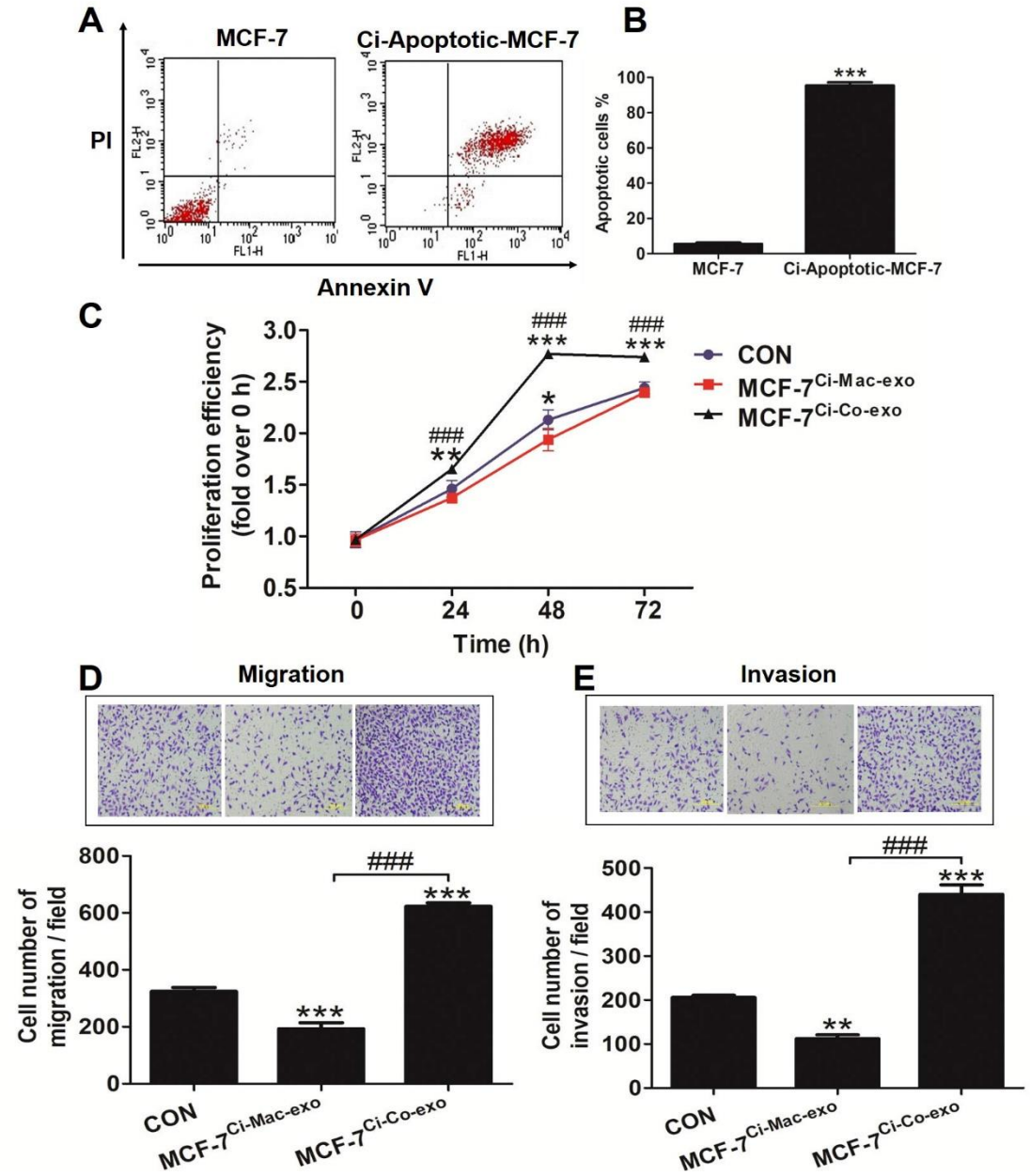

Figure S1. Apoptosis of MCF-7 cells induced by cisplatin (Ci-Apoptotic-MCF-7) and exosomes from macrophages cocultured with Ci-Apoptotic-MCF-7 cells (Ci-Co-exo) increases proliferation, migration and invasion ability of MCF-7 cells

