Supporting Information

Liu et al. 10.1073/pnas.1114981109

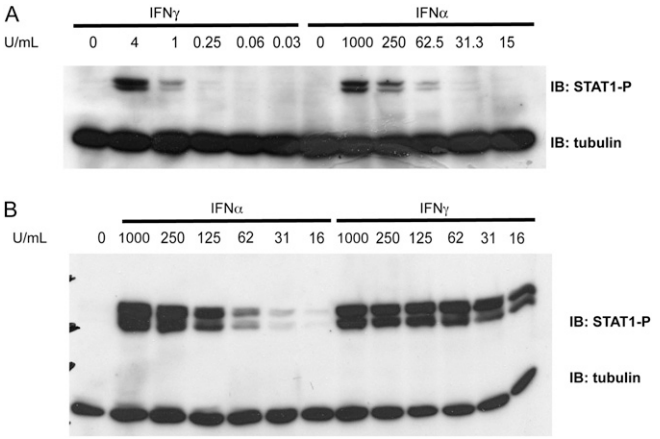

Fig. S1. (*A*) Bone marrow-derived macrophages were treated with IFNα and IFNγ at the indicated concentrations for 30 min and the cell lysates were subjected to immunoblotting (IB) for phospho-STAT1 and tubulin, which is a housekeeping gene. (*B*) Similar to *A*. Higher titrations of IFNα and IFNγ were used.

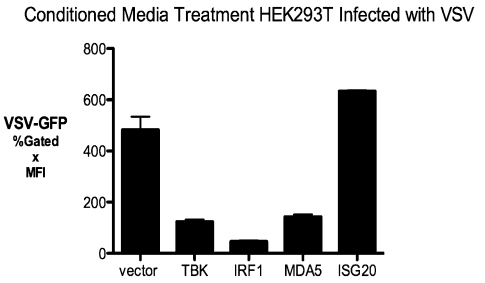

Fig. S2. Conditioned media from HEK293T cells overexpressing the indicated gene were used to treat freshly plated HEK293T cells. The cells were infected with vesicular stomatitis virus (VSV)-GFP 4 h after treatment, and VSV-GFP was measured by FACS. Values are represented as mean ± SEM. MFI, geometric mean of fluorescence index.

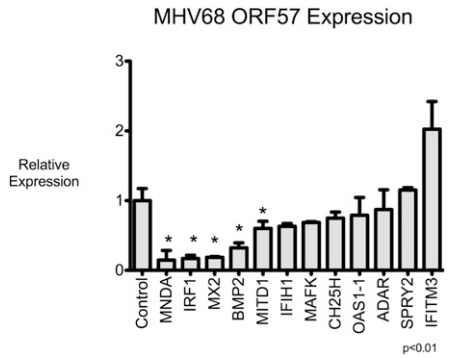

Fig. S3. HEK293T cells were transfected with selected IFN-stimulated genes (ISGs) that inhibited murine gammaherpes virus (MHV)-68 replication. Expression of MHV-68 ORF57 was measured by quantitative PCR at 4 h postinfection (hpi). Values are represented as mean ± SEM.

