Extended Data Fig. 7. SARS-CoV-2 Delta robustly produces 5' end svRNAs that lead to delayed IFN induction.

(a and b) Replication kinetics of the SARS-CoV-2 Delta in human Calu-3 cells. Cells were infected with Delta at MOIs of 0.001 and incubated at 33°C or 37°C. (c) Confocal microscopy images of Calu-3 cells infected with Delta. At the indicated times post-infection, cells were stained with anti-viral NP antibody and d) Induction of IFN-β and IL-6 secretion from Calu-3 cells infected with Delta. At the indicated times post-infection, the supernatants were harvested for ELISA. (e) Immunoblot analysis of RIG-I in lysates of the Delta-infected Calu-3 cells at the indicated times post-infection. Representative images of three independent experiments are shown. Quantification of band intensity is relative to 24 h post-infection. Each data point is the mean ± SD of three independent experiments. (f) sRNA-seq reads mapped to Delta genomes. Reads were strand-specifically mapped to the positive-sense (+) RNAs or negative sense (-) RNAs. Read counts were quantified for each nucleotide of the genome. (g) Coverage of reads (log10 read no.) in Calu3 cells at 33°C. (h) Size distribution of 5' UTR svRNAs. (j) RT-qPCR quantification of 5' end svRNA levels at 8, 24, 48, 72, and 120 hpi in Delta-infected Calu-3 cells at 33°C or 37°C as indicated in the legend to Fig. 1. Levels of 5' end svRNAs were related to those at 8 hpi, as calculated by the ΔΔCt method using snRNA-U6 as an endogenous control. Each data point is the mean ± SD of three independent experiments. Statistically significant differences compared to parental strain are shown as *P < 0.01.