

1 **Supplementary Data**

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3 **Genetic Modification to Design a Stable Yeast-expressed Recombinant SARS-CoV-2 Receptor Binding**
4 **Domain as a COVID-19 Vaccine Candidate**

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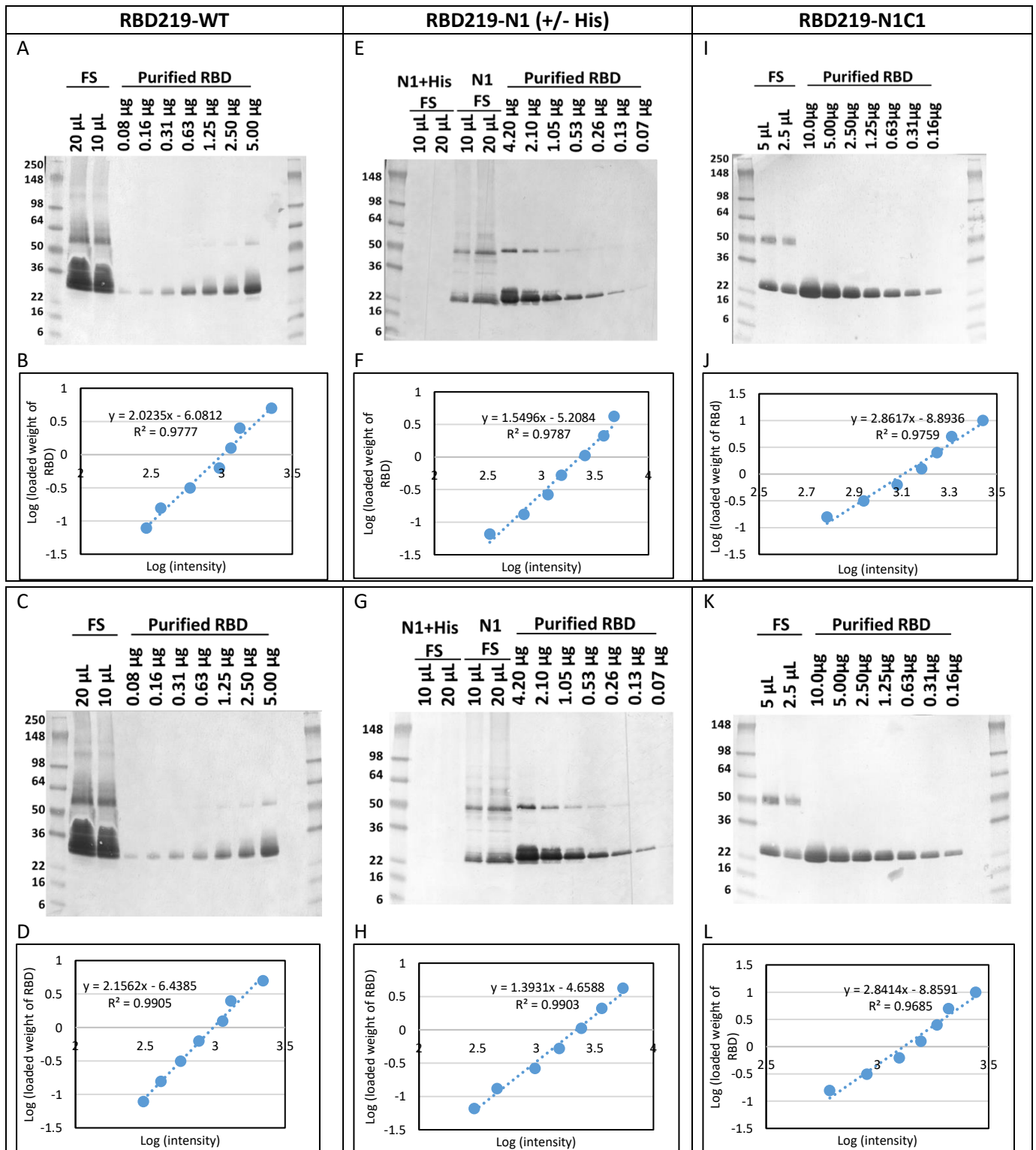
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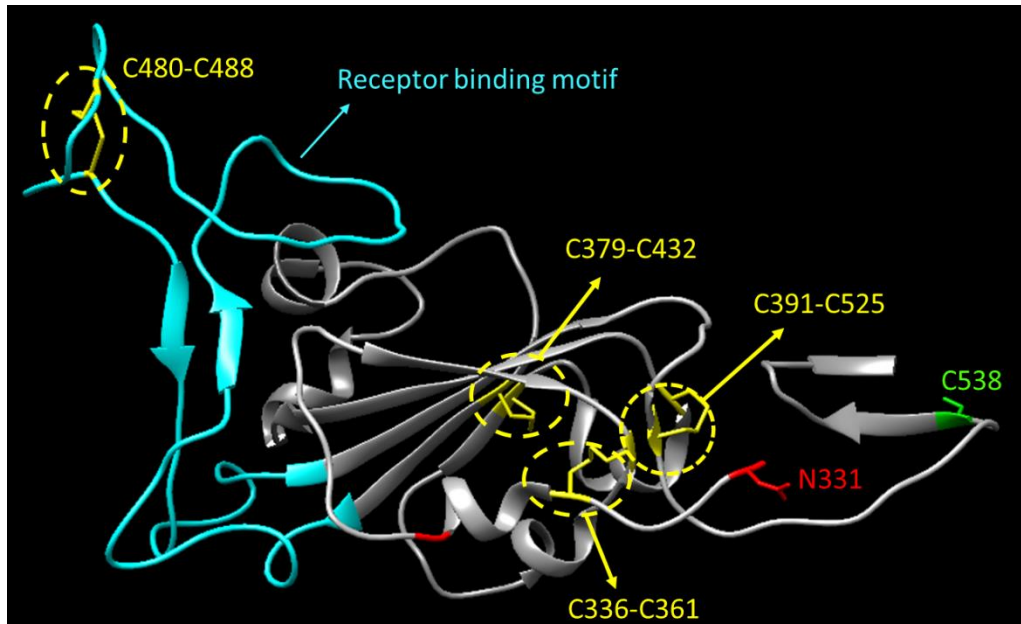


