SUPPLEMENTARY FIGURE LEGENDS

FIG. S1. **Autophagy was critical for IFN-γ-induced anti-proliferation and viral replication inhibition.** *A*, the number of cells was counted 72 h after IFN-γ (10 ng/ml) treatment in WT and *Atg5*$^{-/-}$ MEFs. Data, obtained from triplicate cultures, are means ± S.D. *, $p < 0.05$. Bar, 100 μm. *B*, levels of HSV-1 titers 7 days post-infection in IFN-γ (10 ng/ml)-treated WT and *Atg5*$^{-/-}$ MEFs. pfu, plaque-forming units. Data, obtained from triplicate cultures, are means ± S.D. *, $p < 0.05$.

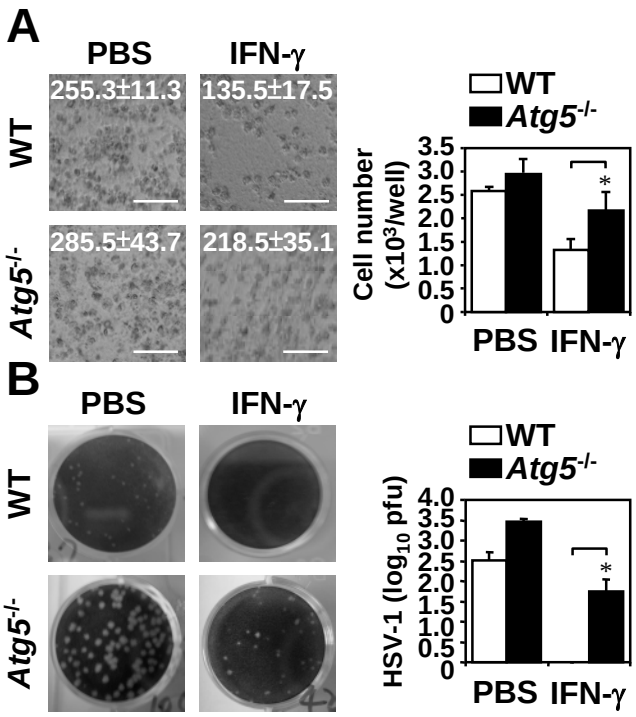
FIG. S2. **STAT1 expression decreased in the absence of autophagy.** *A*, flow cytometry was used to detect the expression of STAT1α/β. The percentages of positive cells and mean fluorescence intensity (*MFI*) are shown. *B*, Western blotting was used to determine the expression of STAT1α/β after pretreatment with (+) and without (–) MG132 (25 μM). β-actin was the internal control. Data are representative of three individual experiments.

FIG. S3. **SHP2 mediated the inhibition of IFN-γ-induced nitrite generation in the absence of autophagy.** Griess reagent was used to detect nitrite generation 48 h after IFN-γ (10 ng/ml) treatment with (+) and without (–) 0.5 h of SHP2 inhibitor NSC-87877 (5 μM) pretreatment in WT and *Atg5*$^{-/-}$ MEFs. Data, obtained from triplicate cultures, are means ± S.D. *, $p < 0.05$.

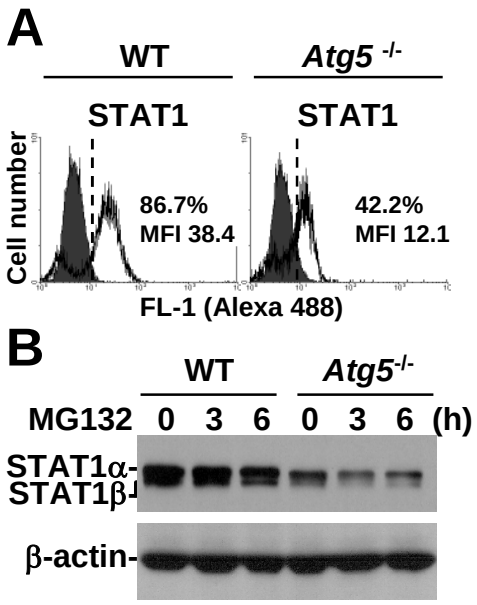
FIG. S4. **Autophagic stimuli and SHP2 inhibition facilitated IFN-γ-induced STAT1 activation in K562 cells.** *A*, Western blotting was used to determine the time kinetic phosphorylation of STAT1α/β (Y701) and LC3 conversion in IFN-γ (10 ng/ml)-treated U937 and K562 cells. *B* and *C*, with (+) and without (–) 0.5 h of rapamycin (5 μM) pretreatment or shSHP2-2 transfection, Western blotting was used to determine the phosphorylation of STAT1α/β (Y701) and LC3 conversion in IFN-γ (10 ng/ml)-treated K562 cells for 0.25 h. β-actin was the internal control. Data are representative of three individual experiments.

