

Supplementary information:

Figure 1. Lipid accumulation in differentiating 3T3-F442A and human primary adipocytes following incubation with serial concentrations of protease inhibitors. Lipid accumulation was estimated by a colorimetric adipogenesis assay after Oil Red O staining in differentiating 3T3-F442A (Fig 1A) and human primary adipocytes (Fig 1B). Data expressed as mean (n=5) \pm SD. *= $P < 0.01$; Drug v Vehicle.

Figure 1A: 3T3-F442A adipocytes

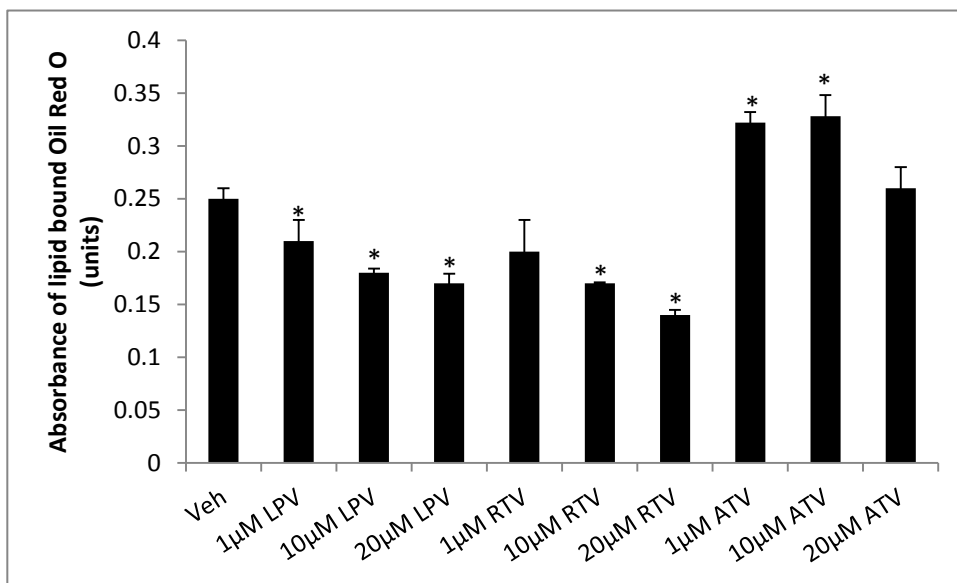


Figure 1B: Human primary adipocytes

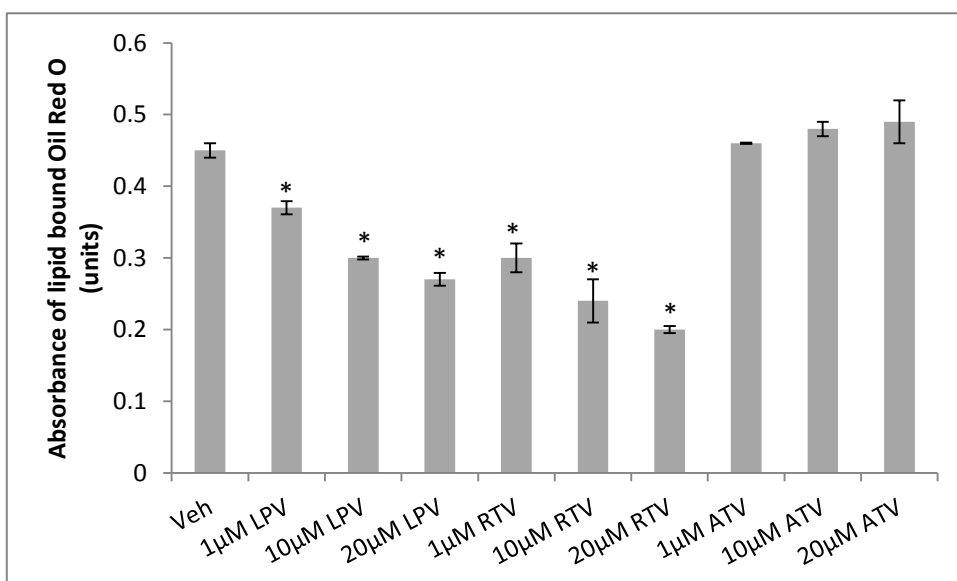