(A) Flow cytometry analysis of Annexin V-FITC/PI co-stained untreated (left panel) and apoptotic (right panel) MCF-7 cells induced by cisplatin. (B) Quantification of the flow cytometry results. (C) Proliferation of MCF-7 cells in control (CON), MCF-7$^{Ci\text{-}Mac\text{-}exo}$ and MCF-7 $^{Ci\text{-}Co\text{-}exo}$ groups was measured over 72 h by MTS assay. Representative images (upper panel) and quantification (lower panel) of migration (D) and invasion (E) assays of CON, MCF-7$^{Ci\text{-}Mac\text{-}exo}$ and MCF-7 $^{Ci\text{-}Co\text{-}exo}$ cells. Each bar represents the average number of cells from 5 fields. Results are typical of three independent experiments. Data represent means ± S.E. ($\bar{x}$± s) (n=3). * $p<0.05$, **

p<0.01 and *** p<0.001 indicate statistical significance in comparisons between the MCF-7$^{Ci\text{-}Mac\text{-}exo}$ or MCF-7 $^{Ci\text{-}Co\text{-}exo}$ groups with the CON group. ### p<0.001 indicates statistical significance in comparisons between the MCF-7 $^{Ci\text{-}Co\text{-}exo}$ group with the MCF-7$^{Ci\text{-}Mac\text{-}exo}$ group.

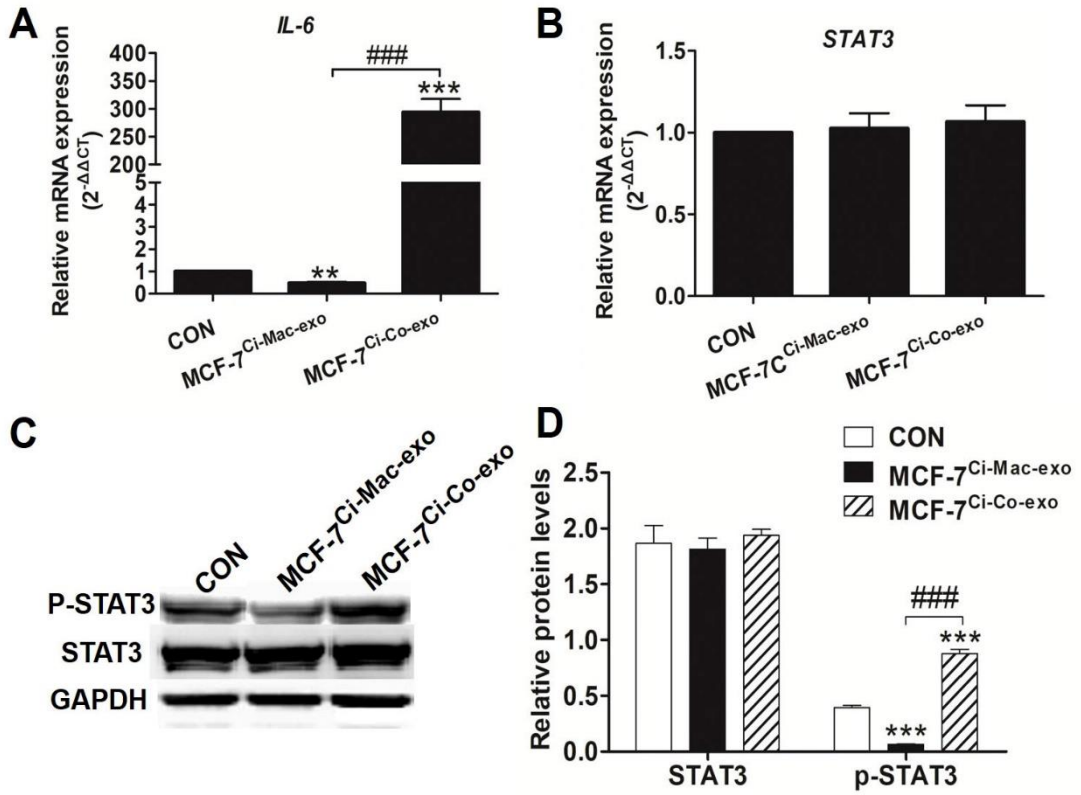

Figure S2. IL-6/ STAT3 signaling pathway is activated after MCF-7 cells are co-cultured with Ci-Co-exo.

IL-6 (A) and STAT3 (B) mRNA levels were assessed using RT-qPCR assay in CON, MCF-7$^{Ci\text{-}Mac\text{-}exo}$ and MCF-7 $^{Ci\text{-}Co\text{-}exo}$ cells. GAPDH was used as the internal standard. (C) Western blotting for STAT3 and p-STAT3, with GAPDH used as the loading control. (D) Bar charts illustrate the relative protein abundance of STAT3 and p-STAT3 compared to GAPDH in CON, MCF-7 $^{Ci\text{-}Mac\text{-}exo}$ and MCF-7 $^{Ci\text{-}Co\text{-}exo}$ cells based on densitometry of Western blotting. Results are typical of three independent experiments. Data represent means ± S.E. ($\bar{x}$± s) (n=3). ** p<0.01 and *** p<0.001 indicate statistical significance in comparisons of the MCF-7 $^{Ci\text{-}Mac\text{-}exo}$ and MCF-7 $^{Ci\text{-}Co\text{-}exo}$ groups to the CON group. ### p<0.001 indicates statistical significance in comparisons of the MCF-7 $^{Ci\text{-}Co\text{-}exo}$ group with the MCF-7 $^{Ci\text{-}Mac\text{-}exo}$ group.

