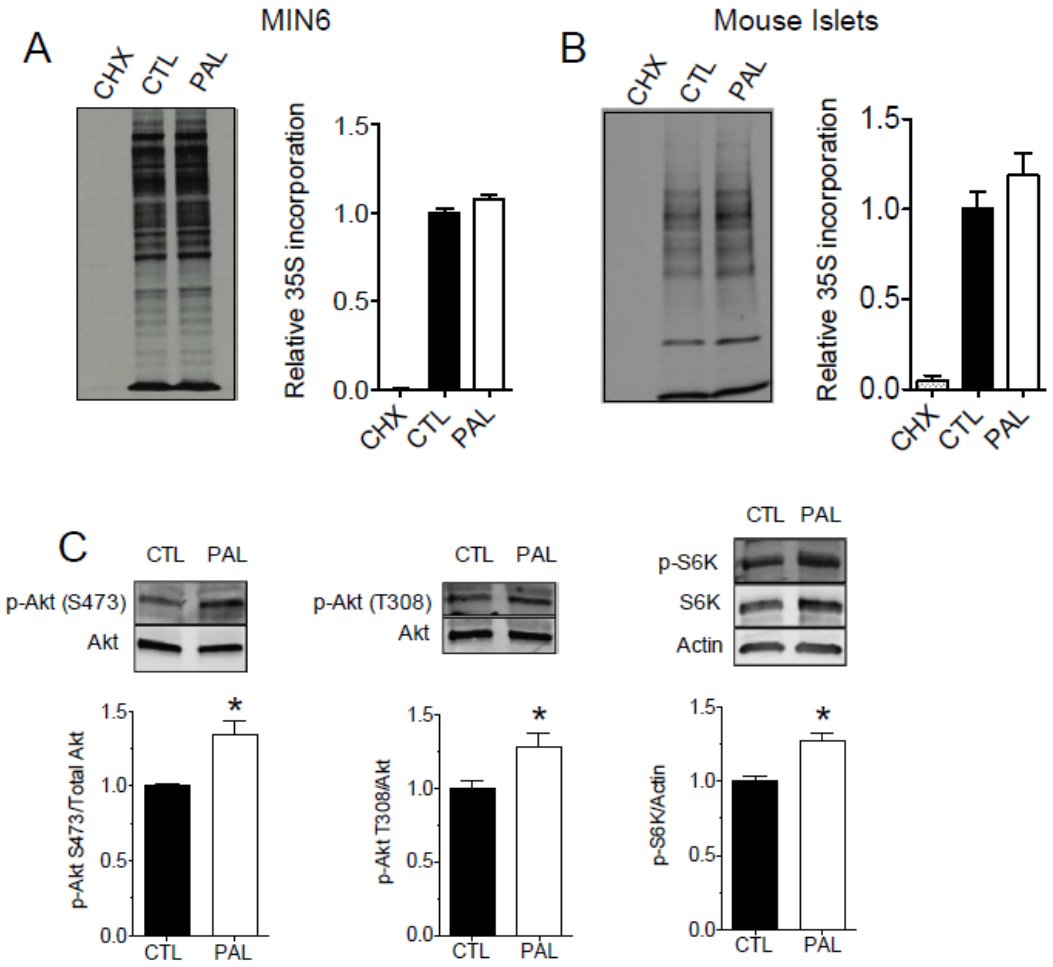
SUPPLEMENTARY DATA

Supplementary Figure 1. Effect of palmitate on protein synthesis in rodent β cells and on mTOR signaling in human islets. *A*, 35S-Met/Cys incorporation (*left panel*) into MIN6 cells upon incubation with cycloheximide (*CHX*, 50 µg/ml), palmitate (*PAL*, 0.5 mM), or control (*CTL*) cells. CHX and PAL were added for 1 h, and 35S-Met/Cys was added during the final 15 min. *Right panel* is the corresponding quantitation of 35S proteins (*N=3* experiments); *B*, Identical to *panel A*, except that cells were primary mouse islets; *C*, Human islets (from 3 donors) were incubated with under control (CTL) or palmitate (PAL, 0.5 mM) conditions in the presence of 11 mM glucose for 1 h, then extracts were subjected to immunoblotting for the indicated proteins. *Upper panels* show representative immunoblots, and *lower panels* show corresponding quantitations (*N=3*). *P<0.05 for the value compared to control.



SUPPLEMENTARY DATA

Supplemental Figure 2. Effect of BSA and glucose concentrations on palmitate-induced mTOR activation in MIN6 cells. *A,* MIN6 cells were incubated under control (*CTL*) and palmitate (*PAL*, 0.5 mM) conditions for 1 h using a palmitate:BSA molar ratio of 5:1, then subjected to immunoblotting for the proteins indicated. *Upper panels* show representative immunoblots, and *lower panels* show corresponding quantitations (*N=3*); *B,* PRP of MIN6 cells after incubation under control and palmitate (0.5 mM) conditions for 1 h using a palmitate:BSA molar ratio of 5:1 and corresponding quantitation of the P/M ratio (*right panel*); *C,* PRP of MIN6 cells after incubation under control and palmitate (0.5 mM) conditions for 1 h using a palmitate:BSA molar ratio of 2.5:1 (*left panel*) and corresponding quantitation of the P/M ratio (*right panel*); *D,* MIN6 cells were incubated under control and palmitate (0.5 mM) conditions for 1 h in 3 mM glucose (palmitate:BSA ratio of 8:1), then subjected to immunoblotting for the proteins indicated. *Upper panels* show representative immunoblots, and *lower panels* show corresponding quantitations (*N=3*); *E,* PRP of MIN6 cells after incubation under control and palmitate (0.5 mM) conditions for 1 h in 3 mM glucose (palmitate:BSA ratio of 8:1). *P<0.05 for the value compared to control.

SUPPLEMENTARY DATA