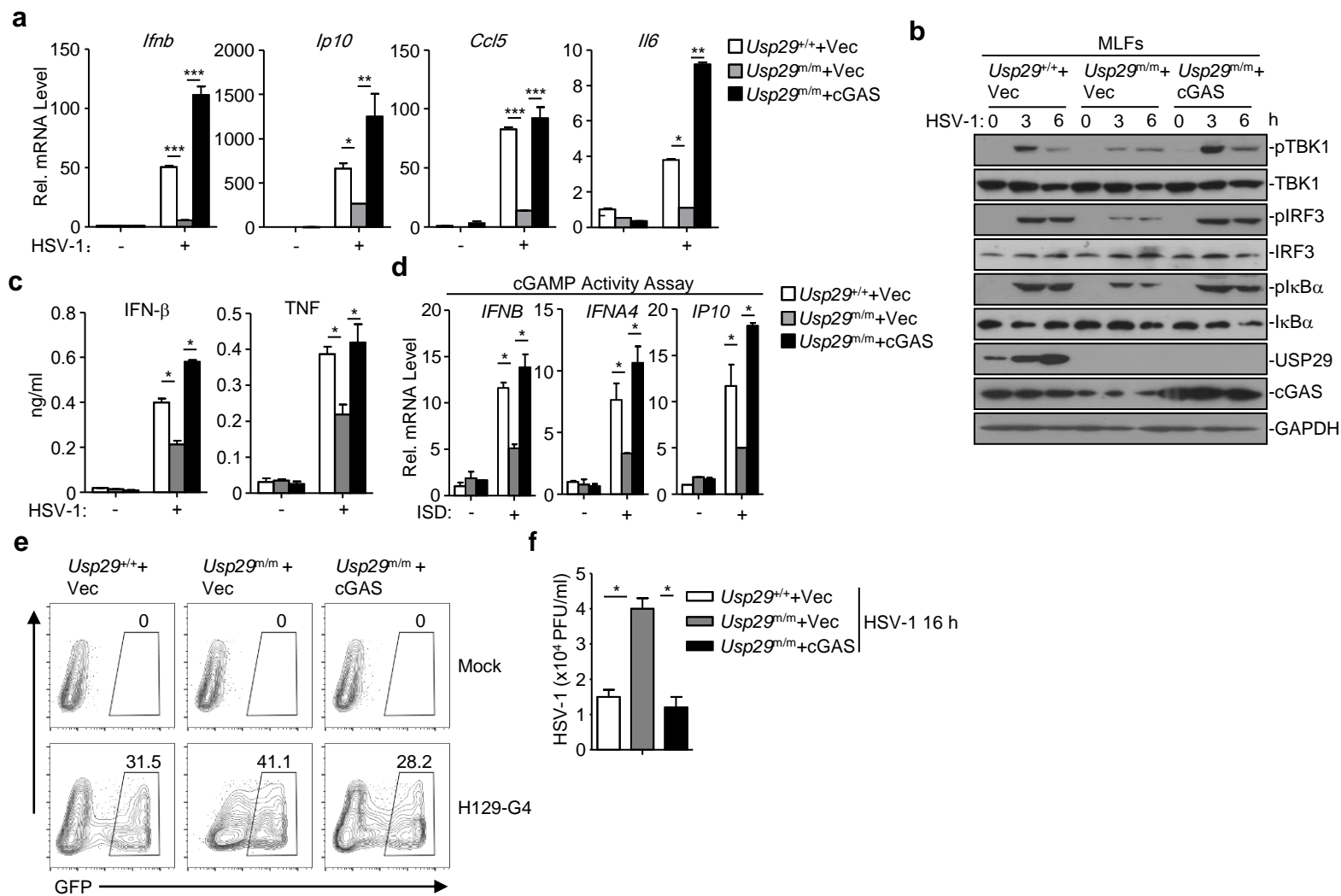


# Supplementary information, Figure S6



## Supplementary information, Fig. S6 USP29 regulates antiviral responses in a cGAS-dependent manner.

**a** qRT-PCR analysis of *Ifnb*, *Ip10*, *Ccl5* or *Il6* mRNA in *Usp29*<sup>+/+</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>+/+</sup> +Vec) or in *Usp29*<sup>m/m</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>m/m</sup> +Vec) or cGAS (*Usp29*<sup>m/m</sup> +cGAS) infected with HSV-1 for 0-6 h. **b** Immunoblot analysis of phosphorylated and total TBK1, IRF3 and IκBα, USP29 and GAPDH in *Usp29*<sup>+/+</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>+/+</sup> +Vec) or in *Usp29*<sup>m/m</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>m/m</sup> +Vec) or cGAS (*Usp29*<sup>m/m</sup> +cGAS) infected with HSV-1 for 0-6 h. **c** ELISA analysis of IFN-β and TNF in the supernatants of *Usp29*<sup>+/+</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>+/+</sup> +Vec) or in *Usp29*<sup>m/m</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>m/m</sup> +Vec) or cGAS (*Usp29*<sup>m/m</sup> +cGAS) infected with HSV-1 for 12 h. **d** *Usp29*<sup>+/+</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>+/+</sup> +Vec) or *Usp29*<sup>m/m</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>m/m</sup> +Vec) or cGAS (*Usp29*<sup>m/m</sup> +cGAS) were left untransfected or transfected with ISD45 for 4 h. The cell extracts containing cGAMP were delivered to digitonin-permeabilized HFFs for 4 h followed by qRT-PCR analysis. **e** Flow cytometry analysis of *Usp29*<sup>+/+</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>+/+</sup> +Vec) or *Usp29*<sup>m/m</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>m/m</sup> +Vec) or cGAS (*Usp29*<sup>m/m</sup> +cGAS) infected with or without H129-G4 for 16 h. **f** Plaque assays of *Usp29*<sup>+/+</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>+/+</sup> +Vec) or *Usp29*<sup>m/m</sup> MLFs reconstituted with the empty vector (*Usp29*<sup>m/m</sup> +Vec) or cGAS (*Usp29*<sup>m/m</sup> +cGAS) infected with or without HSV-1 for 16 h.

\**P*<0.05; \*\**P*<0.001; \*\*\**P*<0.001 (analysis of two-way ANOVA followed by Bonferroni post-test). Data are representative of two (**d**) or three (**a**, **b**, **c**, **e**, **f**) independent experiments (mean ± S.D. in **a**, **c**, **d**, **f**).