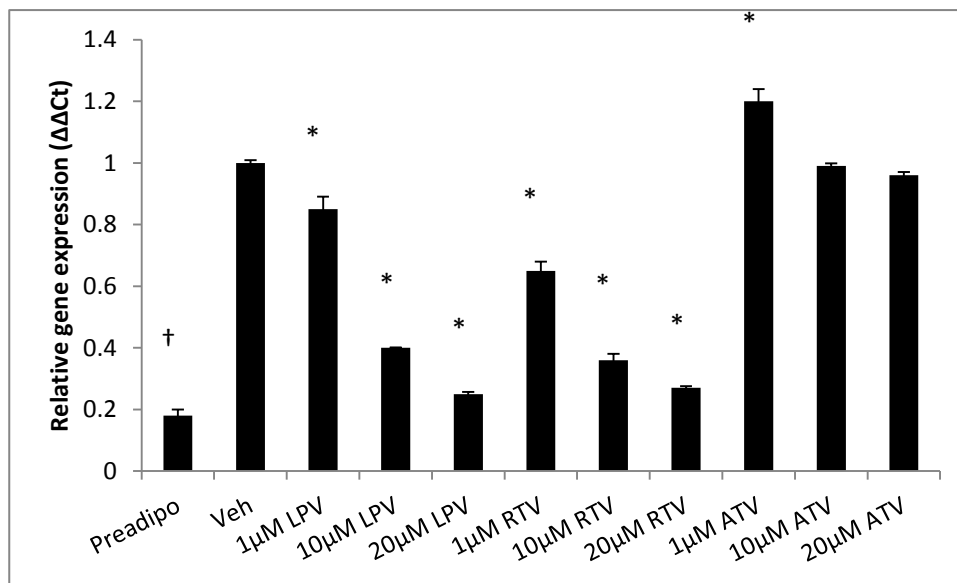
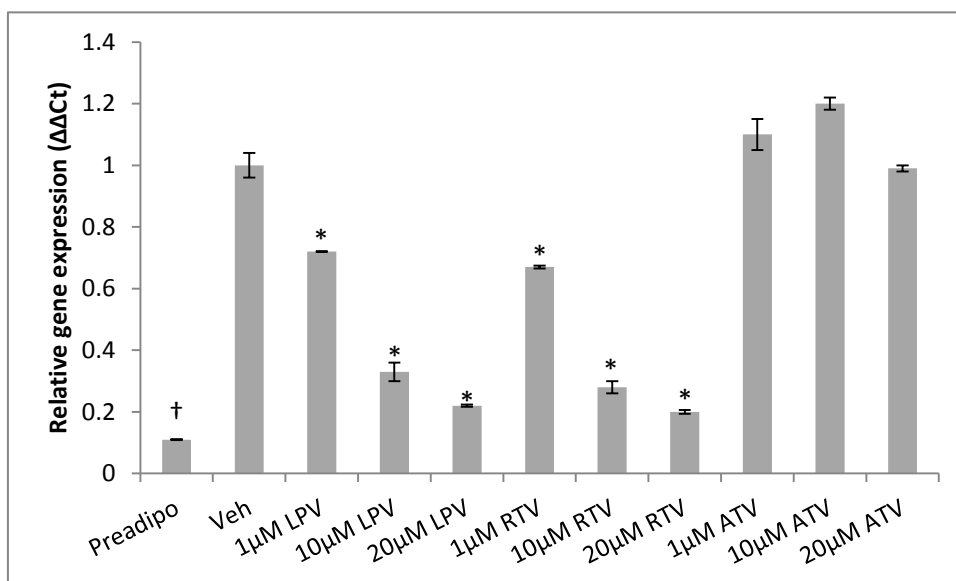


Figure 2: Expression of *PPAR γ* (2A and 2B) and *LPINI* (2C and 2D) mRNA in differentiating 3T3-F442A and human primary adipocytes following treatment with serial concentrations of protease inhibitors. Relative gene expression was assessed by Real Time PCR and is presented as $\Delta\Delta Ct$. Data expressed as mean (n=5) \pm SD. *= $P < 0.01$; Drug v Vehicle. †= $P < 0.01$; Preadipocyte v Vehicle. Preadipo: preadipocyte; Veh: vehicle; LPV: lopinavir; RTV: ritonavir; ATV: atazanavir.

