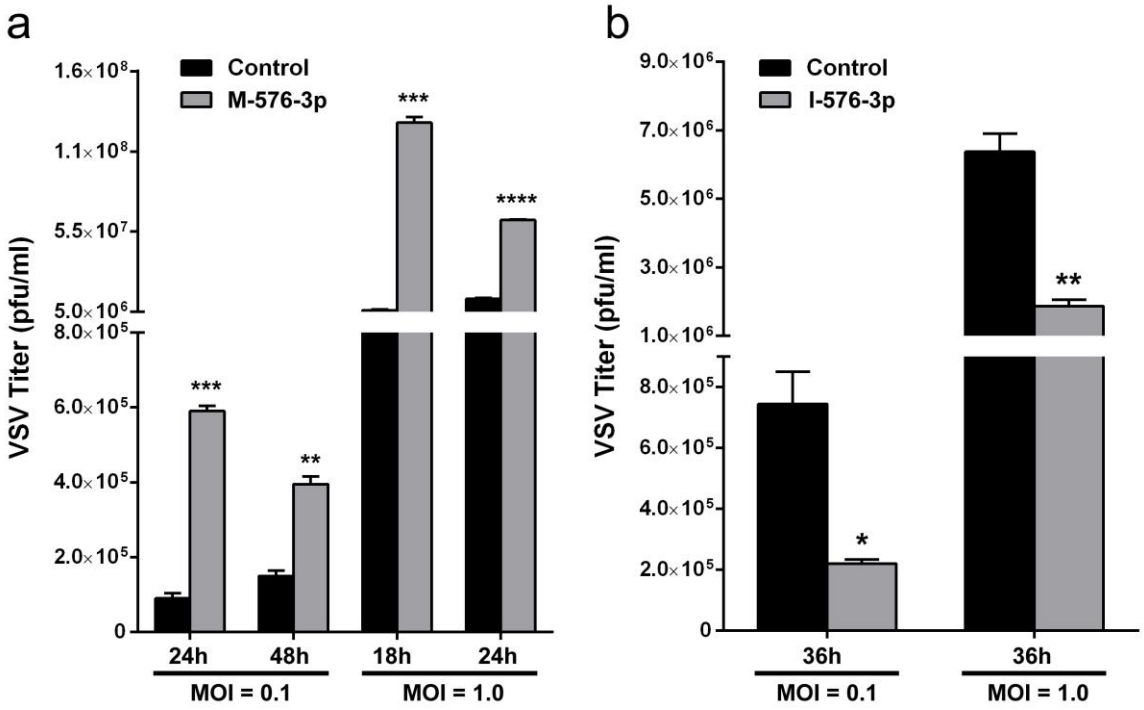
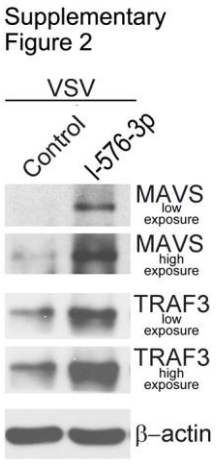
Supplementary Information

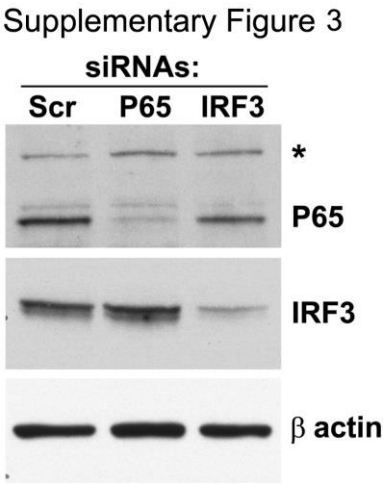
Supplementary Figure 1



Supplementary Figure 1. miR-576-3p promotes VSV replication. a,b, HBEC were transfected with control miRNA, miR-576-3p mimic (M-576-3p) (**a**), or miR-576-3p inhibitor (I-576-3p) (**b**). Cells were then infected with VSV at MOI 1 or 0.1 for the depicted time points. Supernatants were subjected to plaque assays to determine the viral titers. Unpaired two tailed t-test was used and error bars represent SD. *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001.

