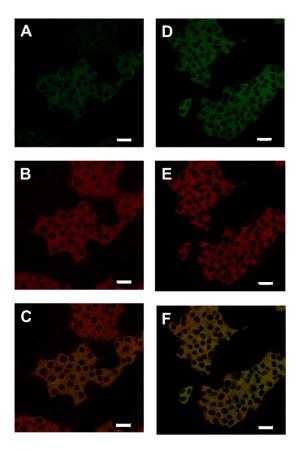
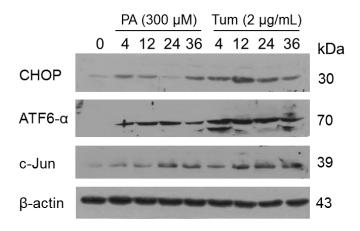
## Supplementary figures

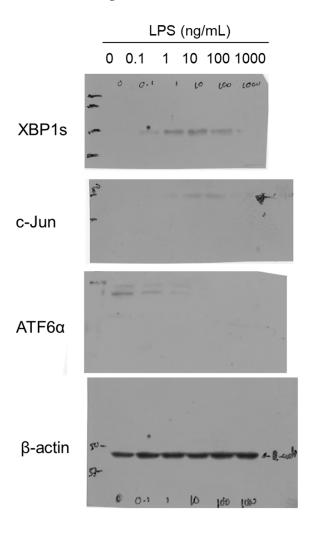
Sup. Fig. 1. LPS treatment increases the signal of DBP-PA on endoplasmic reticulum. Confocal images of  $\beta$ -cells treated with BDP-PA (A), ER-tracker probe (B) and merge (C). Under the same conditions,  $\beta$ -cells treated with BDP-PA plus LPS (D), ER-tracker plus LPS (E), and the merge (F). Bars correspond to 20  $\mu$ m.



Sup. Fig. 2. Activation of UPR arms induced by PA treatment (300  $\mu$ M). Tunicamycin (2  $\mu$ g/mL) was employed as a control of UPR activation.  $\beta$ -actin was used as a loading control.



**Sup. Fig. 3**. Full western-blot of XBP1s, c-Jun, and ATF6 $\alpha$  under LPS increasing concentrations (0.1 1000 ng/mL).  $\beta$ -actin was used as a loading control.



**Sup. Fig. 4.** Full western blot of PMCA1/4 under different conditions of treatment with stearic acid, oleic acid and LPS.

