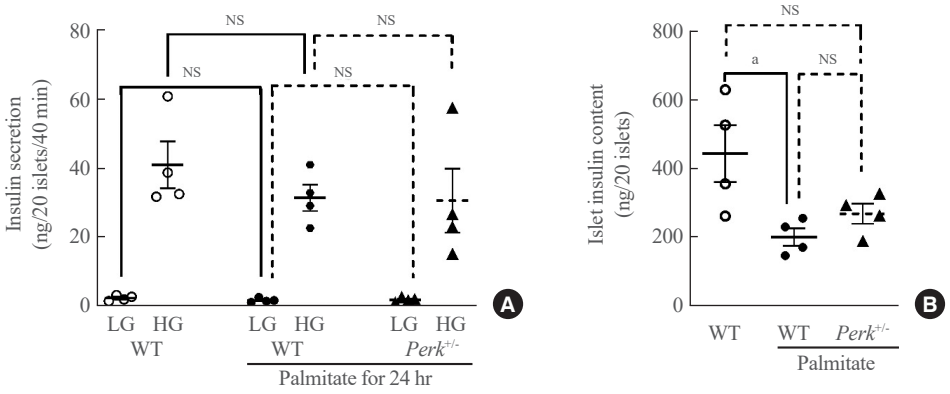

Supplemental Fig. S2. Glucose-stimulated insulin secretion (GSIS) from mouse islets and the islet insulin contents exposed to *in vitro* lipotoxicity. Mouse islets were isolated from each genotype, and exposed to 0.5-mM palmitate (conjugated with bovine serum albumin free from fatty acid [3:1 molar ratio]) for 24 hours. After starvation and incubation with low glucose (2.8 mM) and high glucose (17.5 mM), we collected the supernatants and assayed the insulin using an enzyme-linked immunosorbent assay (ELISA) kit (ALPCO). Then we collected the islets, extracted insulin using HCl, and assayed it using the same ELISA kit. (A) GSIS from mouse islets and (B) islet insulin contents. For (A), two-way repeated-measures analysis of variance (ANOVA) was used. For (B), one-way ANOVA was used. NS, no significant difference; LG, low glucose; HG, high glucose; WT, wild-type; Perk, pancreatic endoplasmic reticulum kinase. $^{a}P<0.05$ between the indication.