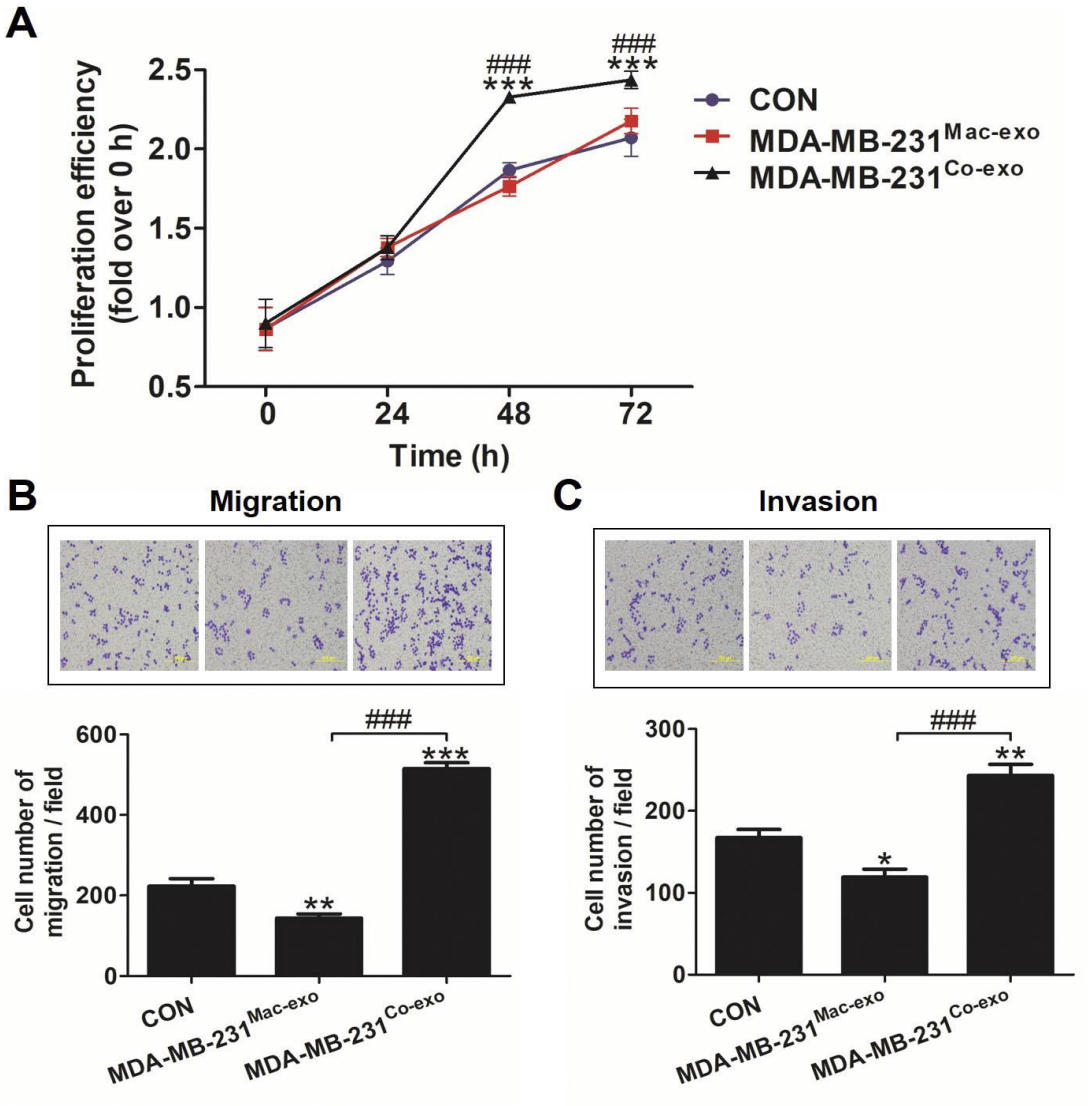

Figure S3. Co-exo increases proliferation ability and promotes cellular migration and invasion of MDA-MB-231 cells

(A) Proliferation of MDA-MB-231 cells in control (CON), MDA-MB-231$^{Mac\text{-}exo}$ and MDA-MB-231$^{Co\text{-}exo}$ groups was measured over 72 h by MTS assay. Results are typical of three independent experiments. Data represent means ± S.E. ($\bar{x} \pm$ s) (n=3). Representative images (upper panel) and quantification (lower panel) of migration (B) and invasion (C) assays of CON, MDA-MB-231$^{Mac\text{-}exo}$ and MDA-MB-231$^{Co\text{-}exo}$ cells. Each bar represents the average number of cells from 5 fields. * $p<0.05$, ** $p<0.01$ and *** $p<0.001$ indicate statistical significance in comparisons of the MDA-MB-231$^{Mac\text{-}exo}$ or MDA-MB-231$^{Co\text{-}exo}$ groups with the CON group. ### $p<0.001$ indicates statistical significance in comparisons of the MDA-MB-231$^{Co\text{-}exo}$ group with the MDA-MB-231$^{Mac\text{-}exo}$ group.

