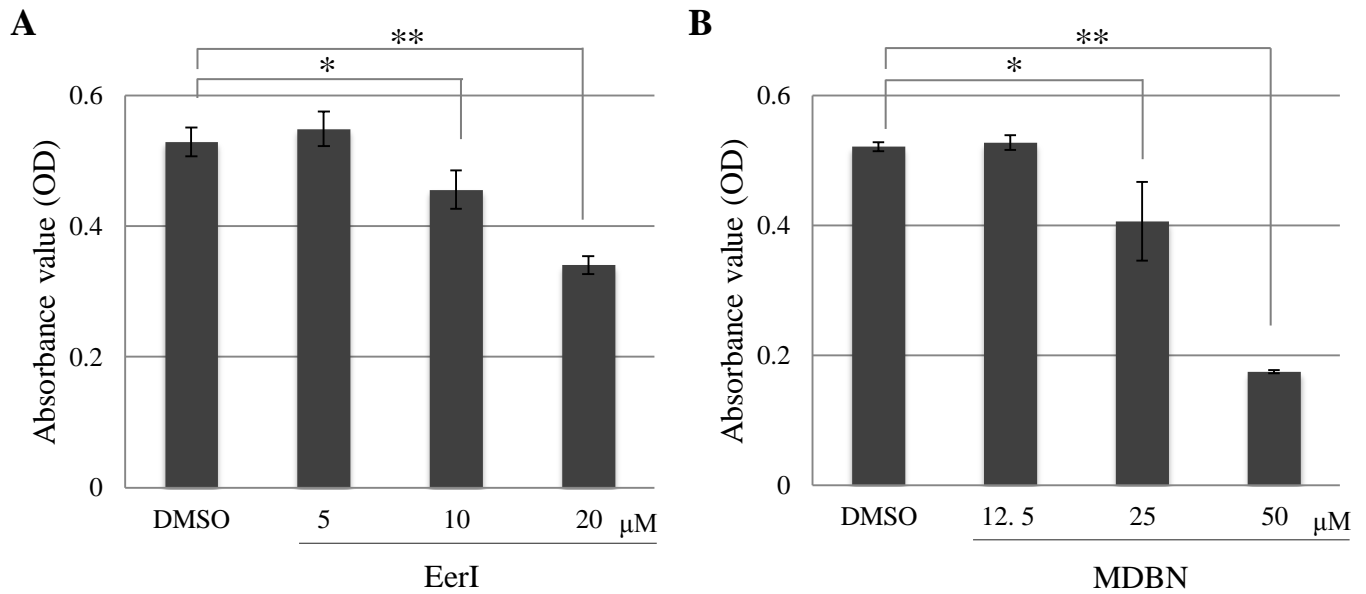


# Supplementary Figure 1

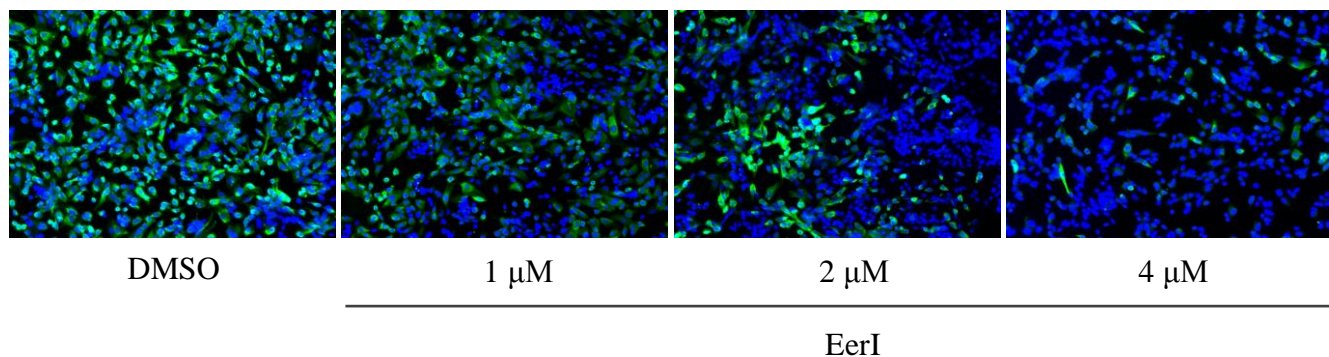


## Supplementary Fig. 1.

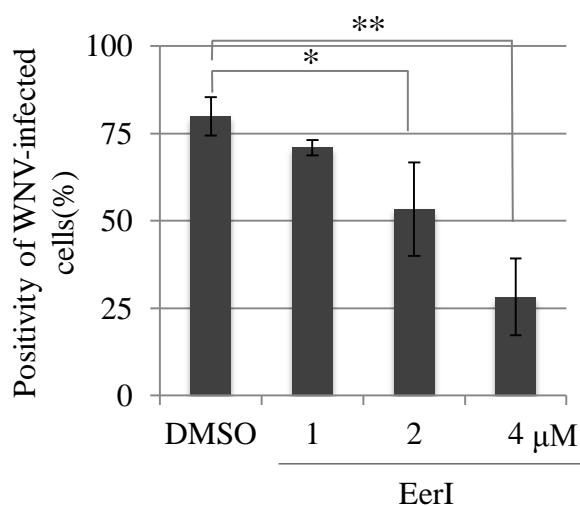
Cell viability of HeLa cells after treatment with either EerI or MDBN. The HeLa cells were treated with the indicated concentrations of either EerI (left) or MDBN (right). Cell viability was examined by a MTT assay at 24 h post treatment.

