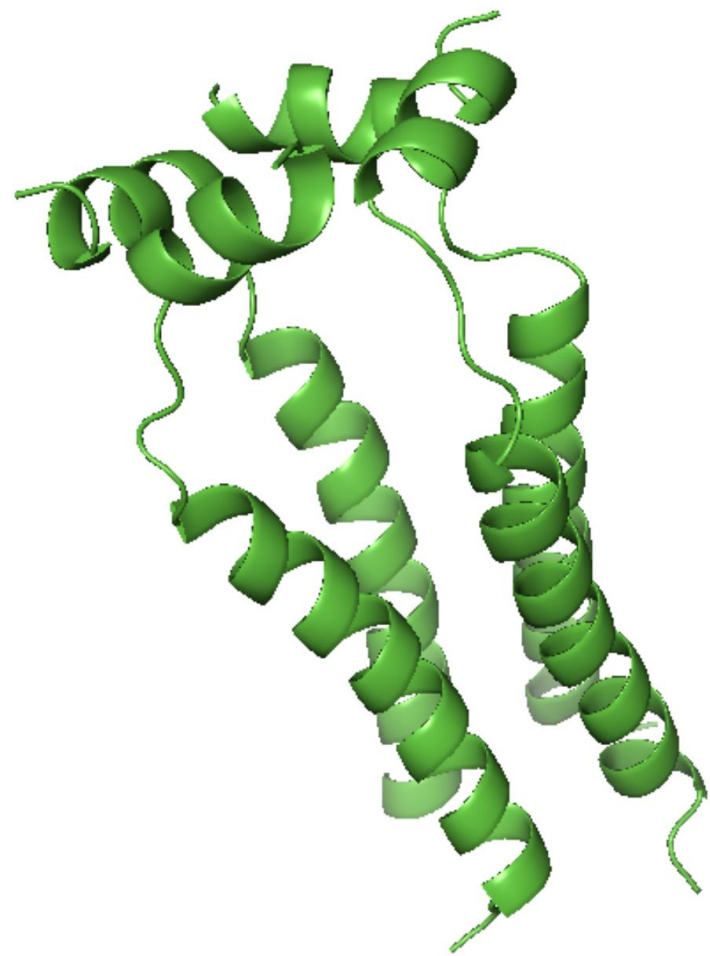
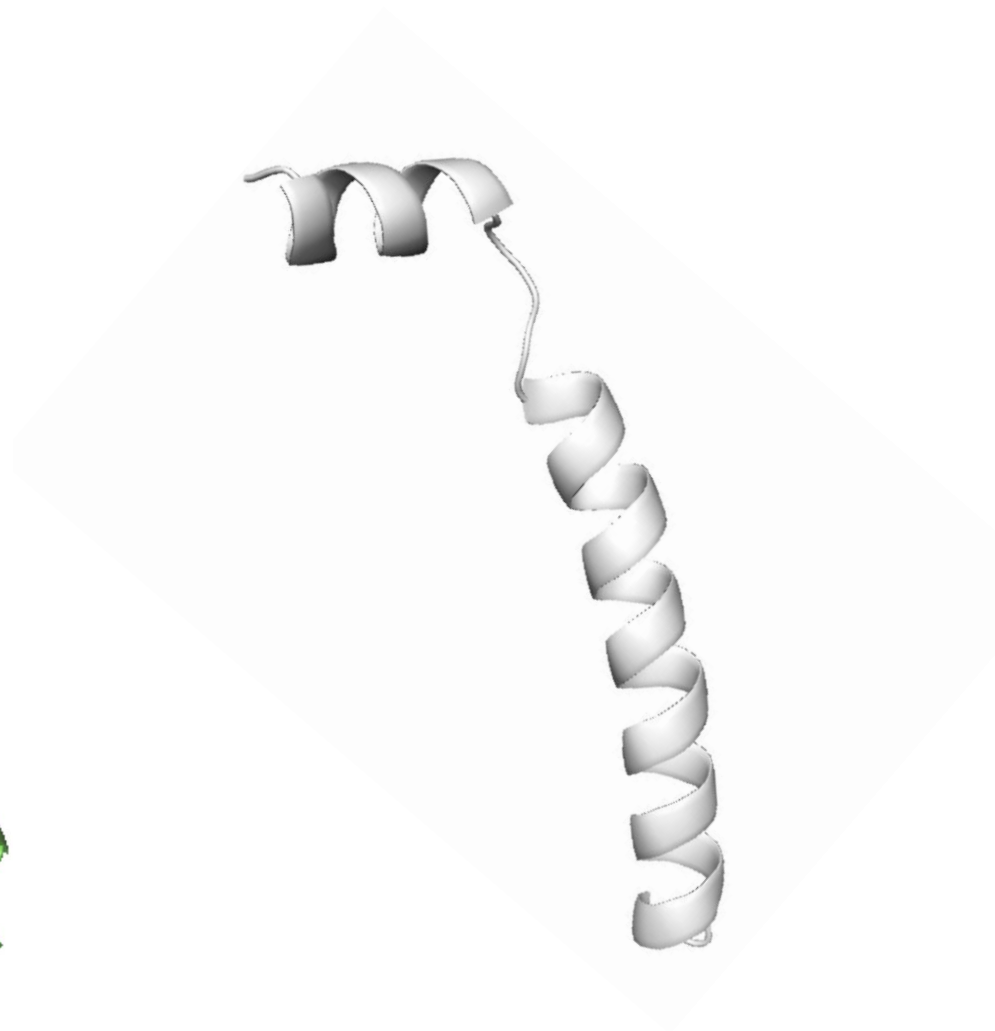


