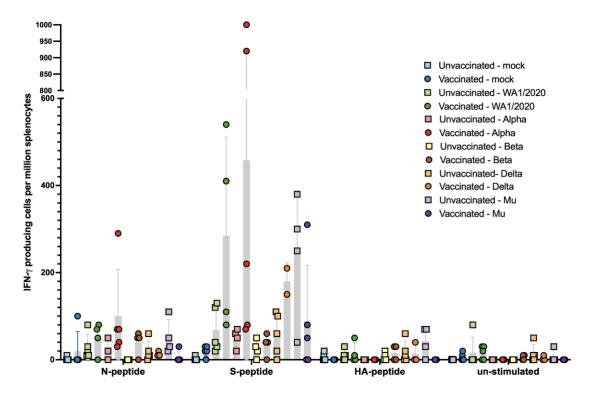
## **SUPPLEMENTARY FIGURES**

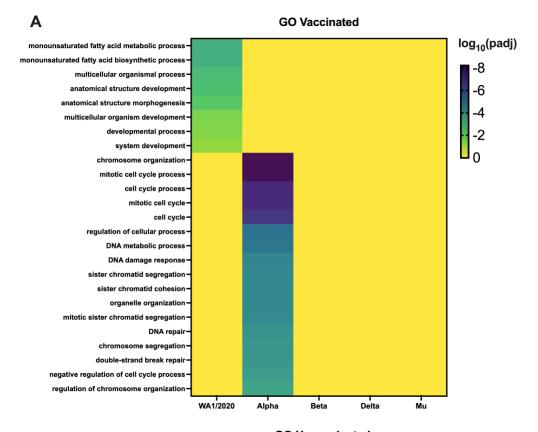
**Supplementary Figure 1.** INF-y producing cells per million splenocytes after stimulation with (from left to right): N-peptide, S-peptide, HA-peptide and un-stimulated.

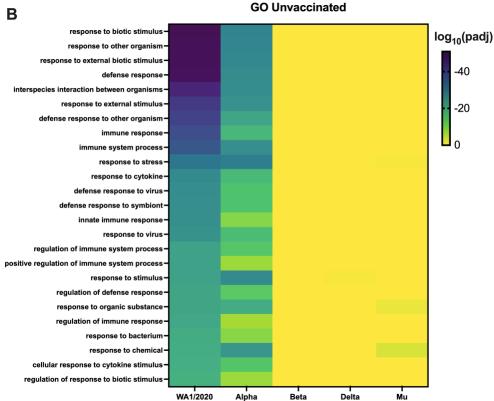
**Supplementary Figure 2. Gene ontology.** Top 25 most significantly upregulated biological processes based on significance in WA1/2020 challenged groups. (A) Upregulated biological processes in vaccinated animals compared to unvaccinated (B) Upregulated biological processes in unvaccinated animals compared to vaccinated.

Supplementary Figure 3. Abundance of additional cell subsets in the lungs of infected hamsters extrapolated from the host transcriptome. Scale represents estimated fraction of each cell type for each condition.

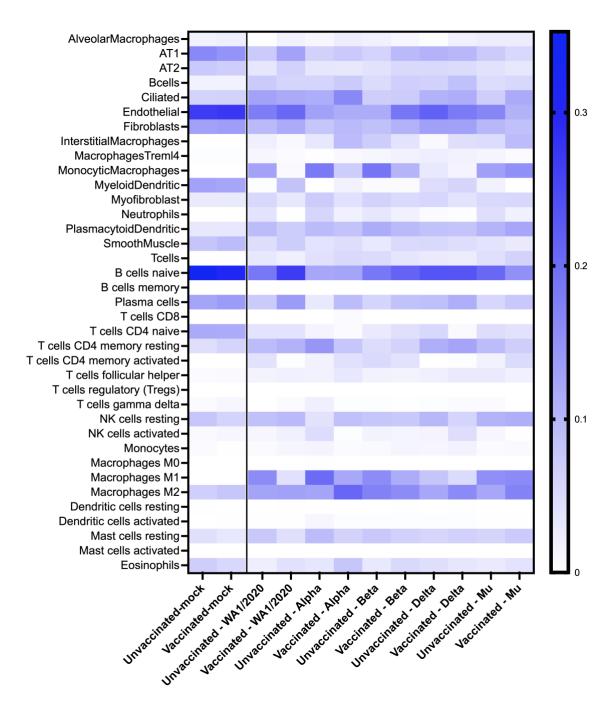


**Supplementary Figure 1.** INF-y producing cells per million splenocytes after stimulation with (from left to right): N-peptide, S-peptide, HA-peptide and un-stimulated.





**Supplementary Figure 2. Gene ontology.** Top 25 most significantly upregulated biological processes based on significance in WA1/2020 challenged groups. (A) Upregulated biological processes in vaccinated animals compared to unvaccinated (B) Upregulated biological processes in unvaccinated animals compared to vaccinated.



Supplementary Figure 3. Abundance of additional cell subsets in the lungs of infected hamsters extrapolated from the host transcriptome. Scale represents estimated fraction of each cell type for each condition.