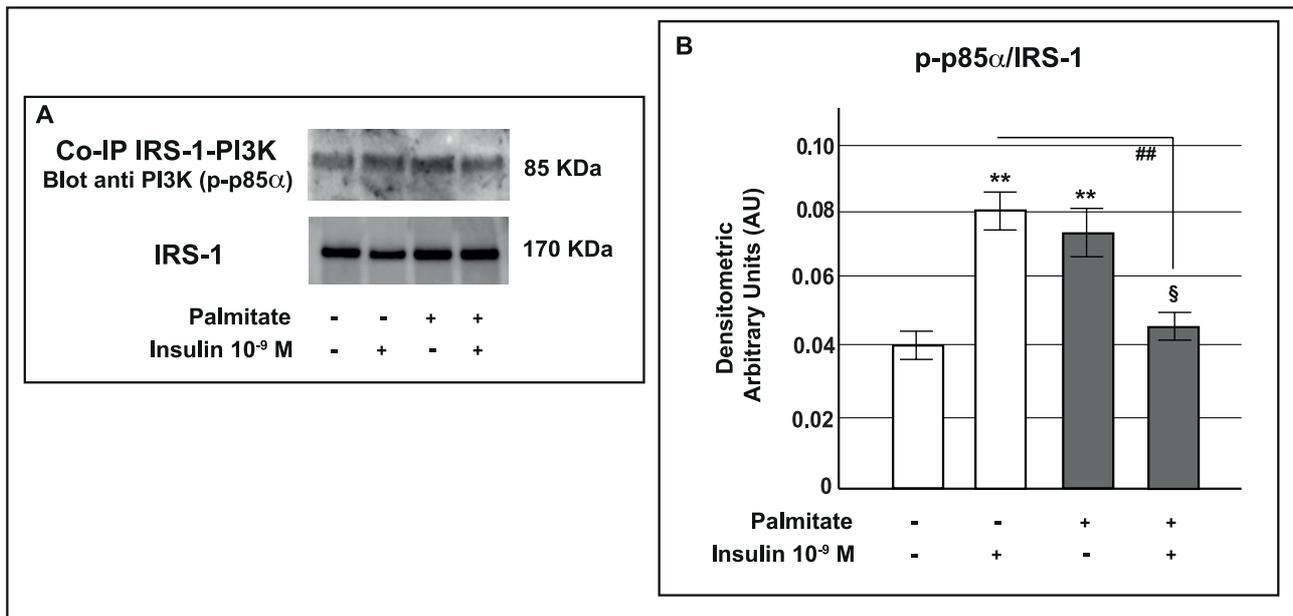
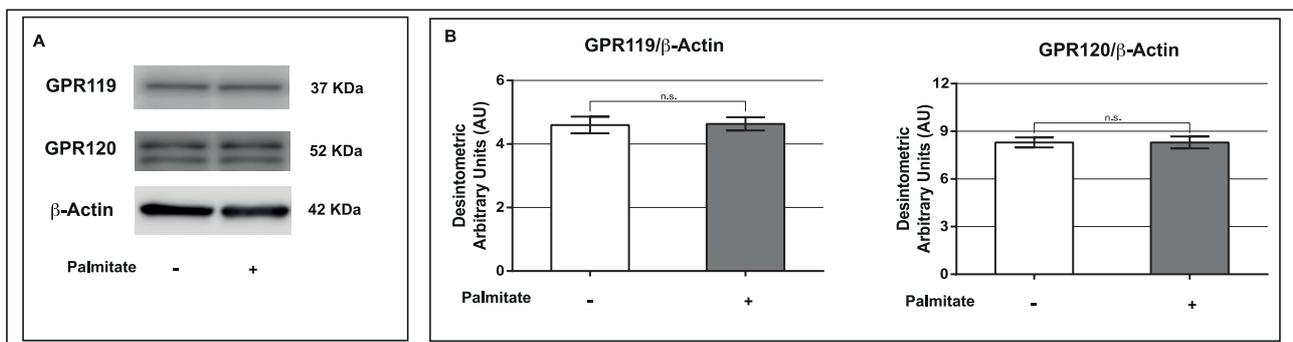


