

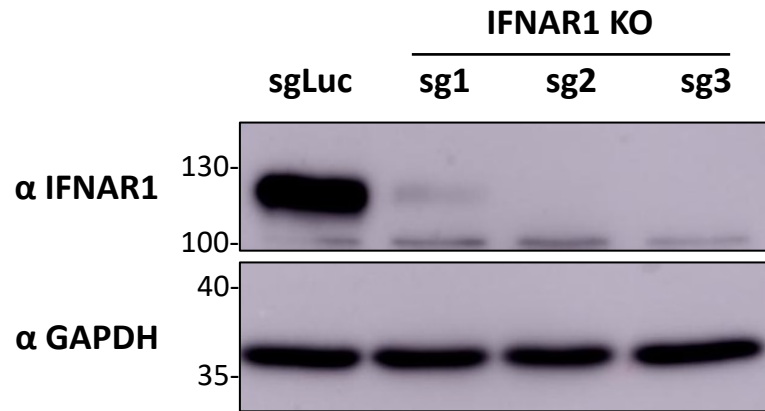
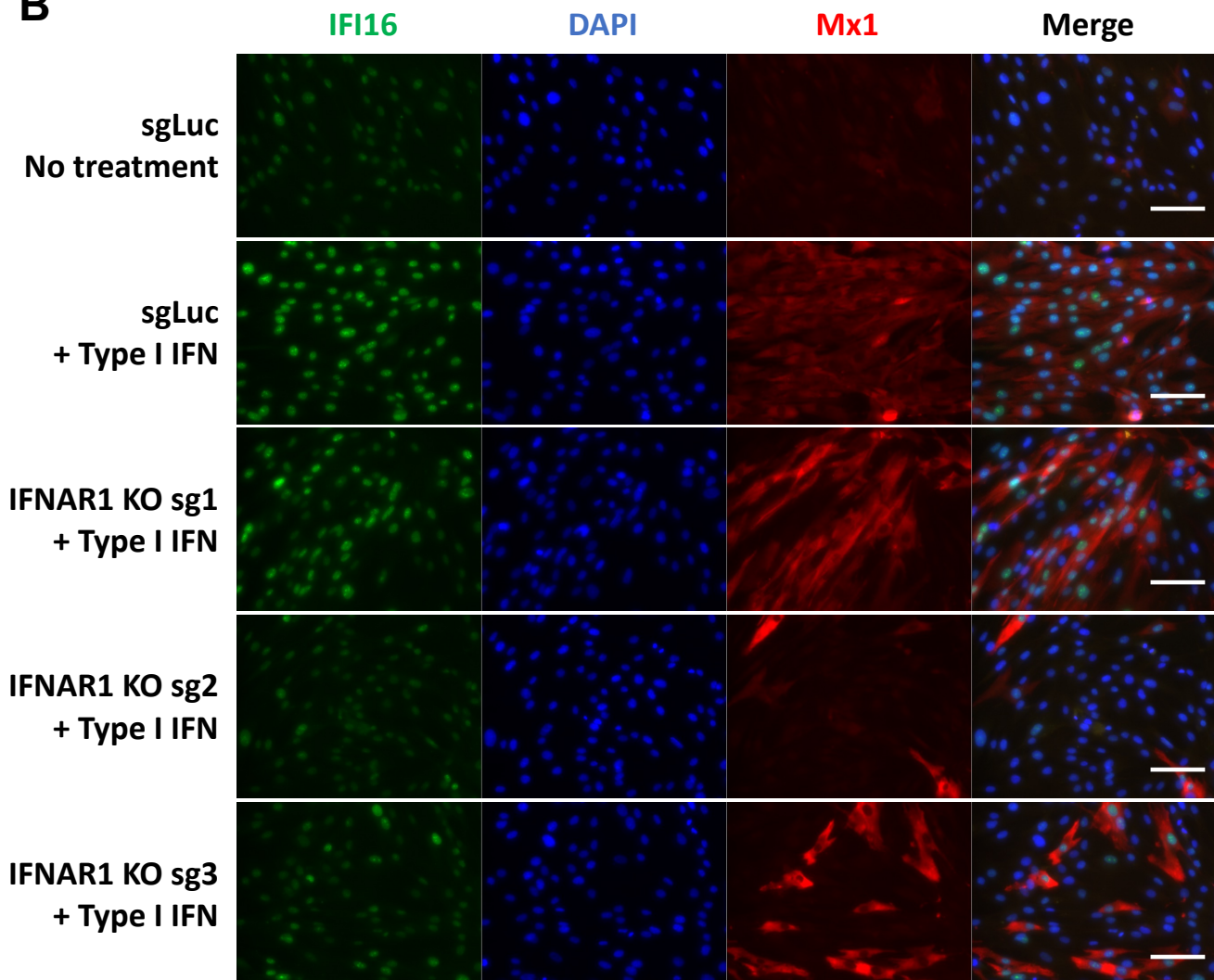
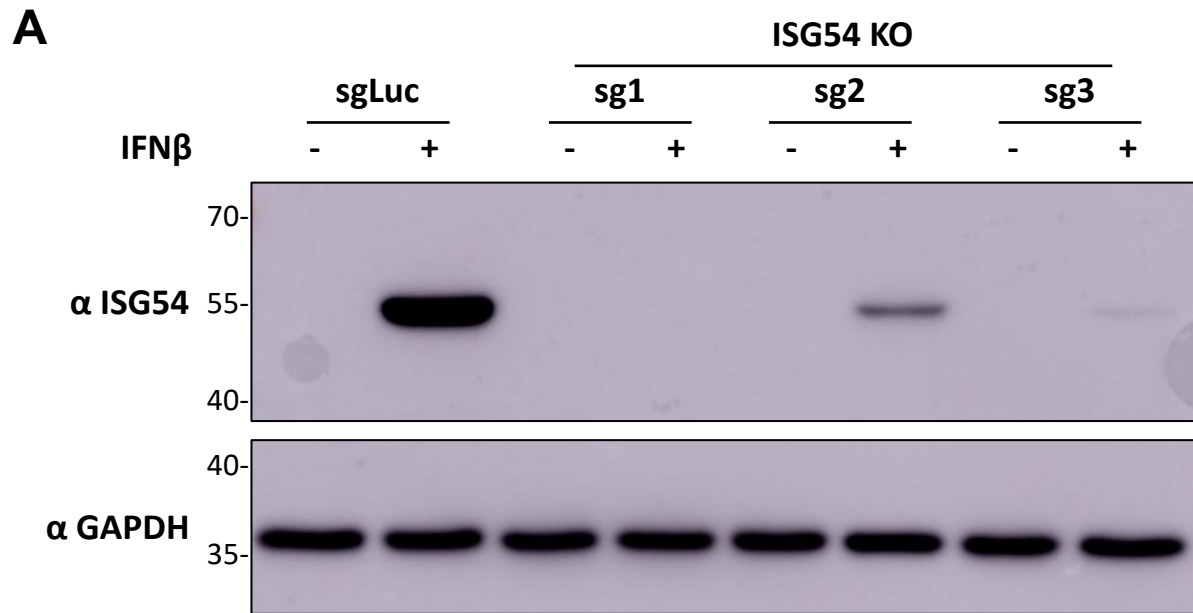
A**B**