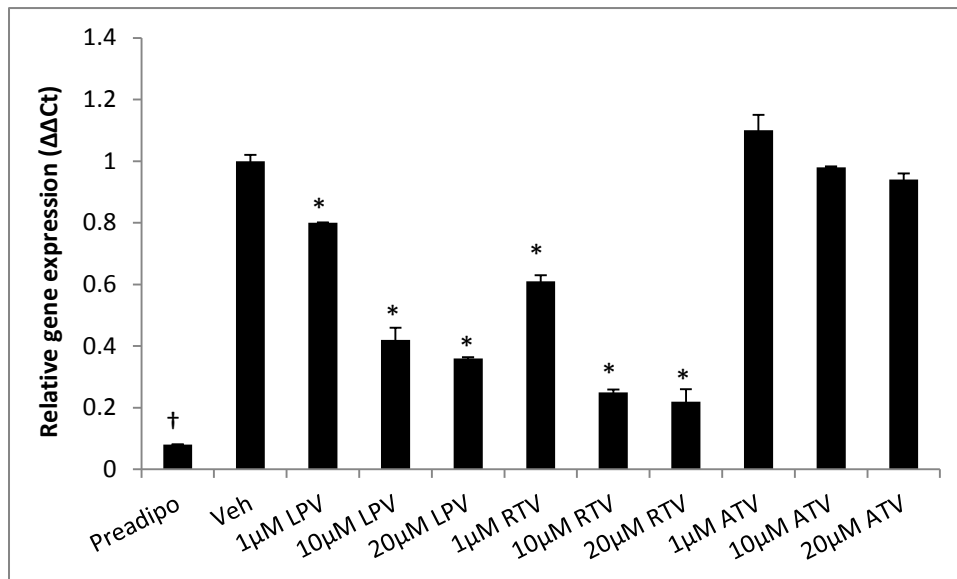
2A) *PPAR γ* expression in 3T3-F442A



2B) *PPAR γ* expression in human primary adipocytes



2C) *LPIN1* expression in 3T3-F442A



2D) *LPIN1* expression in human primary adipocytes

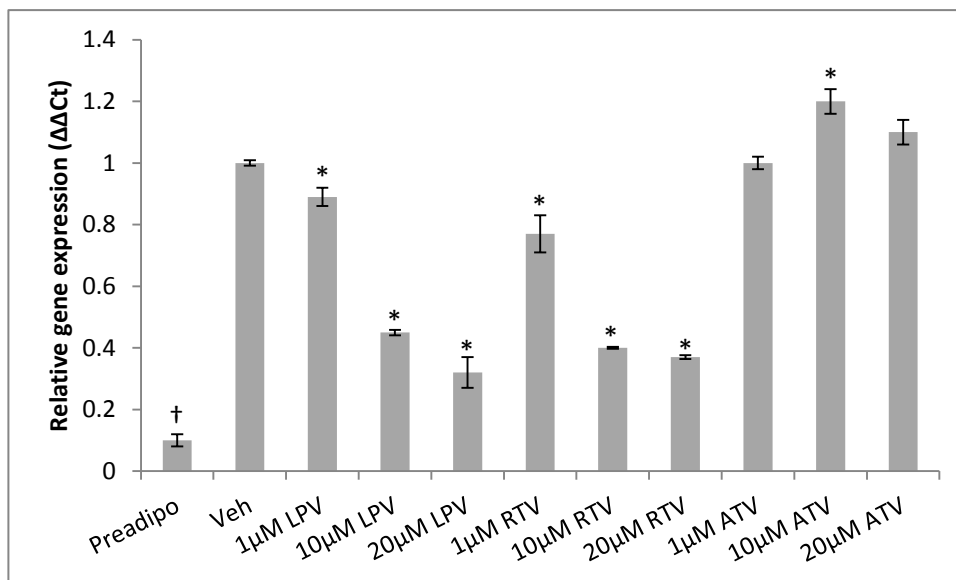


Figure 3. Adipokine secretion in differentiating 3T3-F442A and human primary adipocytes following incubation with serial concentrations of protease inhibitors. Secreted adipokines (adiponectin [3A & 3B]; IL-6 [3C & 3D]; TNF α [3E & 3F]; resistin [3G & 3H]) in the conditioned media following incubation of adipocytes with protease inhibitors was determined by Bead-based multiplex or singleplex ELISA. Data expressed as mean (n=5) \pm SD. *= P <0.01; Drug v Vehicle. †= P <0.01; Preadipocyte v Vehicle. Preadipo: preadipocyte; Veh: Vehicle; RTV: ritonavir; LPV: lopinavir; ATV: atazanavir; IL-6: Interleukin-6. TNF α : Tumor necrosis factor- α .