SUPPLEMENTARY DATA



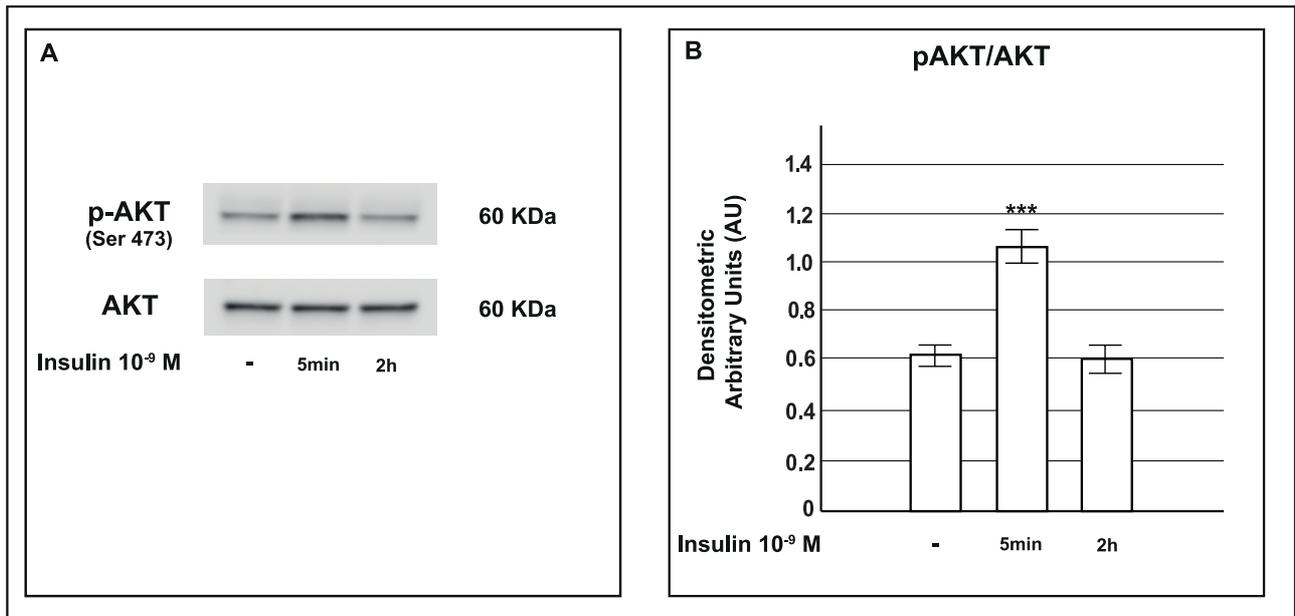
Supplementary Figure 1. Effect of pre-exposure to palmitate on PI3K activation in GLUTag cells.

Panel A: Representative immunoblot from control and palmitate GLUTag treated cells (0.5 mM for 24 h) acutely stimulated with insulin 10⁻⁹ M for 5 min for IRS-1-PI3K co-immunoprecipitation (p85 α) and total IRS-1 (IRS-1); Panel B: corresponding densitometric analysis in control cells (open bars) and in cells exposed to palmitate (gray bars). ** P < 0.01, vs. basal control; ## P < 0.01 vs. insulin stimulated control group; §P < 0.05, vs. palmitate (1-way ANOVA followed by Bonferroni test, n = 3).



Supplementary Figure 2. Effect of pre-exposure to palmitate on GPR119 and GPR120 protein expression in GLUTag cells.

Panel A: Western blot analysis of GPR119 and GPR120 from palmitate GLUTag treated cells (0.5 mM for 24 h) with respect to control; Panel B: corresponding densitometric analysis. n.s.= not significant (1-way ANOVA followed by Bonferroni test, n = 3).



Supplementary Figure 3. Time course of p-AKT insulin-stimulation in GLUTag cells.

Panel A: Western blot analysis of p-AKT (Ser 473) and total AKT (AKT) from GLUTag cells stimulated with insulin 10^{-9} M for 5 min or 2h; Panel B: corresponding densitometric analysis. *** $P < 0.001$ vs. basal (1-way ANOVA followed by Bonferroni test, $n = 3$).