20 **Figure S1** Western blot of RBD219-WT fermentation supernatant and purified RBD219-WT (A, C) and the
 21 standard curve generated using the purified RBD219-WT (B, D). Western blot of RBD219-N1 and N1+His
 22 fermentation supernatant and purified RBD219-N1+His (E, G) and the standard curve generated using the
 23 purified RBD219-N1+His (F, H). Western blot of RBD219-N1C1 fermentation supernatant and purified
 24 RBD219-N1C1 (I, K) and the standard curve generated using the purified RBD219-N1C1 (J, L)

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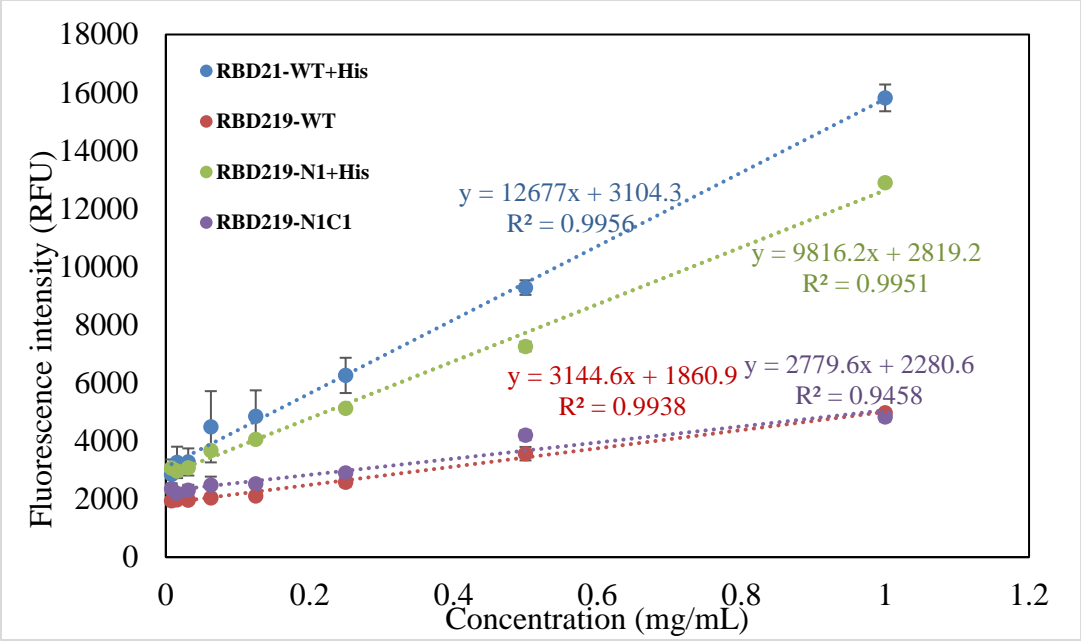


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29 **Figure S2.** The structure of RBD219-WT is extracted from SARS-CoV-2 Spike protein (PDB ID: 6XEY) using
30 Chimera 1.14. The four disulfide bond formation at C336/C361, C379/C432, C391/525, and C480/488
31 are highlighted in yellow and the free cysteine is highlighted in green. The two glycosylation sites N331
32 and N343 are highlighted in red. The receptor-binding motif (RBM) is highlighted in cyan.

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36 **Figure S3** Fluorescence intensity vs. concentration plot for different RBD variants