



Supplementary Figure S1. Assessment of mRNA expression level of *Calr* in cells overexpressing PAX4 wild-type and variants. The *Calr* gene was assessed for its mRNA expression in INS-1 832/13 cells overexpressing PAX4 wild-type and variants using qPCR, with its relative mRNA expression calculated through normalization to the *GAPDH* mRNA level. The fold increase of the mRNA expression in the cells overexpressing PAX4 wild-type and variants compared with that in the cells transfected with empty vector was calculated and was shown as mean \pm s.e.m. from four independent experiments. * $P < 0.05$ vs. wild-type.