FIG. S5. **Autophagic stimuli facilitated IFN-γ-induced STAT1 activation.** Western blotting was used to determine the phosphorylation of STAT1α/β (Y701) after a 0.5 h-pretreatment with rapamycin (*RAP*, 5 μM), starvation (*STA*), or LPS (1 μg/ml), and then a 0.25-h treatment with IFN-γ (10 ng/ml) in WT MEFs. β-actin was the internal control. Data are representative of three individual experiments.

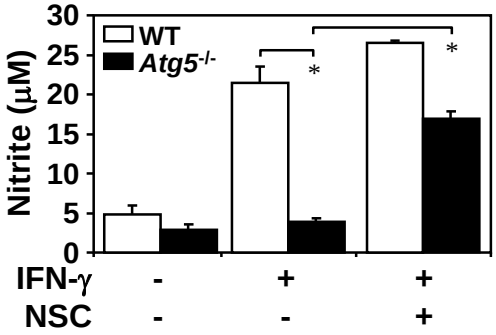
Chang et al. Figure S1



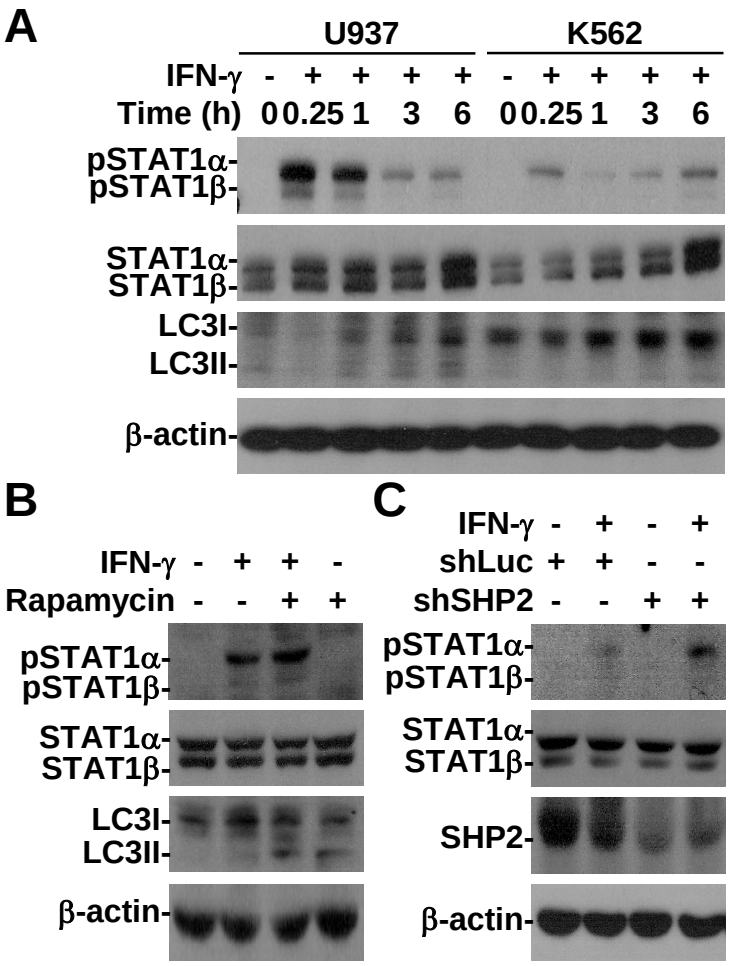
Chang et al. Figure S2



Chang et al. Figure S3



Chang et al. Figure S4



Chang et al. Figure S5