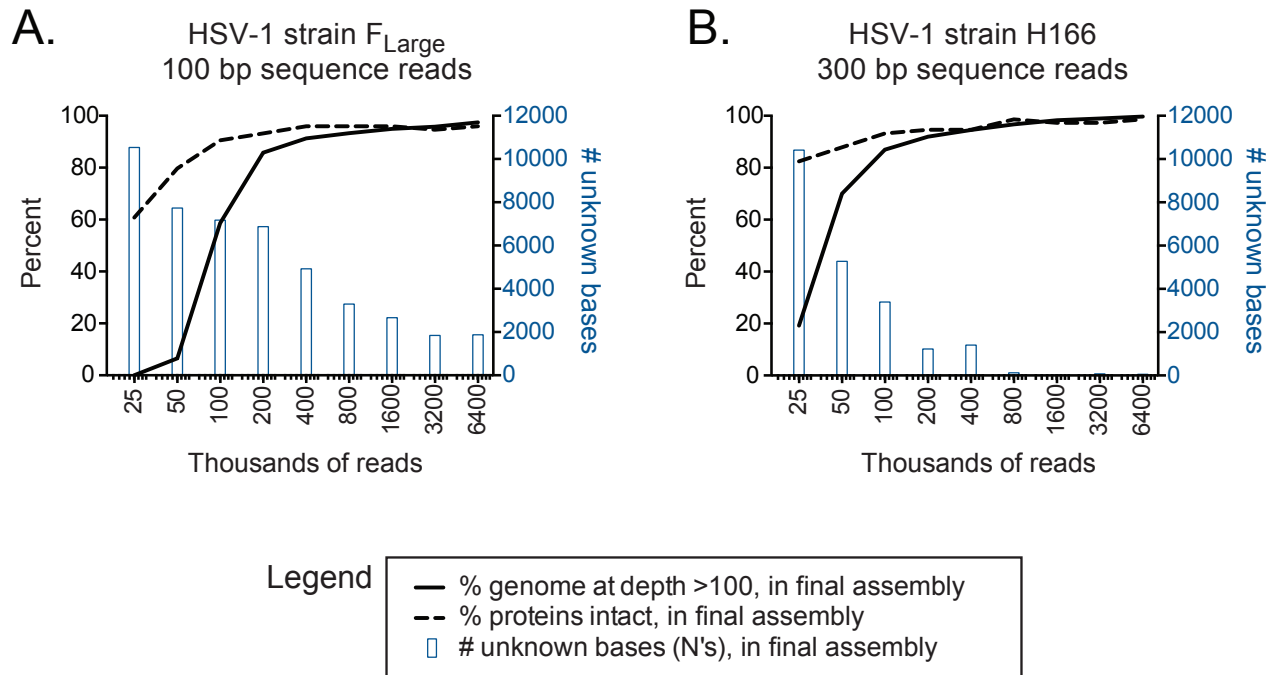


Supplemental Figure S5. Serial assemblies demonstrate how increasing amounts of input data produce improved viral genome assemblies.



Supplemental Figure S5. Serial assemblies demonstrate how increasing amounts of input data produce improved viral genome assemblies. We used VirGA to generate serial assemblies of both 100 bp paired-end sequence reads (**A**) and 300 bp paired-end sequence reads (**B**), doubling the number of input reads each time (x-axis). For each assembly, we calculated the percent of the genome with sequencing coverage depth greater than or equal to 100-fold (solid line), the percent of proteins that were assembled intact (gap-free, dashed line), and counted the number of undetermined bases (“N”s in the final assembly, blue histograms). (**A**) For 100 bp, paired-end data, we observed that a minimum of 400,000 reads were needed to produce an HSV-1 assembly with 90% of the proteins intact. (**B**) For 300 bp, paired-end data, we observed that just 200,000 reads were needed to produce an HSV-1 assembly with 90% of the proteins intact. Results were verified with serial assemblies of data from HSV-1 F_{Syncytial} and H166_{Syncytial} as well (data not shown).