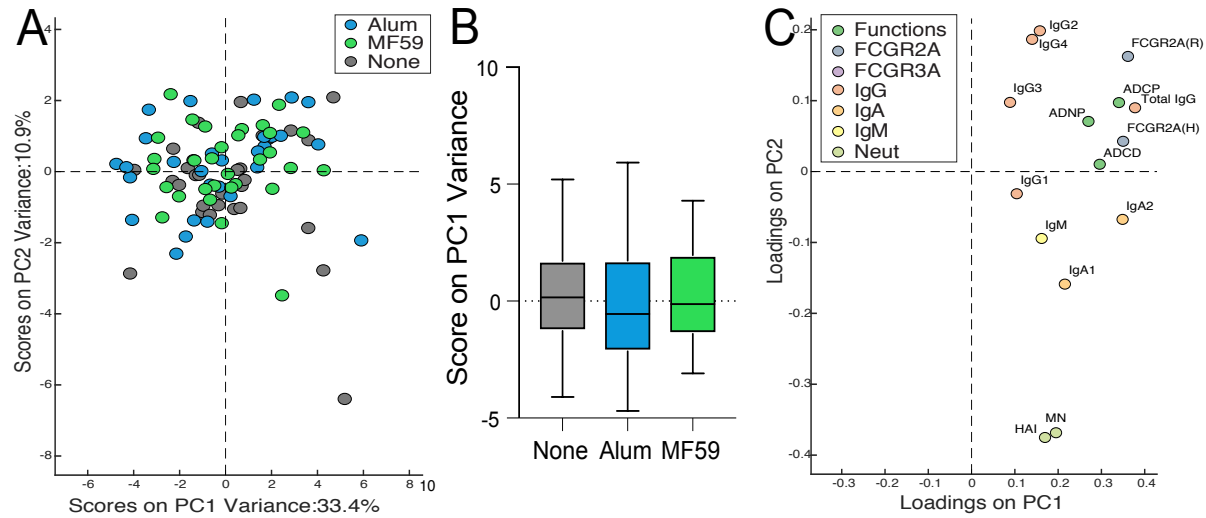
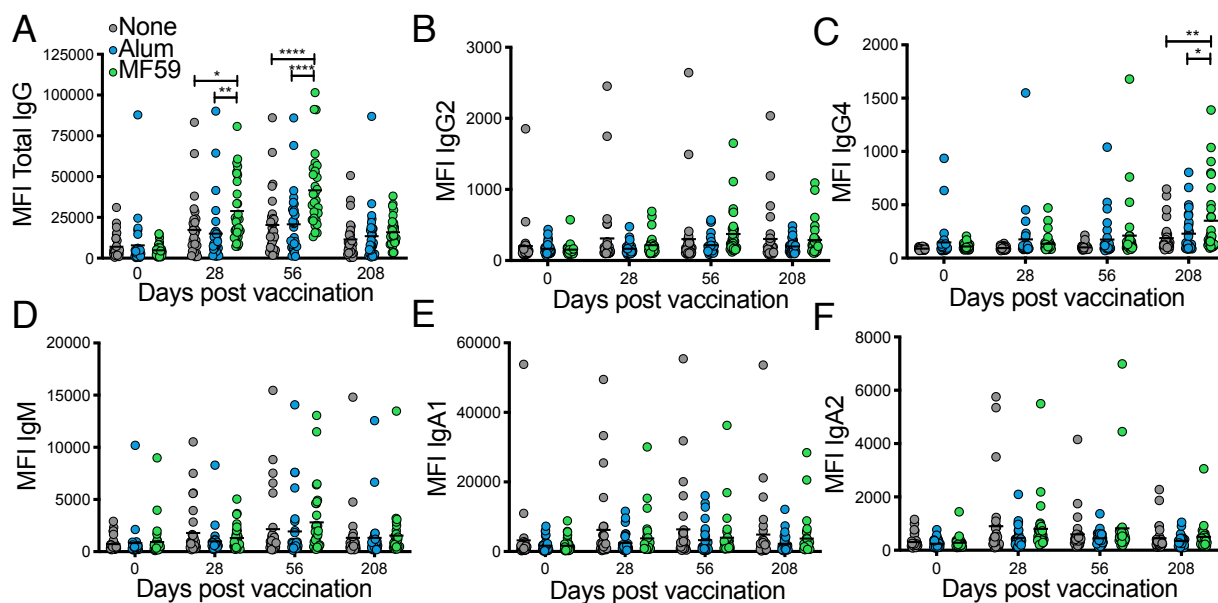


