

Figure. S1 Parkin deficiency significantly enhanced VSV Δ M51–GFP -induced transcriptional levels of antiviral genes. (A-C) Primary $Parkin^{+/+}$ and $Parkin^{-/-}$ MEFs were infected with VSV Δ M51–GFP at a MOI of 0.5 for 12 h, and lysed to measure transcript levels of Ifnb1 (A), Ifit1 (B), and Il6 (C) by qRT-PCR analysis.

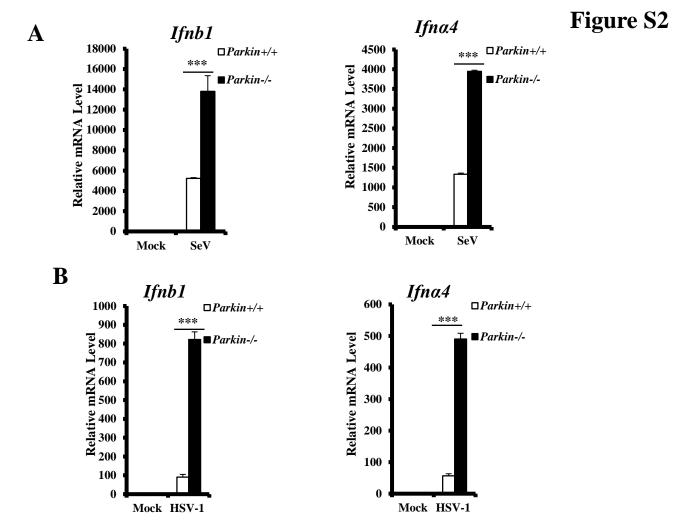


Figure. S2 Parkin deficiency significantly enhanced SeV- or HSV-1-induced transcriptional levels of antiviral genes in *Parkin*^{-/-} immortalized MEFs.

(A-B) Immortalized *Parkin*^{+/+} and *Parkin*^{-/-}MEFs were infected with SeV for 9 h (A) or herpes simplex virus 1 (HSV-1) at a multiplicity of infection (MOI) of 5 for 9 h (B), followed by qRT-PCR analysis to measure transcript levels of *Ifnb1* and *Ifna4*.

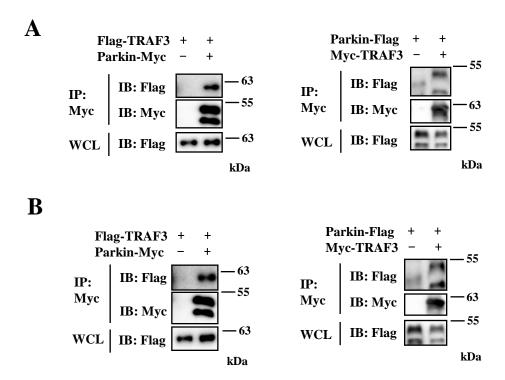


Figure. S3 Parkin and TRAF3 interacted with each other in the presence or absence of EDTA in HEK293 cells.

(A, B) HEK293 cells were transfected with the indicated expression plasmids. Twenty-four hours after transfection, cell lysates in the presence (A) or absence of EDTA(B) were immunoprecipitated with anti-Myc beads and analyzed by immunoblotting with the indicated antibodies. Bottom panel, expression of exogenous proteins in whole-cell lysates (WCL).

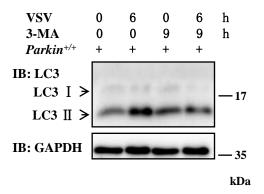


Figure. S4 Autophage inhibitor 3-MA inhibited VSV-induced autophagy.

Immortalized $Parkin^{+/+}$ MEFs were left untreated or treated with 3-methyladenine (3-MA) (final concentration, 5mM) and infected with VSV at MOI of 1 for the indicated times. Cell lysates were analyzed by immunoblotting with the indicated antibodies.

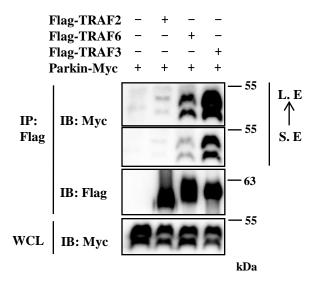


Figure. S5 Overexpressed Parkin weakly interacted with TRAF2 or TRAF6, compared to TRAF3.

HEK293 cells were transfected with the indicated expression plasmids. Twenty-four hours after transfection, cell lysates were immunoprecipitated with anti-Flag beads and analyzed by immunoblotting with the indicated antibodies. Bottom panel, expression of exogenous proteins in whole-cell lysates (WCL). S. E, Short Exposure; L. E, Long Exposure.

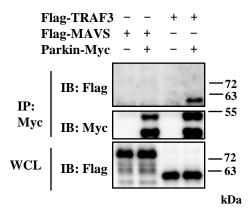


Figure. S6 Parkin failed to interact with MAVS.

HEK293 cells were transfected with the indicated expression plasmids. Twenty-four hours after transfection, cell lysates were immunoprecipitated with anti-Myc beads and analyzed by immunoblotting with the indicated antibodies. Bottom panel, expression of exogenous proteins in whole-cell lysates (WCL).