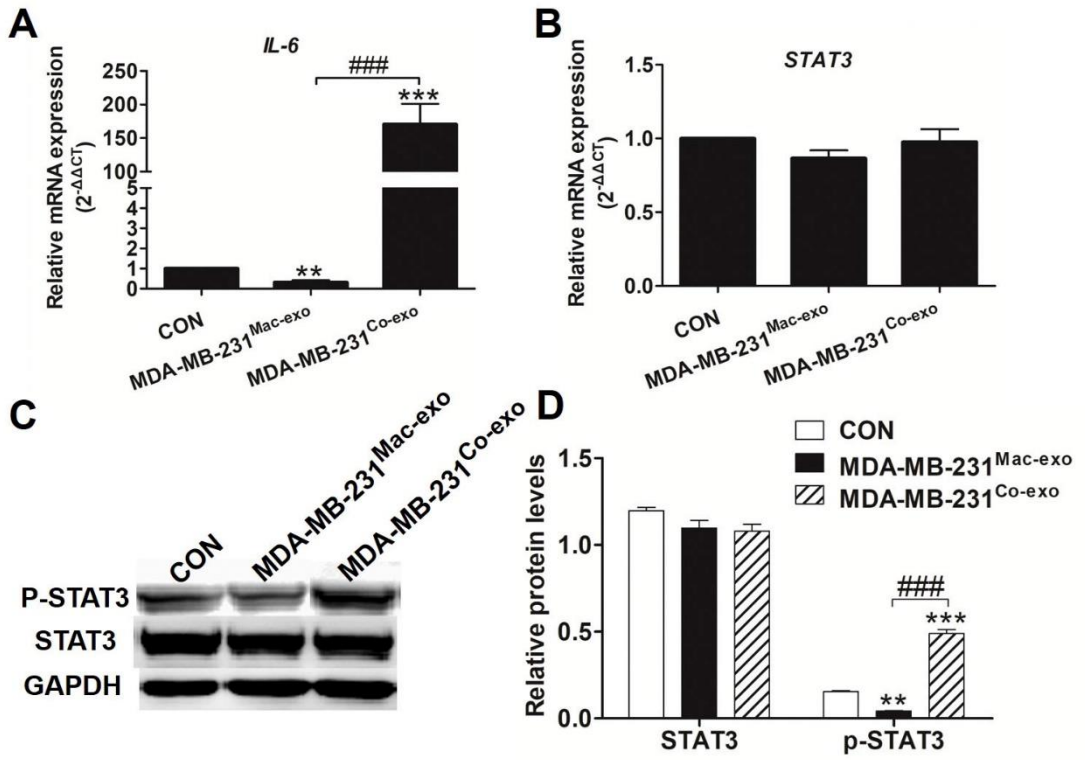

Figure S4. IL-6/ STAT3 signaling pathway is activated after MDA-MB-231 cells are co-cultured with Co-exo.

IL-6 (A) and STAT3 (B) mRNA levels were assessed using RT-qPCR assay in CON, MDA-MB-231$^{Mac\text{-}exo}$ and MDA-MB-231$^{Co\text{-}exo}$ cells. GAPDH was used as the internal standard. (C) Western blotting for STAT3 and p-STAT3, with GAPDH used as the loading control. (D) Bar charts illustrate the relative protein abundance of STAT3 and p-STAT3 compared to GAPDH in CON, MDA-MB-231$^{Mac\text{-}exo}$ and MDA-MB-231$^{Co\text{-}exo}$ cells based on densitometry of Western blotting. Results are typical of three independent experiments. Data represent means ± S.E. ($\bar{x}$± s) (n=3). ** $p<0.01$ and *** $p<0.001$ indicate statistical significance in comparisons of the MDA-MB-231$^{Mac\text{-}exo}$ or MDA-MB-231$^{Co\text{-}exo}$ groups with the CON group. ### $p<0.001$ indicates statistical significance in comparisons of the MDA-MB-231$^{Co\text{-}exo}$ group with the MDA-MB-231$^{Mac\text{-}exo}$ group.