Fig 3A: Secreted adiponectin in 3T3-F442A adipocytes

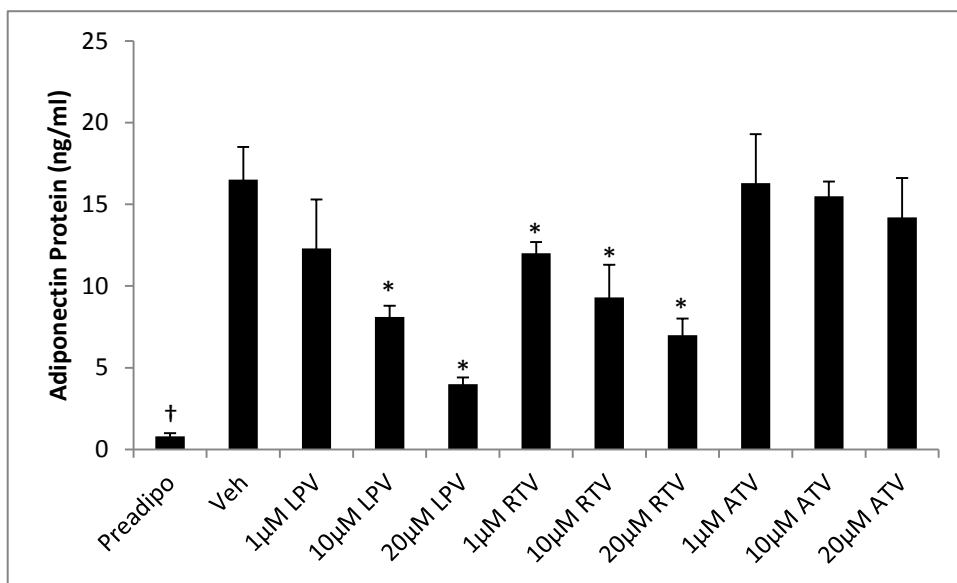


Fig 3B: Secreted adiponectin in human primary adipocytes

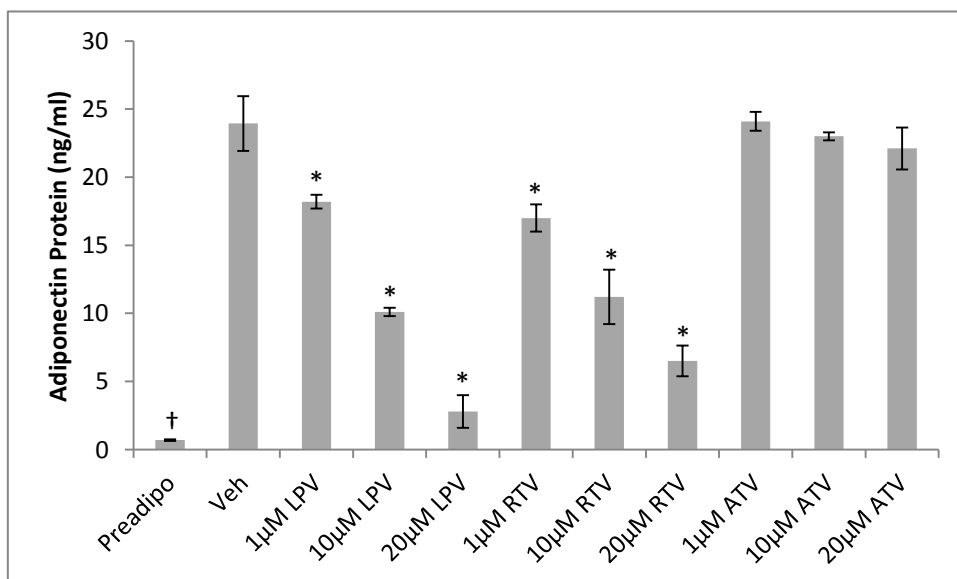


Fig 3C: Secreted IL-6 in 3T3-F442A adipocytes

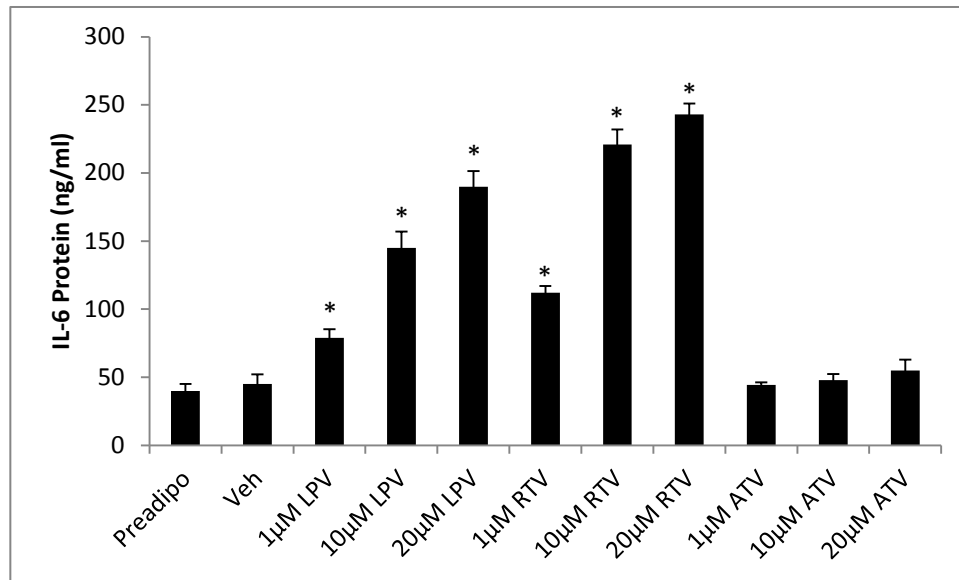


