



**Supplementary information, Fig. S3** Identification of virus-induced IncLrrc55-AS in macrophages via IFN-JAK-STAT pathway. **a** RT-qPCR analysis of *Isg15* expression in WT and *Ifnar1*<sup>-/-</sup> macrophages treated with IFN $\alpha$ 4, IFN $\beta$  (500 U/ml) for 8 hours or infected with SeV for 12 hours (**left**), in macrophages pretreated for one hour with Baricitinib (2  $\mu$ M) or Fludarabine (1  $\mu$ M) and then infected with SeV or VSV for 12 hours or treated with IFN $\alpha$ 4 for 8 hours (**right**). **b** Prediction of transcription factor binding site analyzed by LASAGNA-Search software in the promoter region (~ -2000bp ~ +100bp from TSS, transcription start site) of *IncLrrc55-AS*. **c** RT-qPCR analysis of *IncLrrc55-AS* and *Ifna4*, *Ifnb* mRNA expression, and Western blot analysis of phosphorylated (p-) IRF3 in macrophages infected with SeV for indicated times. Data are shown as mean  $\pm$  SEM from three independent experiments (**a, c**). \*\*\*P < 0.005 (Student's t-test or ANOVA).