# Supplementary Figure 2

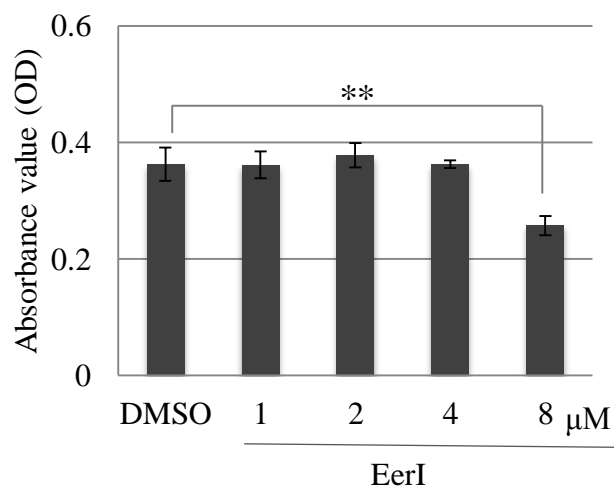
A



B



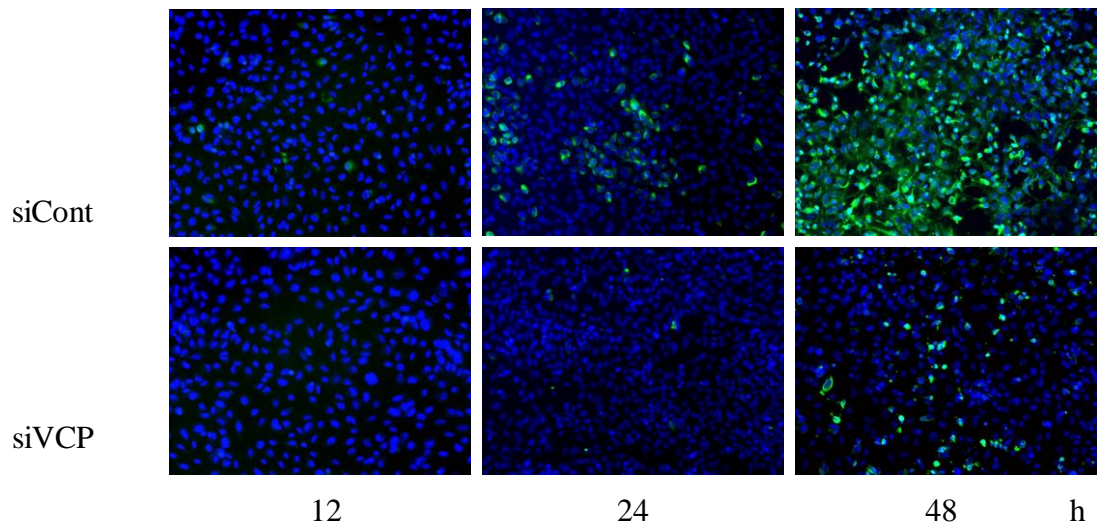
C



## Supplementary Fig. 2.

WNV infection in SK-N-SH cells is attenuated in the presence of EerI. (A) WNV infection in human neuroblastoma, SK-N-SH cells. SK-N-SH cells were inoculated with WNV (MOI=1). After 1 h.p.i., the inoculated-cells were treated with EerI at the indicated concentration. DMSO treated-cells were used as control. The cells were fixed and prepared for IFA at 24 h.p.i. and stained with anti-JEV antibody which has cross reactivity with WNV antigen (green). Cell nuclei were stained with DAPI (blue). (B) Positivity of WNV-infected cells from (A). Mean  $\pm$  SD from triplicate experiments is shown; \*  $p < 0.05$ . \*\*  $p < 0.01$  (one-way ANOVA). (C) Cell viability of SK-N-SH at 24 h after exposure to EerI with absorbance values obtained after MTT assay.

# Supplementary Figure 3

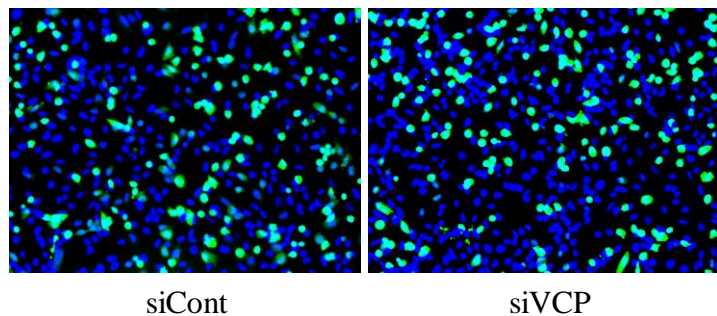


## Supplementary Fig. 3

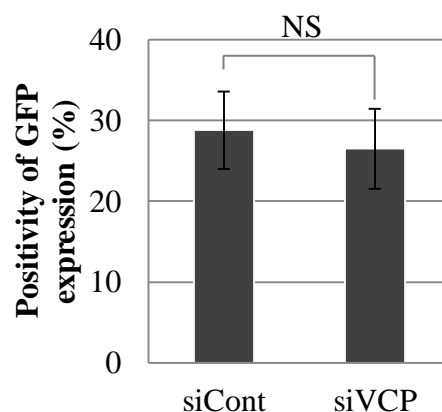
Representative figure showing IFA results of WNV infection in siVCP (1) compared to siCont treated-HeLa cells at 12, 24 and 48 h.p.i. The HeLa cells were treated with either siVCP or siCont and then incubated at 37 °C for 48 h. Thereafter, the cells were infected with WNV (MOI=1) and incubated at 37 °C for 12, 24 and 48 h.p.i., respectively. After incubation at the indicated time points, the cells were then fixed and prepared for IFA followed by staining with anti-JEV antibody that has cross reactivity with WNV antigen (green). Cell nuclei were stained with DAPI (blue).

# Supplementary Figure 4

A



B



## Supplementary Fig. 4.

VCP knockdown does not affect infection of pseudotyped VSV. (A) HeLa cells were treated with siRNA against VCP (siVCP) or control siRNA (siCont) for 48 h. Thereafter, the siRNA-treated cells were inoculated with pseudotyped VSV. Pseudotyped VSV positive cells were determined by expression of green fluorescence protein (GFP), which was carried by the pseudotyped VSV replicon, at 8 h.p.i. nuclei were stained with DAPI (blue). (B) The positivity of GFP from (A). Mean  $\pm$  SD from triplicate experiments is shown. The significance was analyzed using a one-way ANOVA.