Figure S1. Characterization of IFNAR1 CRISPR knockout (KO) HDF cells. **A.** HDFs stably expressing Cas9 and a sgRNA targeting either the IFNAR1 gene (sg1, sg2, and sg3) or the nonmammalian luciferase gene (sgLuc) were immunoblotted for IFNAR1 and GAPDH. **B.** sgLuc or IFNAR1 KO sg1/2/3 HDF cells were treated with 500 U/ml type I IFN for 21 h, fixed, immunostained for IFI16 and Mx1, and counterstained with DAPI. Scale bar, 100 μ m.



B

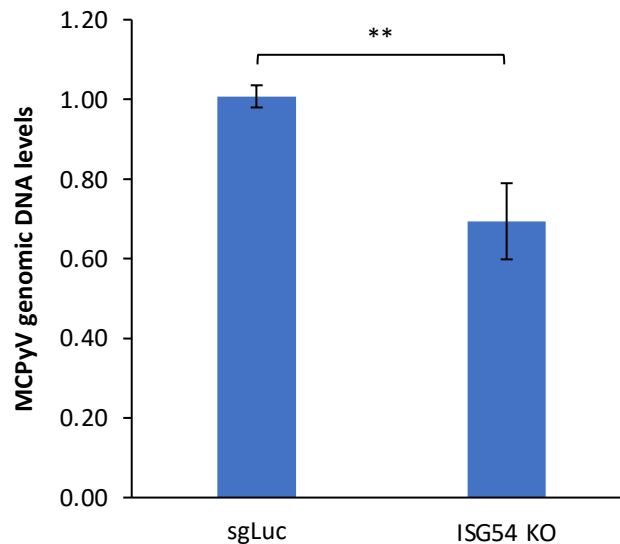


Figure S2. ISG54 knockout does not significantly affect MCPyV infection. **A.** HDFs stably expressing Cas9 and a sgRNA targeting either the ISG54 gene (sg1, sg2, and sg3) or the luciferase gene (sgLuc) were treated with IFN β for 20 h and immunoblotted for ISG54 and GAPDH. **B.** MCPyV infected sgLuc or ISG54 KO (sg1) HDF cells were harvested for DNA extraction on day 5 post-infection. MCPyV genomic DNA levels were determined by qPCR quantification and normalized to the GAPDH genomic DNA levels. The value for one of the MCPyV-infected sgLuc HDF groups was set as 1. Error bars represent the standard deviation from three independent experiments. ** $p < 0.01$.