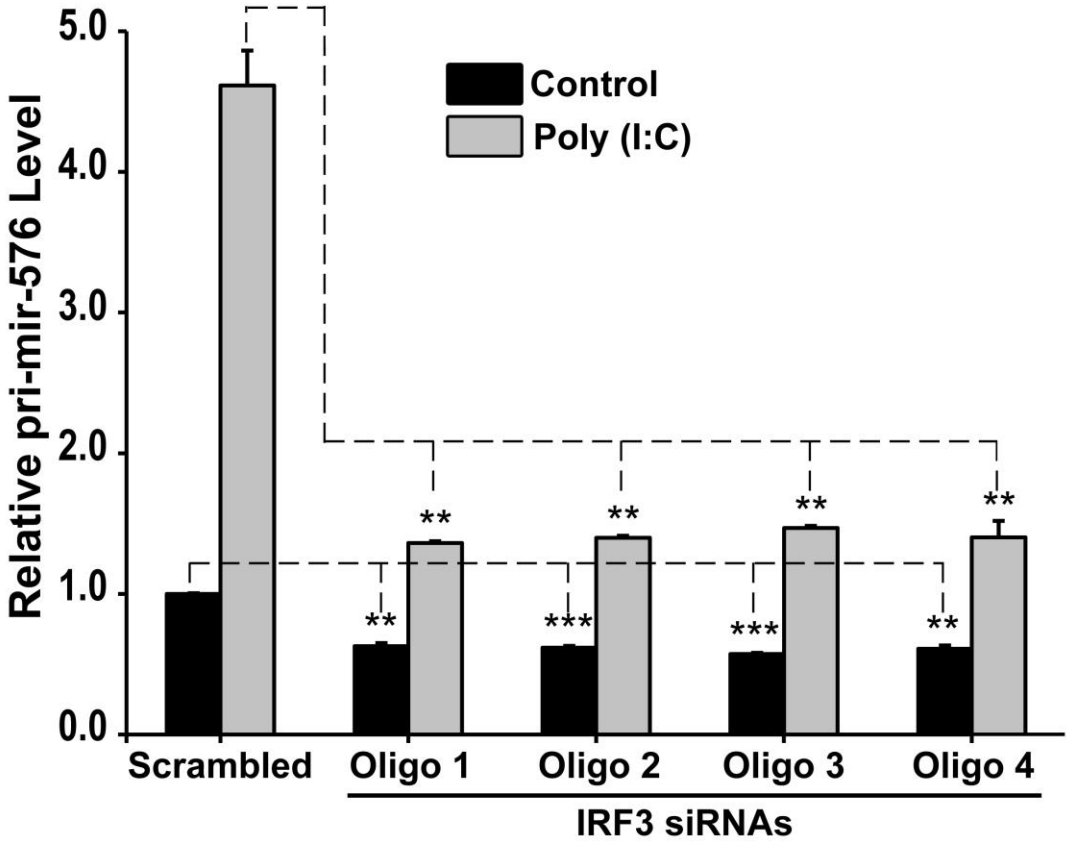


Supplementary Figure 2. miR-576-3p targets MAVS and TRAF3. HBEC were transfected with control miRNA or miR-576-3p inhibitor (I-576-3p) and then infected with VSV at MOI 0.1 for 18 h. Cell lysates were harvested and analyzed by western blot with MAVS and TRAF3 antibodies. Both light and dark exposures are shown. β-actin serves as loading control.

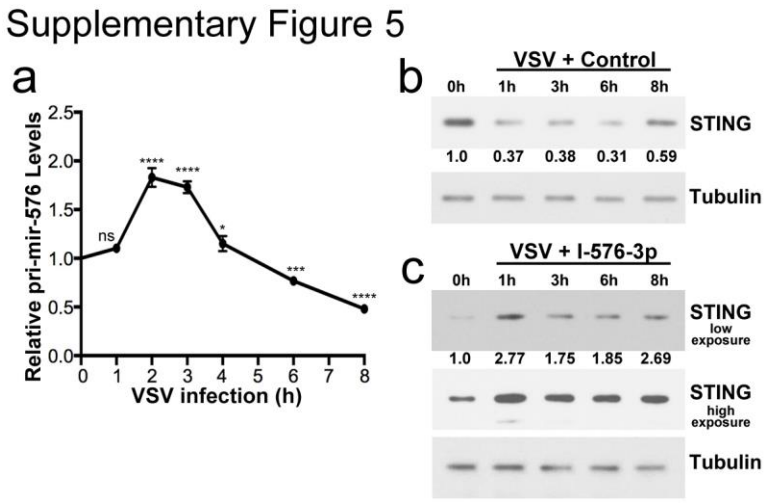


Supplementary Figure 3. siRNA knockdown of P65 and IRF3. HBEC were transfected with the indicated siRNAs. Cell lysates were harvested and analyzed by western blot with IRF3 and P65 antibodies. β-actin serves as loading control. The asterisk indicates a non-specific band.

