SUPPLEMENTAL FIGURE LEGENDS

- <u>Figure.S1</u>: **Viability in stable INS1E clones.** Apoptosis was measured by annexin V-FITC plus PI staining and FACS analysis. Bars show the percentages of cells that were viable (Annexin $^{+}$ /PI $^{-}$), early apoptotic (Annexin $^{+}$ /PI $^{-}$) or late apoptotic/dead (Annexin $^{+}$ /PI $^{+}$) (n= 3). Results are expressed as mean \pm SEM.
- <u>Figure.S2</u>: mRNA levels of mitochondrial, K_{ATP} channels and ER stress related genes in stable INS1E clones. mRNA levels of stable INS1E cell lines were detected by real time PCR. The data were normalized to TBP1 mRNA and presented relative to control cells (n=6). Results are expressed as mean \pm SEM.
- <u>Figure.S3</u>: **Mitochondrial content in stable INS1E clones**. Mitochondrial content was estimated as the ratio between copy numbers of mtDNA (cytochrome c oxidase 1, COI) *versus* nuclear DNA (CCAAT-enhancer-binding proteins- β , C/EBP- β) (n=4). Results are expressed as mean \pm SEM.
- <u>Figure.S4</u>: **Protein levels of mitochondrial respiratory chain subunits stable INS1E clones**. Representative immunoblotting revealing protein levels of the mitochondrial complex subunits (I, II, III, IV, V) of stable INS1E clones using a monoclonal anti-total OXPHOS antibody cocktail. Actin was used as a control of protein quantity (n=7).

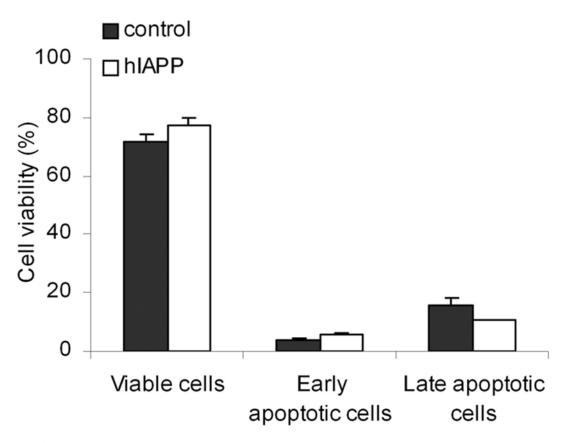


Fig. S1

	genes	control	hIAPP
Mitochondria biogenesis	TFAM	1.00±0.13	0.92±0.24
	NRF1	1.00±0.27	0.89±0.07
KATP channel subunits	Kir 6.2	1.00±0.09	1.09±0.15
	Sur1	1.00±0.09	0.83±0.07
ER stress	Bip	1.00±0.15	0.87±0.16
	CHOP	1.00±0.24	0.85±0.22

Fig. S2

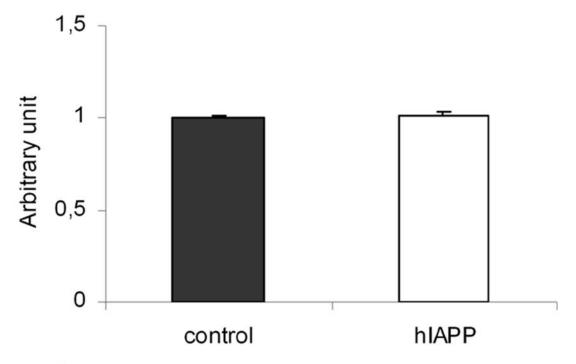


Fig. S3

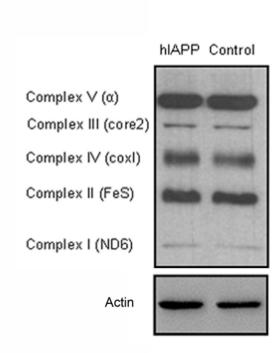


Fig. S4