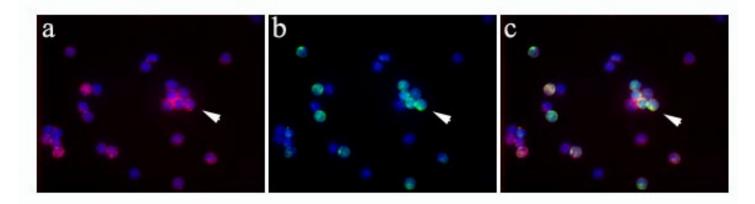


## **Supplemental Figure 1**

(A) GHS-R expression on activated purified human T cells, utilizing an antibody recognizing 186-265 amino acids near C terminal region of GHS-R peptide of human origin. (B) Differential pattern of GHS-R expression on resting human T cells. Lower panel reveals punctate GHS-R expression on resting T cells demonstrate some minor co-localization with GM-1 positive rafts. (C) Proliferation of human T cells (open circles) and IL-2 levels (closed circles) in response to anti-CD3 mAb and ghrelin treatment. Ghrelin demonstrated had no significant effects (P < 0.05) on either T cell proliferation or IL-2 secretion. (D) Specificity of anti-ghrelin and anti-pre-pro ghrelin labeling in purified T cells. These images were acquired using equal exposure time and gain.



## **Supplemental Figure 2**

Acylated ghrelin is co-expressed with total ghrelin in human PBMCs. (**A**) Total ghrelin was labeled with anti-rabbit antibody followed by secondary antibody conjugated with AF-594 (red). (**B**) Acylated ghrelin expression was assessed using a anti-guinea pig antibody, and specific secondary antibody conjugated with AF-488 (green). Nuclei were stained with DAPI. (**C**) Merge reveals approximately 30 % of the cells expressing total ghrelin also co-express the active octanoylated form of ghrelin.