Supplementary Figure 4

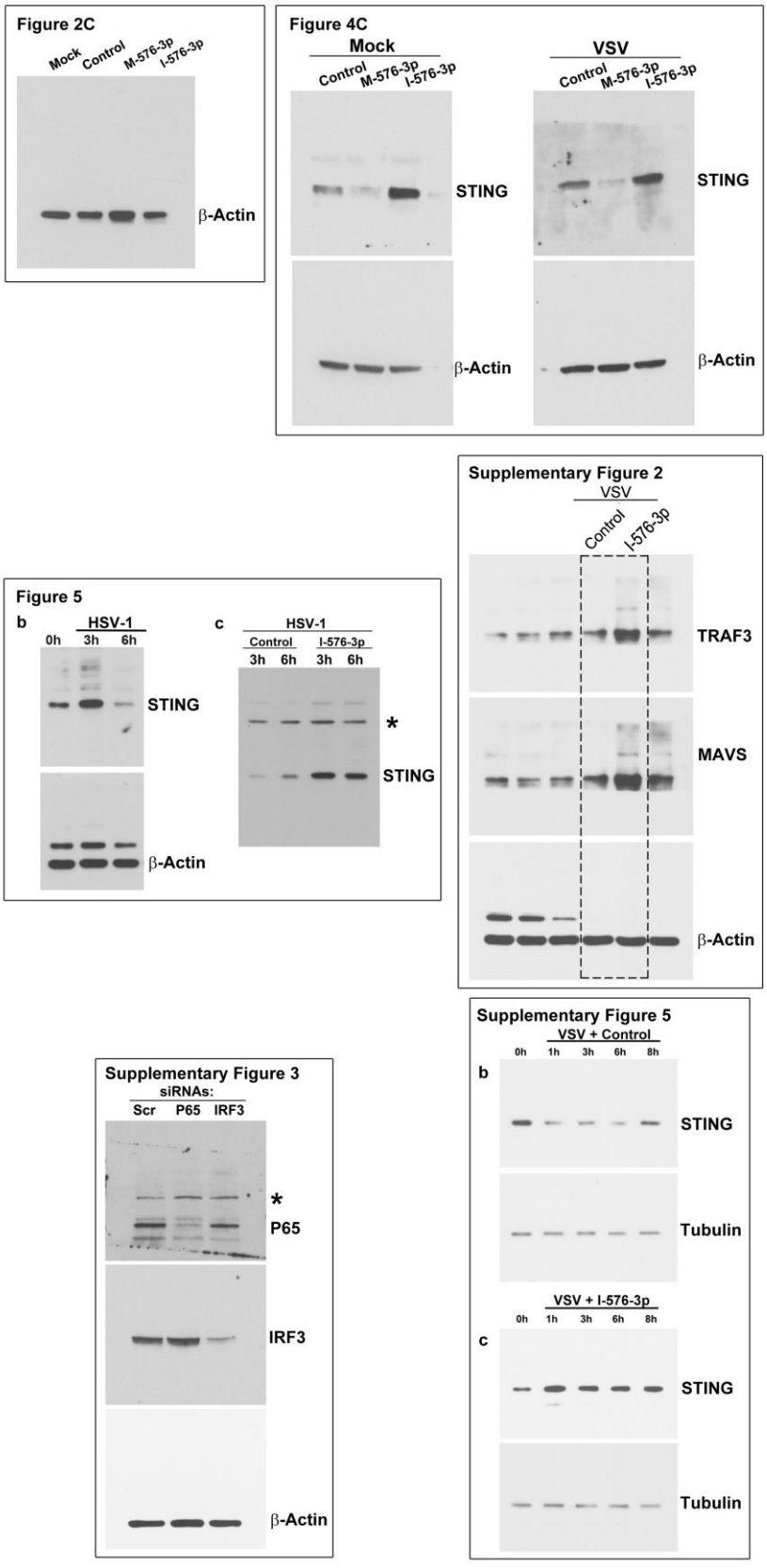


Supplementary Figure 4. IRF3 knockdown with various siRNA oligos. HBEC were transfected with control siRNA or with 4 different siRNAs that target IRF3 to confirm specificity. Then, cells were transfected with poly (I:C), RNA was purified, and pri-mir-576 levels were measured by qPCR. Unpaired two tailed t-test was used and error bars represent SD. **p<0.01, ***p<0.001.



Supplementary Figure 5. Pri-mir-576 and STING protein levels are regulated during VSV infection. a, HBEC were infected with VSV at an MOI 1 in the course of 8 hours. Total RNA was harvested at the depicted time points and subjected to qPCR to measure pri-mir-576 levels. **b**,**c**, HBEC were transfected with control miRNA (**b**) or with miR-576-3p inhibitor (I-576-3p) (**c**) and then infected with VSV at MOI 3 over time. STING protein levels were measured by western blot at the depicted times. Tubulin was used as loading control. Quantification of STING protein levels normalized to tubulin was performed using ImageJ. Unpaired two tailed t-test was used and error bars represent SD. *p<0.05, ***p<0.001, p****<0.0001.

Supplementary Figure 6



Supplementary Figure 6. Full blots from Figures 2c, 4c, 5, Supplementary Figures 2, 3 and 5.