



**Fig.S8 Interaction between the enhancers and the promoters of the selected antiviral genes from distances they work in the genomic context.**

**(A)** Volcano plot of enhancer-associated antiviral genes. Red plots represent up-regulated genes and blue plots represent down-regulated genes, black plots represent genes with no significant change. The significant standard is  $p\text{-adjust} < 0.05$ ,  $|\text{FoldChange}| \geq 0.5$ . The 8 selected genes are annotated in the plot.

**(B)** Hi-C result depicting the interaction of the interactions between the promoters of selected antiviral genes and their associated enhancers in mock (upper right) and BmNPV (lower left) infected cells. Shaded regions are representative of the chromatin interaction between these enhancer-promoter contacts in the Hi-C heatmap of BmN cells. The depth of red color represents the strength of interaction.

**(C)** Schematic diagram of the vector PB-Ctr-Zeo used as the control to exclude the impact of viral infection on these separate promoters.

**(D)** BmNPV infection have no significant effect on the separate promoters of the antiviral genes. Two technical replicates for each of the three biological replicates per treatment were analyzed ( $n = 3$ ). Error bar indicated the standard deviation. Two-tailed  $t$ -test; ns means no significance observed.