Figure S1

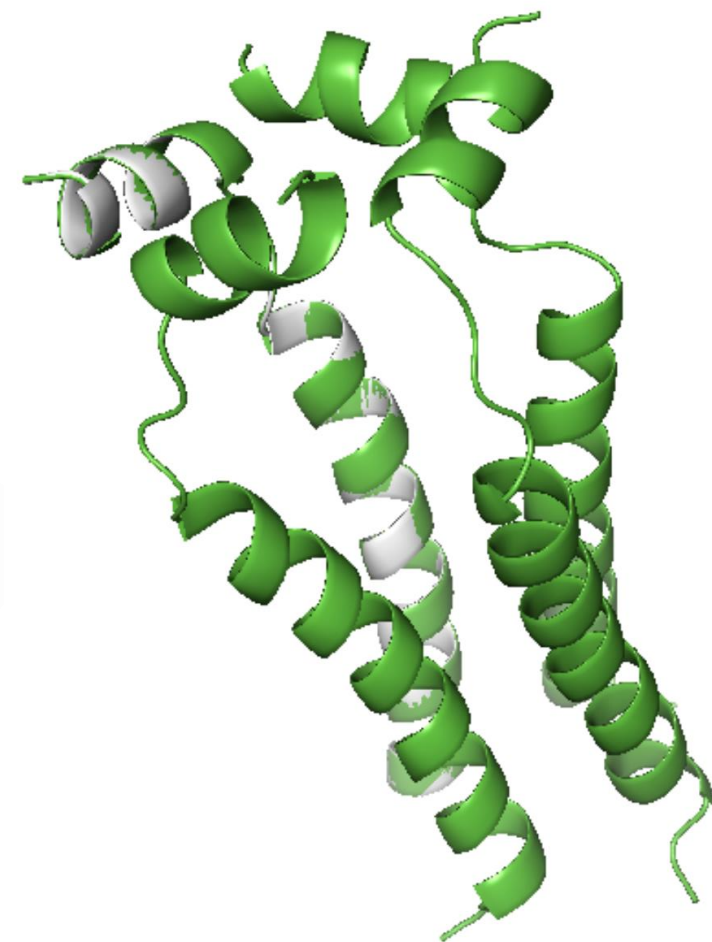
SWISS-MODEL prediction



M2-E79K



M2-WT

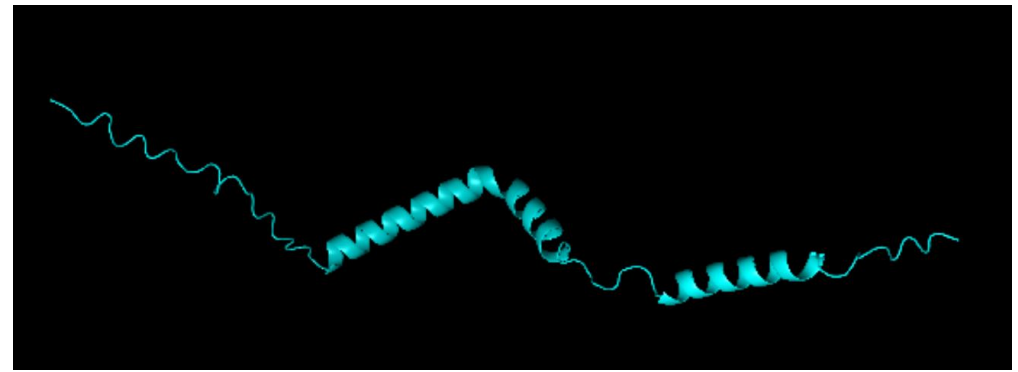


Pymol overlap

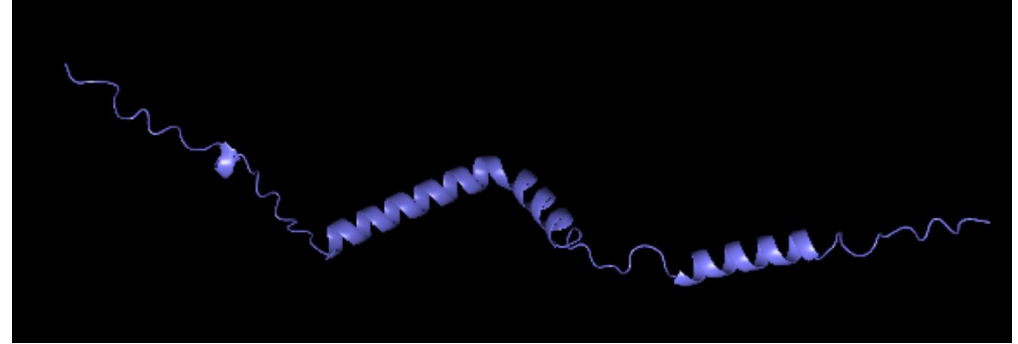
Figure S2

AlphaFold2 prediction

