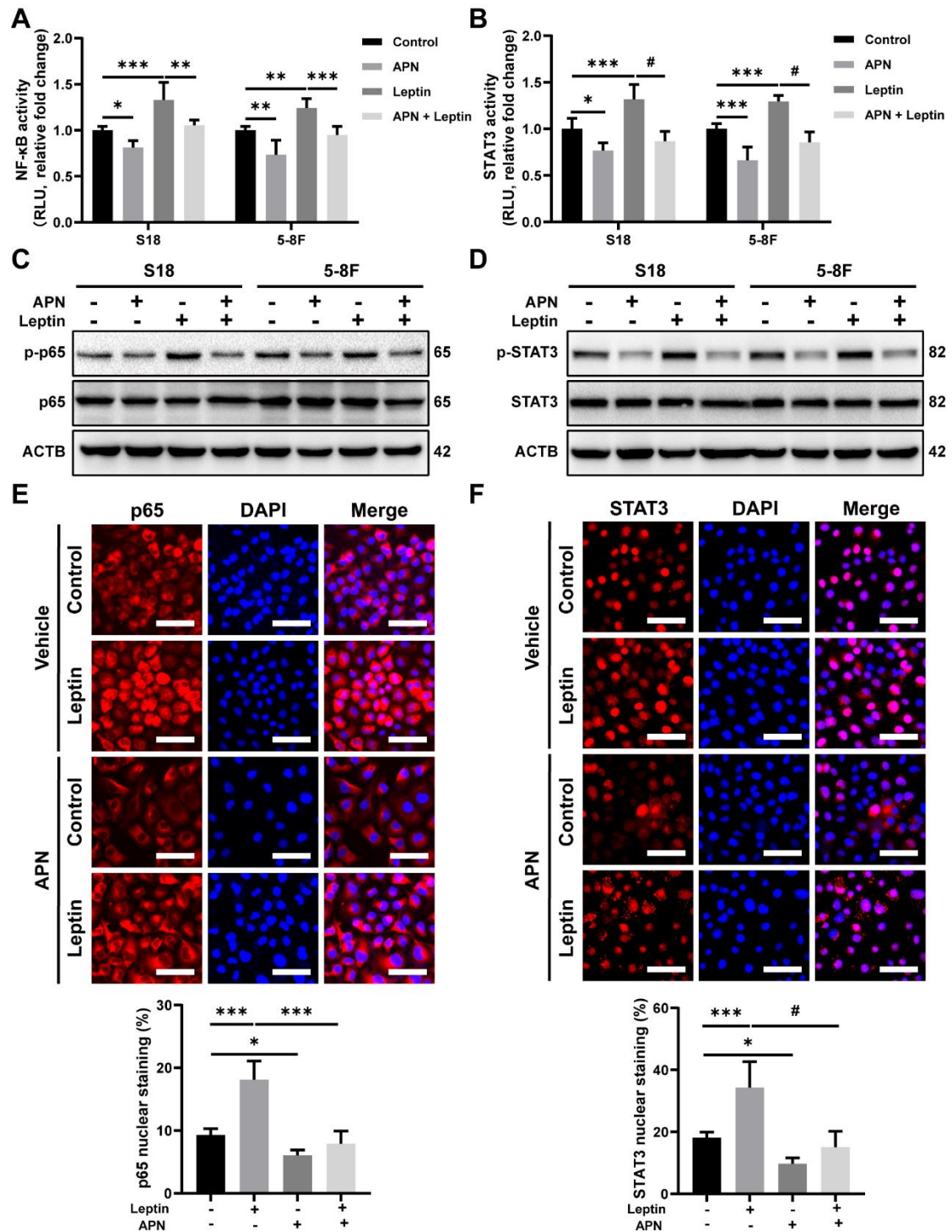


## Supplementary Figures

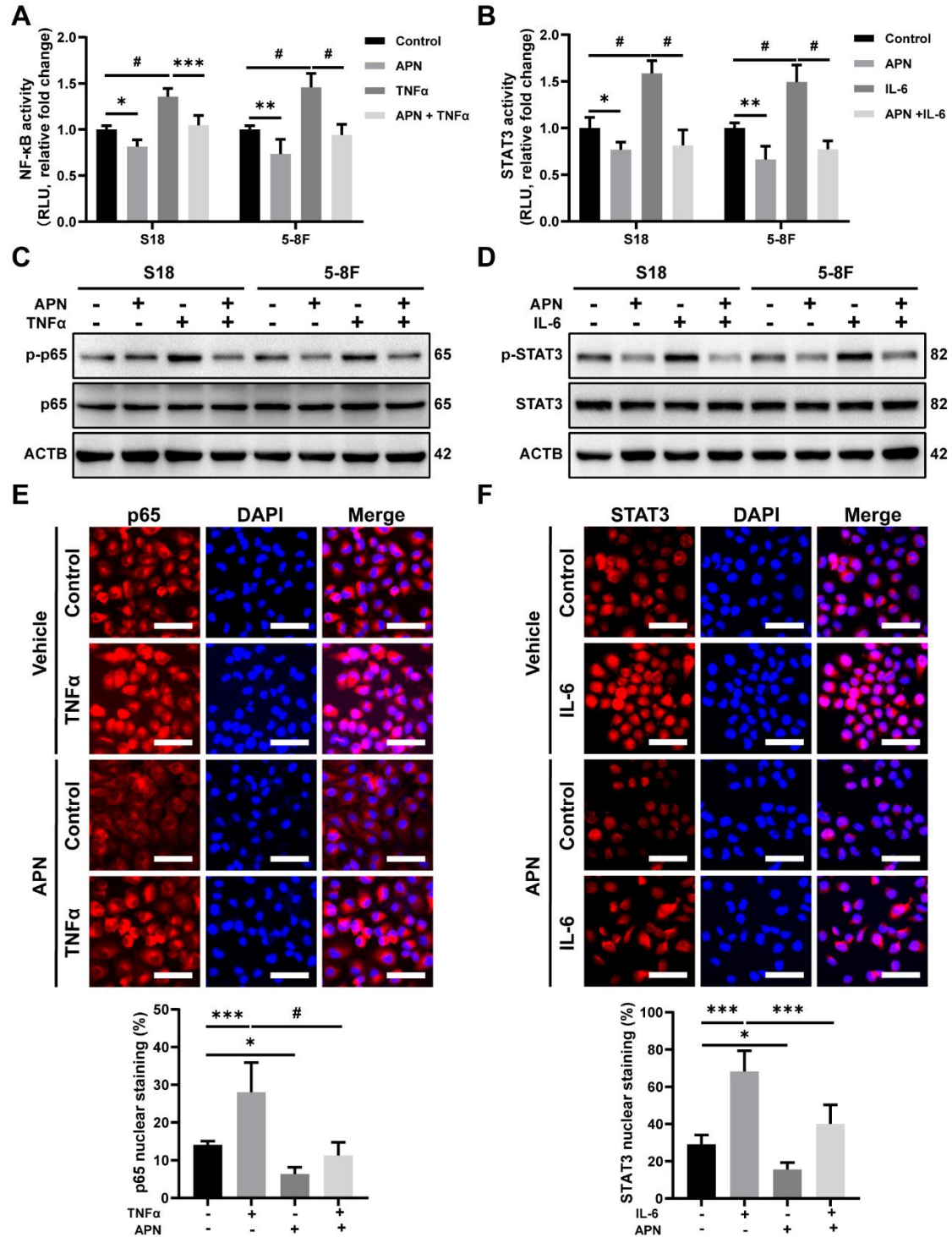


**Figure S1.** Adiponectin blocks leptin induced the activation of NF- $\kappa$ B and STAT3. (A)

Luciferase reporter assay of NF- $\kappa$ B in S18 and 5-8F cells pretreated with 40  $\mu$ g/mL adiponectin

for 2 h and followed by 50 ng/mL leptin treatment for 3 h. (B) Luciferase reporter assay of

STAT3 in S18 and 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/mL leptin treatment for 3 h. (C) Western blot analysis of p-p65 protein level of S18 and 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/ml leptin treatment for 30 min. (D) Western blot analysis of p-STAT3 protein level of S18 and 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/mL leptin treatment for 30 min. (E) The distribution of NF-κB p65 subunit was visualized by immunofluorescent staining in 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/mL leptin treatment for 3 h. Scale bar: 20 µm. (F) The distribution of STAT3 was visualized by immunofluorescent staining in 5-8F cells pretreated with 40 µg/mL adiponectin and followed by 50 ng/mL leptin treatment for 3 h. Scale bar: 20 µm. Results are presented as mean ± SD of three independent experiments performed in triplicate. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ , # $P < 0.0001$ .