Fig 3D: Secreted IL-6 in human primary adipocytes

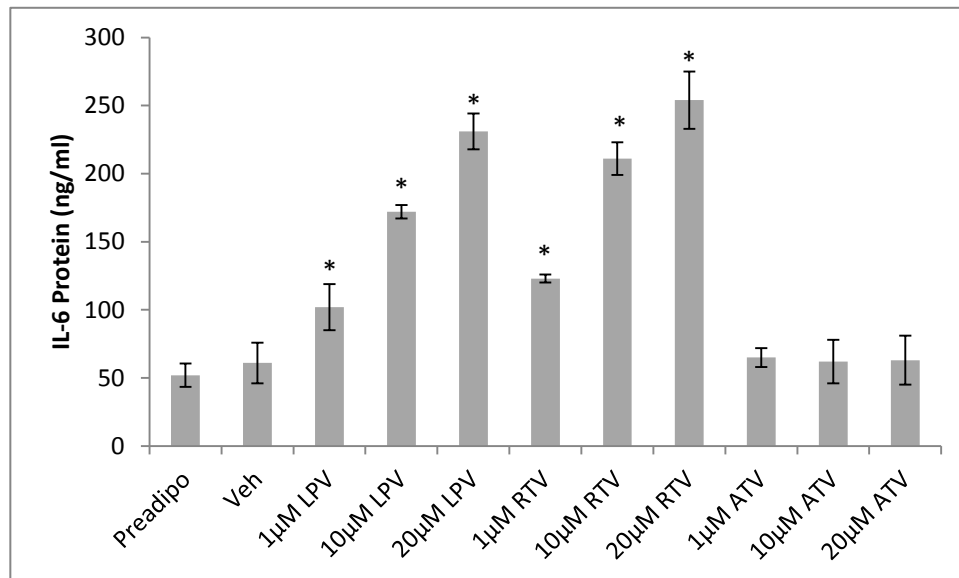


Fig 3E: Secreted TNF- α in 3T3-F442A adipocytes

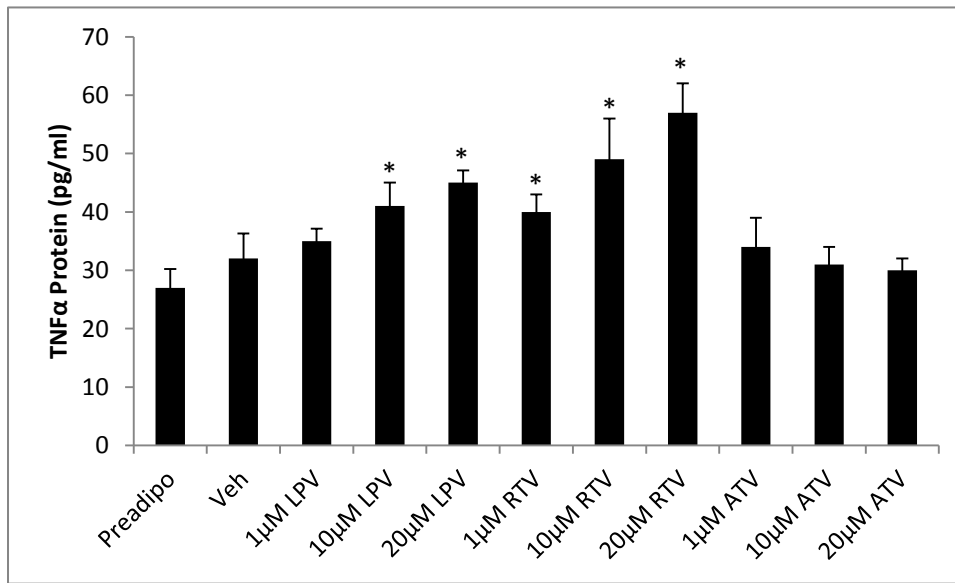


Fig 3F: Secreted TNF- α in human primary adipocytes

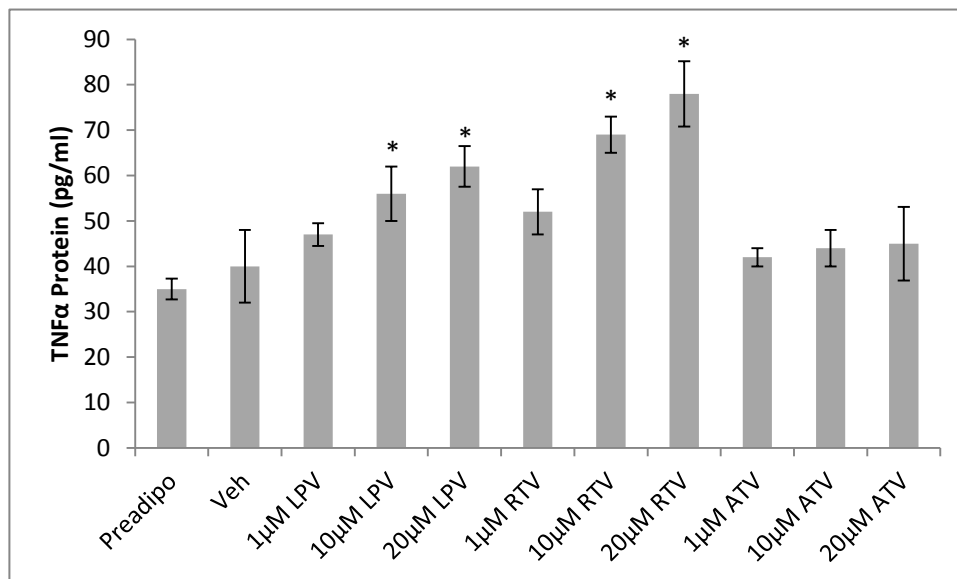


Fig 3G: Secreted resistin in 3T3-F442A adipocytes