M2-E79K



M2-WT



Pymol overlap

M2-79: red spots

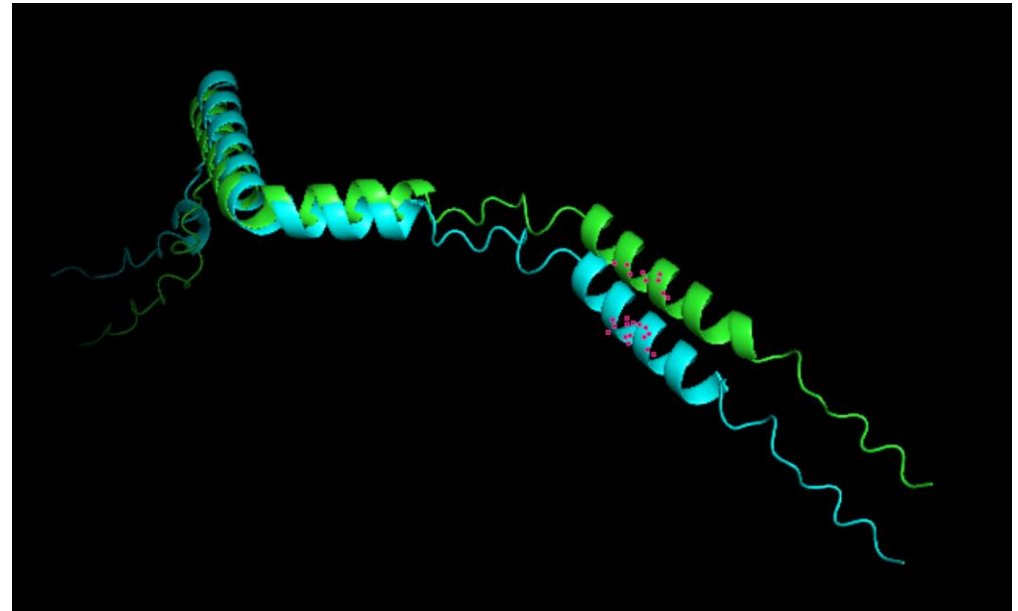
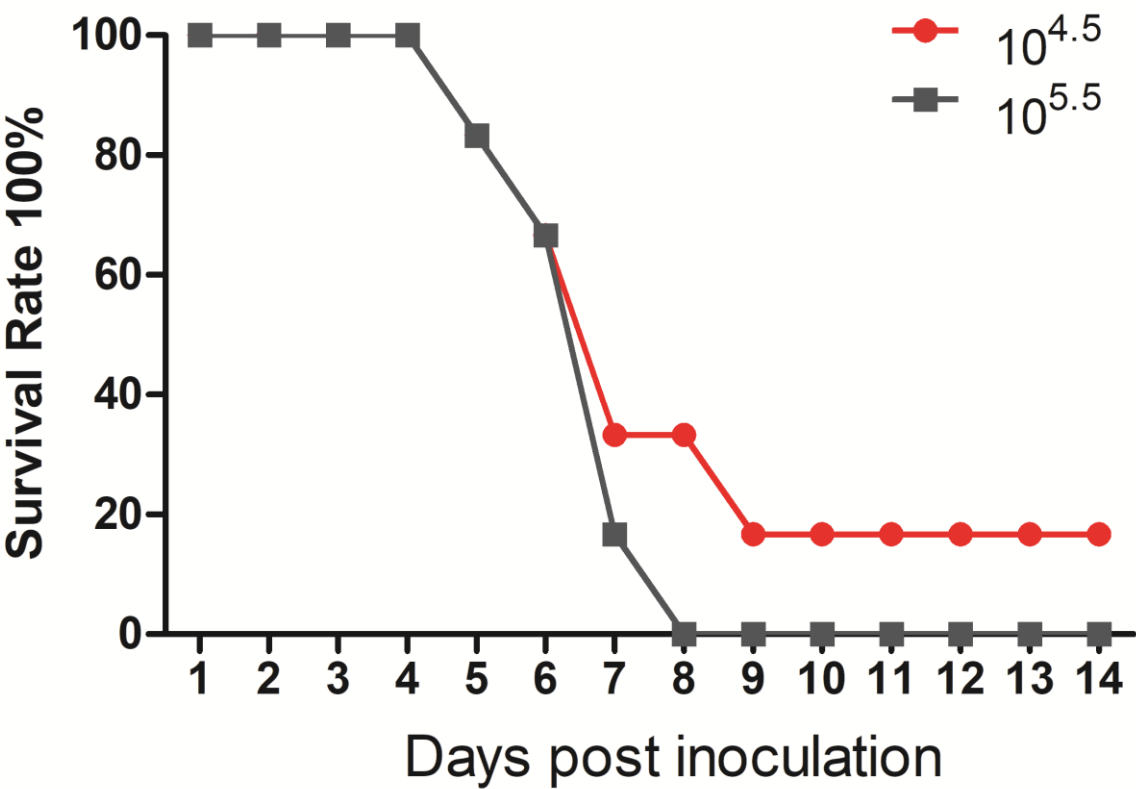


Figure S3



The survival rates of mice inoculated with different doses of CA09 influenza virus. Mice were intranasally challenged with $10^{4.5}$ TCID₅₀ and $10^{5.5}$ TCID₅₀. The dose of $10^{5.5}$ TCID₅₀ resulted in 100% mortality, whereas 16.7% mice survived with the challenge dose of $10^{4.5}$ TCID₅₀.