



**FIG S1** NA enzymatic inhibition of N1 influenza viruses with sera from NA vaccinated mice. The sera were two-fold serially diluted from the starting dilution of 1:100 to a dilution necessary to quantify the NAI titer. Non-linear regression (resulting fit: solid line) was conducted from these results to obtain the  $\log_{10}$  NAI reciprocal titer that inhibited 50% of the NA activity (dotted horizontal line). Before conducting non-linear regression, the NA activity was normalized with 100% NA activity being defined with a 'virus only with no sera' control that included at least 8 wells. Error bars represent the standard error of the mean.