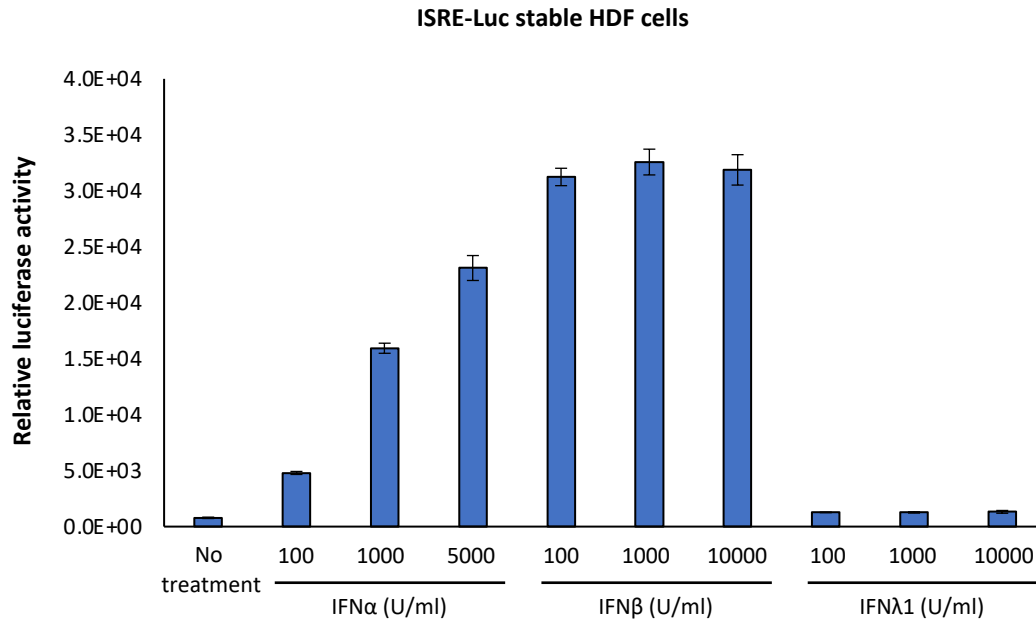
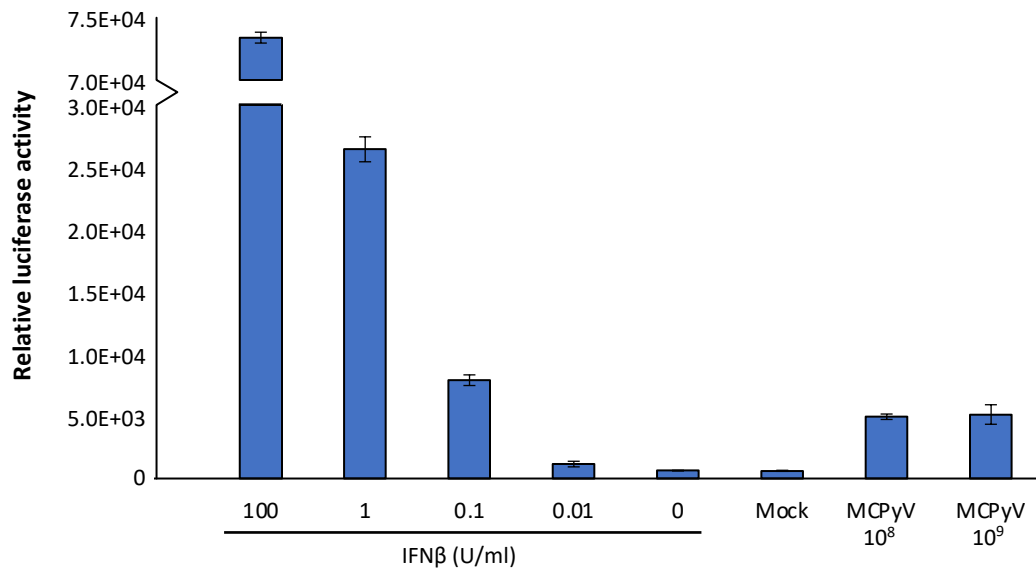
A**B**

Figure S3. Quantification of IFN β induction by MCPyV infection. **A.** HDF ISRE-Luciferase reporter stable cells were treated with the indicated doses of IFNs for 18h. Cell lysates were analyzed using luciferase assays. **B.** Cell culture medium collected from mock-infected HDFs or HDFs infected with 10^8 or 10^9 viral genome equivalents in each well of a 96-well plate were harvested on day 6 post-infection. The cell culture medium or different doses of IFN β were used to treat HDF ISRE-Luciferase reporter stable cells for 6 h. Cell lysates were harvested for luciferase assays.