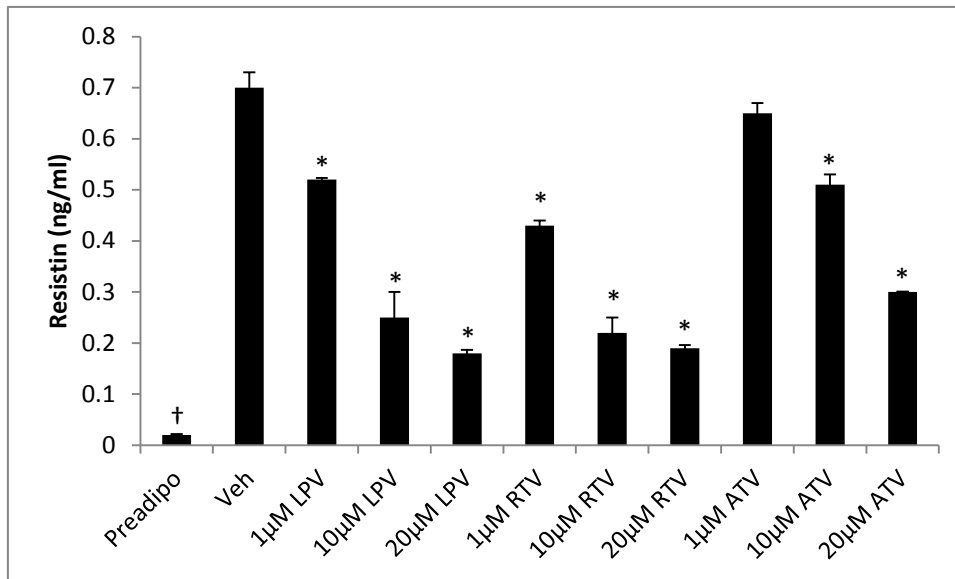


Fig 3H: Secreted resistin in human primary adipocytes

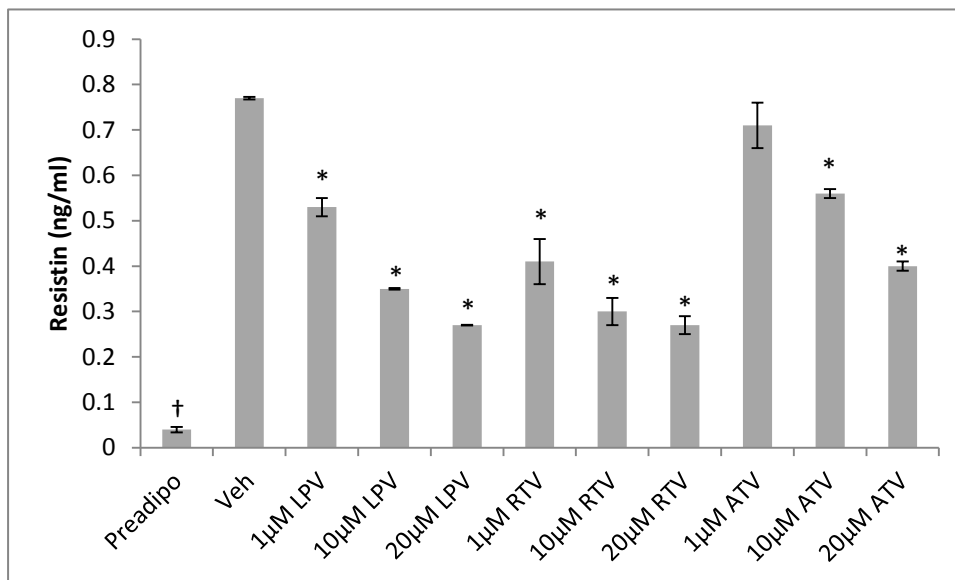


Figure 4. Expression of pAkt_{Ser473} in differentiating human primary adipocytes following incubation with serial concentrations of protease inhibitors. Protein expression was determined from whole adipocyte cell lysate by sandwich ELISA (pAkt and Total Akt). Data expressed as mean ratio of absorbance (pAkt expression adjusted to Total Akt) (n=5) ± SD. *= $P < 0.01$; Drug v Vehicle. Veh: Vehicle; RTV: ritonavir; LPV: lopinavir; ATV: atazanavir.