**Figure S2.** Adiponectin blocks the activation of IL-6 induced STAT3 and TNF $\alpha$  induced NF- $\kappa$ B. (A) Luciferase reporter assay of NF- $\kappa$ B in S18 and 5-8F cells pretreated with 40  $\mu$ g/mL adiponectin for 2 h and followed by 50 ng/mL TNF- $\alpha$  treatment for 3 h. (B) Luciferase reporter assay of STAT3 in S18 and 5-8F cells pretreated with 40  $\mu$ g/mL adiponectin for 2 h and

followed by 50 ng/mL IL-6 treatment for 3 h. (C) Western blot analysis of p-p65 protein level of S18 and 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/mL TNF-α treatment for 30 min. (D) Western blot analysis of p-STAT3 protein level of S18 and 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/mL IL-6 treatment for 30 min. (E) The distribution of NF-κB p65 subunit was visualized by immunofluorescent staining in 5-8F cells pretreated with 40 µg/mL adiponectin for 2 h and followed by 50 ng/mL TNF-α treatment for 6 h. Scale bar: 20 µm. (F) The distribution of STAT3 was visualized by immunofluorescent staining in 5-8F cells pretreated with 40 µg/mL adiponectin and followed by 50 ng/mL IL-6 treatment for 3 h. Scale bar: 20 µm. Results are presented as mean ± SD of three independent experiments performed in triplicate. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ , # $P < 0.0001$ .