

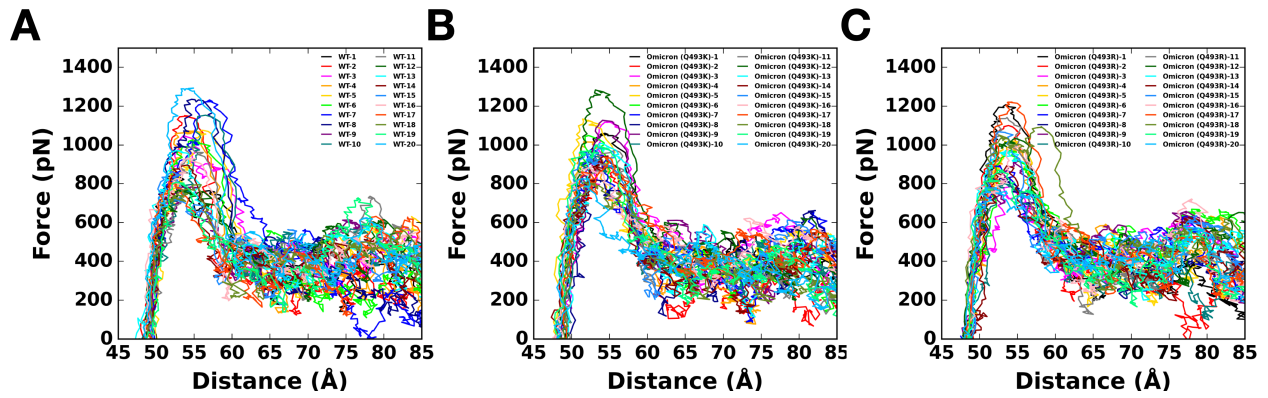
## Supplementary Data

### **Binding of Human ACE2 and RBD of Omicron Enhanced by Unique Interaction Patterns Among SARS-CoV-2 Variants of Concern**

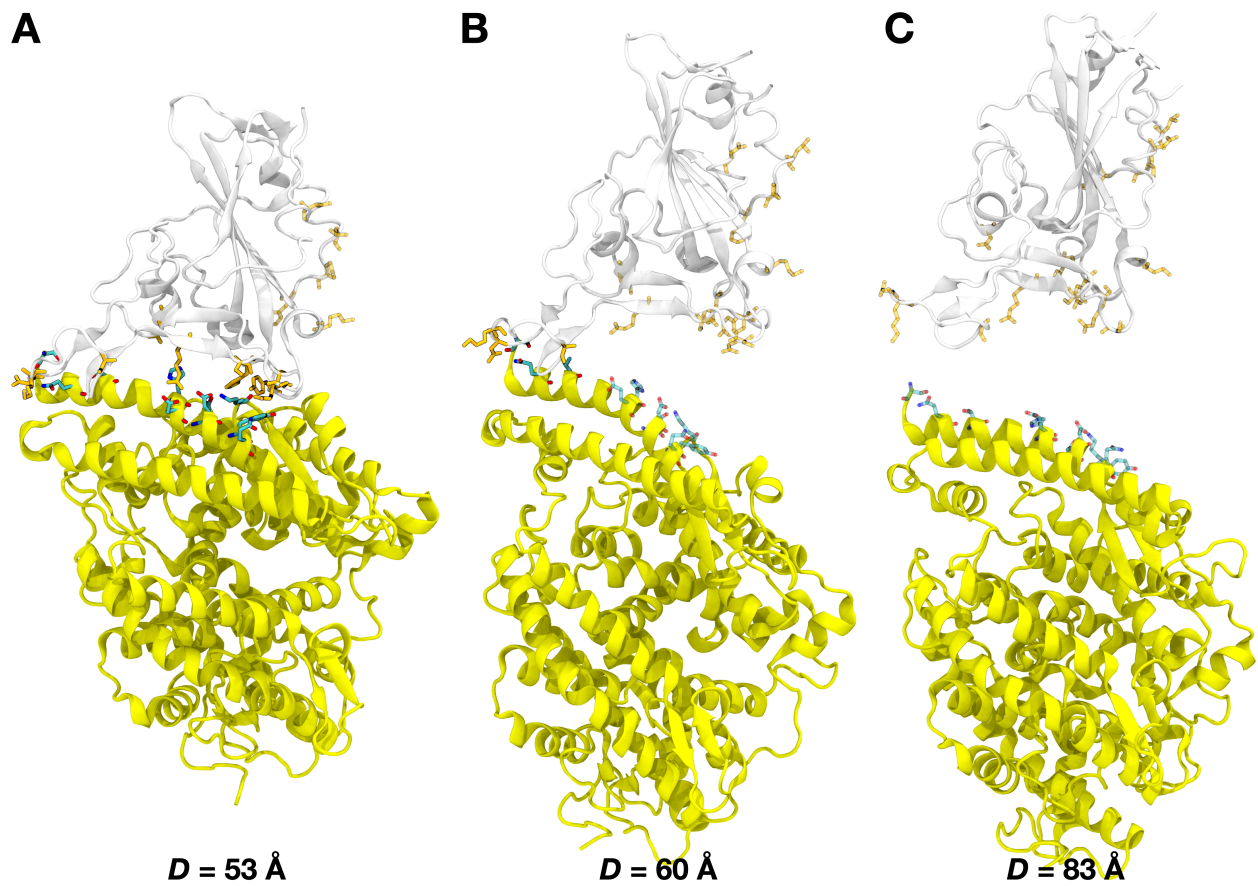
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**Figure S1.** Force profiles of 20 replicas of (A) WT, (B) Omicron Q493K, and (C) Omicron Q493R as a function of the distance between the COM of RBD and ACE2.



**Figure S2.** Separation process between Omicron RBD and ACE2 at  $D = 53 \text{ \AA}$ ,  $60 \text{ \AA}$ , and  $83 \text{ \AA}$ , respectively. The color scheme is the same as in **Figure 1B**.