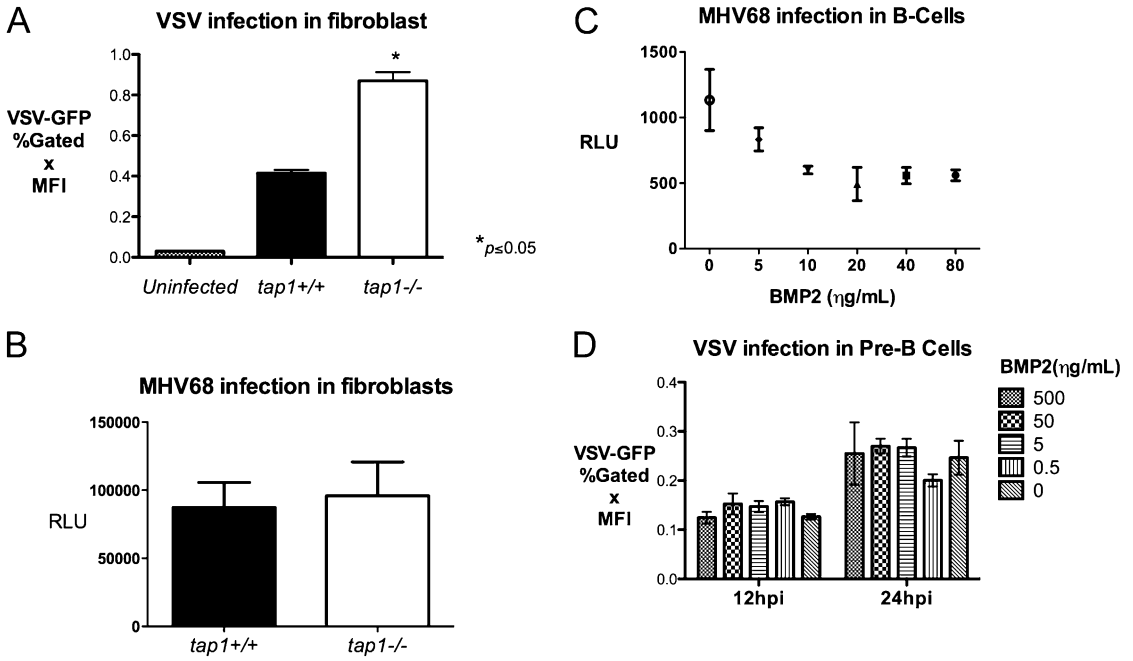

Fig. S4. (*A*) TAP$^{+/+}$ and TAP$^{-/-}$ tail-derived fibroblasts were infected with VSV-GFP at 0.1 MOI, and VSV-GFP was measured by FACs at 12 hpi. MFI, geometric mean fluorescence index. (*B*) TAP$^{+/+}$ and TAP$^{-/-}$ fibroblasts were infected the MHV-68 at 0.25 MOI, and MHV-68-Luc activity was measured at 9 hpi. (*C*) Immortalized pre-B cells were treated with hBMP2 at indicated concentration for 12 h and infected with MHV-68-Luc at 0.25 MOI. Luciferase activity in the cell lysates was quantified at 9 hpi. Values represent mean ± SD. (*D*) HEK293T and Pre-B cells treated with BMP2 at increasing concentrations for 12 h and infected with VSV at 0.01 and 1MOI respectively. VSV-GFP expression was measured by FACS at 9 hpi. Values represent mean ± SD.

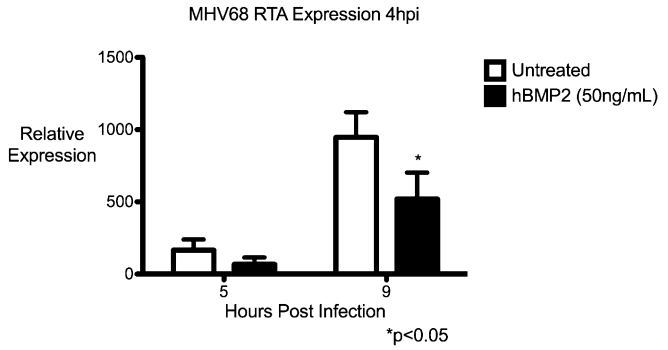

Fig. S5. HEK293T cells were treated with recombinant human BMP2 (hBMP2) at 50 ng/mL for 12 h and infected with 0.2 multiplicity of infection (MOI) of MHV-68. Expression of replication and transactivator protein (RTA) was measured at 4 hpi.

Table S1. List of IFNα-specific, IFN-γ specific, and commonly induced ISGs described in Fig. 1

Table S1 (DOCX)

Table S2. List of all ISGs that inhibited VSV-GFP replication when expressed with red fluorescent construct (DsRed) in HEK293T cells as measured by FACS

Table S2 (DOCX)

VSV-GFP was measured in DsRed^{+} cells and normalized to control transfected cells.

Table S3. Summary of selected 24 antiviral ISGs that inhibited VSV-GFP by FACS

Table S3 (DOCX)

Significant inhibitory effects observed by plaque assay and VSV-G-Luc–pseudotyped virus as shown in Figs. 4*A* and 5*A*, respectively, are indicated by (+) for inhibition and (–) for no inhibition.

Table S4. List of all ISGs that inhibited MHV-68 luciferase activity when expressed in HEK293T cells

Table S4 (DOCX)

Table S5. Summary of selected 12 antiviral ISGs that inhibited MHV-68 luciferase and plaque assay

Table S5 (DOCX)

Significant inhibitory effects by MHV-68 plaque assay or RTA expression as shown in Figs. 4*B* and 5*B*, respectively, are indicated by (+) for inhibition and (–) for no inhibition.