

Supplement Figure Legend:

Figure S1

Dose-dependent effects of palmitate on beta cell apoptosis. Isolated primary islets of wild-type C3H mice were incubated at 11.1 mM glucose for 24h at the designated concentrations of palmitate, whereby the molar ratio of fatty acid:BSA was kept constant at (5:1). Apoptosis was then assessed and quantified by Western blotting for cleaved caspase-3 corrected for by β -actin (**A and B**) or by TUNEL (**C**).

Figure S2

Palmitate-induced ER-stress response in INS-1 cells and primary islets. INS-1 cells were incubated at 11.1 mM glucose with or without palmitate (1mM) for 24 h and the mRNA expression of the ER-stress markers BiP (**A**) and CHOP (**B**) was analyzed by quantitative real-time RT-PCR and corrected for 18S. Primary rat islets were incubated for 24 h at 16.7 mM glucose with or without palmitate and analyzed for BiP (**C**) and CHOP (**D**) as above. Bars represent mean fold change \pm SEM of at least four independent experiments.

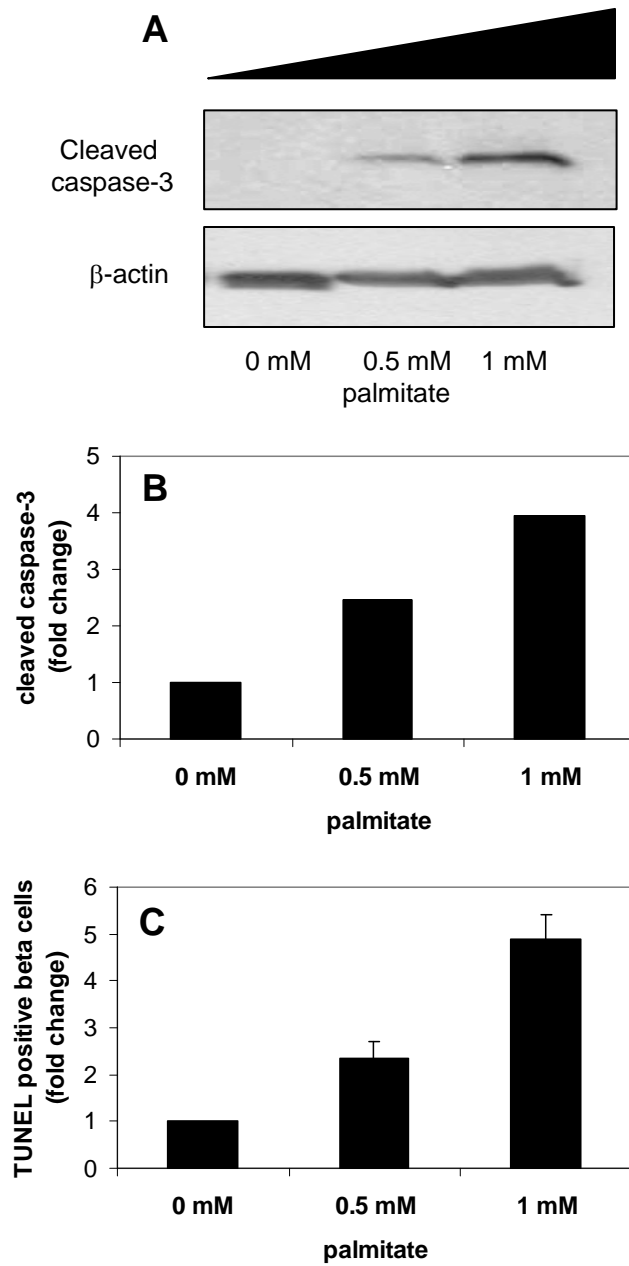
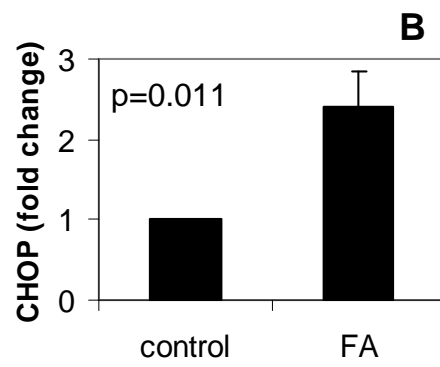
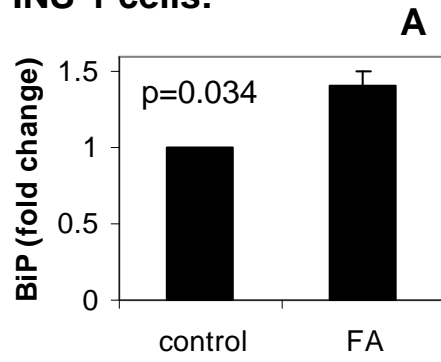


Fig. S1

INS-1 cells:



Primary islets:

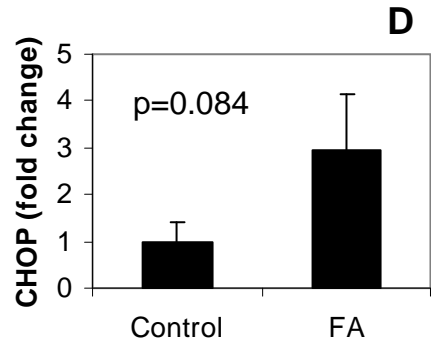
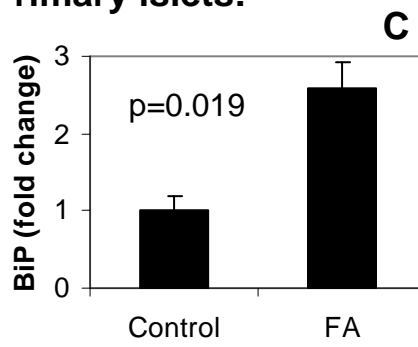


Fig. S2