Supplemental Figure 1



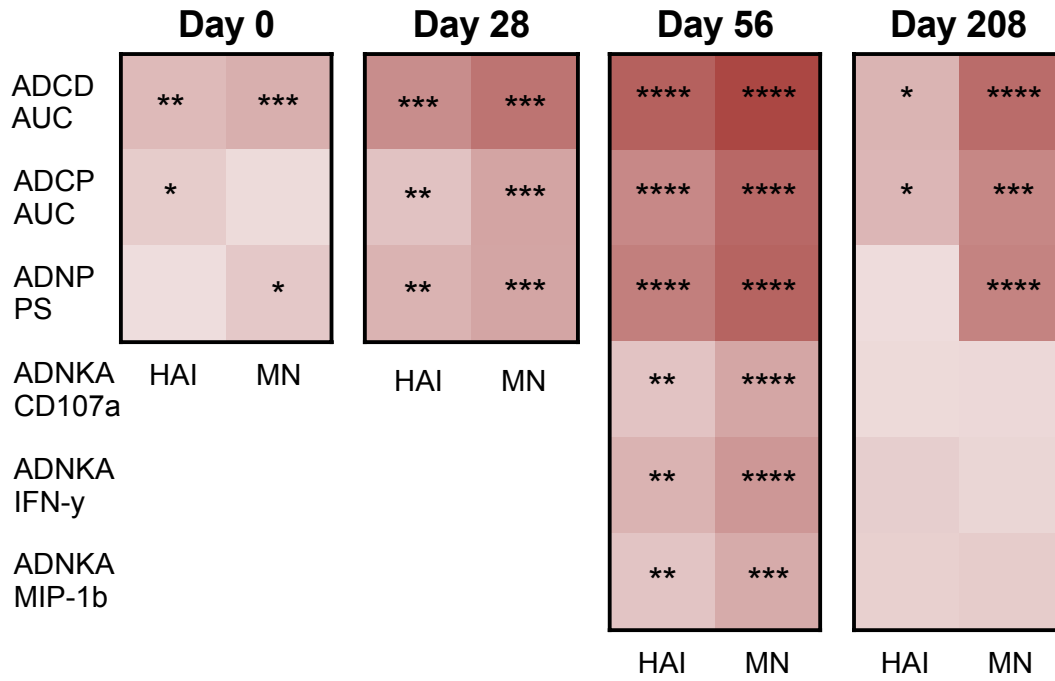
*Supplemental Figure 1.* Antibodies against H5 were compared for 90 vaccinees who received 15 $\mu$ g recombinant H5 unadjuvanted (none), with alum, or with MF59. A principal components analysis (PCA) was used to identify differences in the functional responses of vaccinees by adjuvant. **A.** All H5-specific systems serology measurements (antibody isotypes, FCGR binding, and antibody-dependent functions) from baseline day 0 samples were included in the PCA biplot, where dots represent individual samples (blue=alum, green=MF59, grey=none). **B.** Scores along the first principal component (PC1), which captures the greatest separation between samples, were plotted. Error bars show minimum to maximum. Differences were assessed using a Mann-Whitney U test. \*\*\*\* $p < 0.0001$ . **C.** Loadings in the PCA biplot are shown. Features are located in the loadings plot where they are enriched in samples in (A).

Supplemental Figure 2



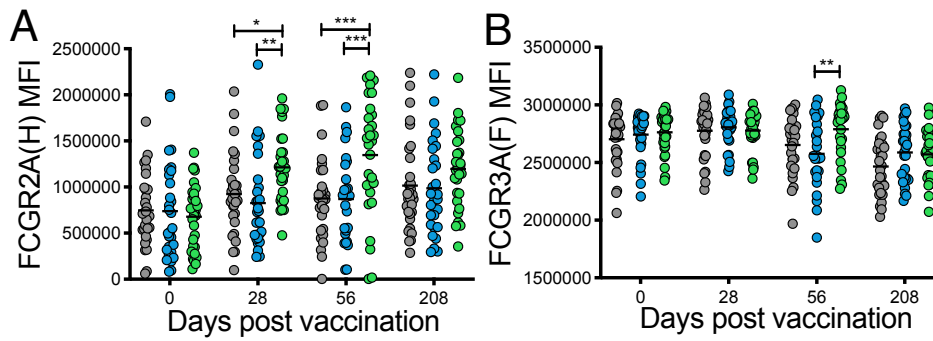
*Supplemental Figure 2. A.* The dot plot shows H5-specific total IgG titers as measured by Luminex in all three vaccine groups over four timepoints. *B.* The dot plot shows H5-specific IgG2 titers as measured by Luminex in all three vaccine groups over four timepoints. *C.* The dot plot shows H5-specific IgG4 titers as measured by Luminex in all three vaccine groups over four timepoints. *D.* The dot plot shows H5-specific IgM titers as measured by Luminex in all three vaccine groups over four timepoints. *E.* The dot plot shows H5-specific IgA1 titers as measured by Luminex in all three vaccine groups over four timepoints. *F.* The dot plot shows H5-specific IgA2 titers as measured by Luminex in all three vaccine groups over four timepoints. **A-F.** Significance was determined by two-way ANOVA followed by Tukey's multiple comparisons test. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\*\* $p < 0.0001$ . Significance is noted only within timepoints.

Supplemental Figure 3



Supplemental Figure 3. Correlations between three measures of antibody neutralization (HAI and MN) and antibody functions across four timepoints. All three vaccine groups were included in this analysis. Significance was tested by Spearman  $r$ . \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , \*\*\*\* $p < 0.0001$ .

Supplemental Figure 4



Supplemental Figure 4. **A.** The dot plot shows H5-specific antibody binding to FCGR2A(H) as measured by Luminex in all three vaccine groups over four timepoints. **B.** The dot plot shows H5-specific antibody binding to FCGR3A(F) as measured by Luminex bead array in all three vaccine groups over four timepoints. **A-B.** Significance was determined by two-way ANOVA followed by Tukey's multiple comparisons test. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\*\* $p < 0.0001$ . Significance is noted only within timepoints.