

Supplementary information

Detection of SARS-CoV-2 humanized antibody with paper-based ELISA

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S.1 Color change for TMB/HRP reaction of different human serum concentrations

For control experiment and assay validity, the solutions used for paper-based assay, which were anti-human IgG conjugated with HRP (Positive control), PBS (Negative control), human serum, 1:1, 1:10 and 1:100 diluted human serum were added directly into TMB solution in 0.6 mL centrifuge tube (Eppendorf, Germany). Human serum may contain biological substance which accelerate TMB reaction due to color change shown in Figure S.1c comparing to PBS in Figure S.1b. Therefore, for testing human serum with HRP/TMB reaction-based, it is suggested that sample preparation may be required. Diluting human serum or removing biological substances can prevent TMB reaction in the absence of HRP.

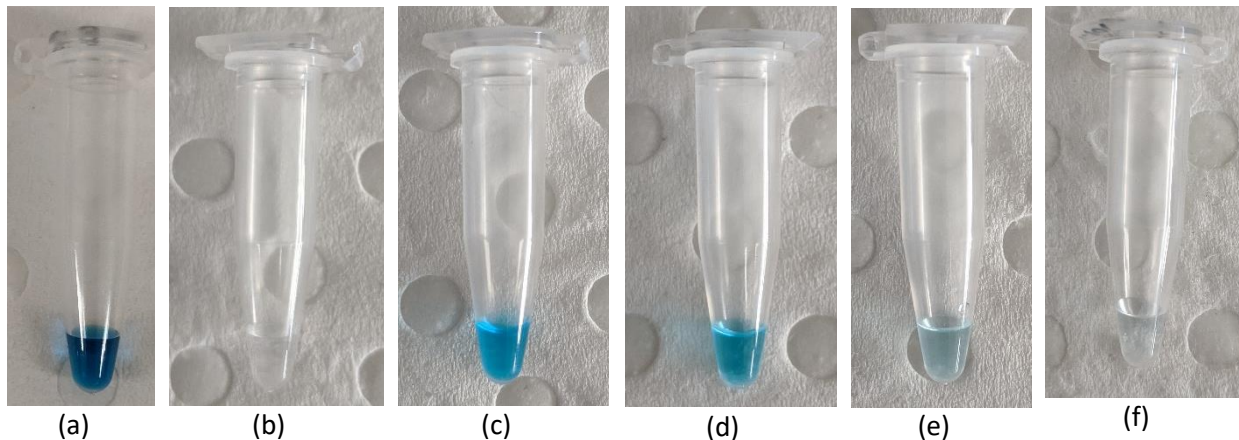


Fig. S.1 The color change at 10th min (a) for 0.1 ng/mL Anti-human IgG conjugated HRP in TMB solution (b) for PBS in TMB solution (c) for undiluted human serum in TMB solution (d) for 1:1 diluted human serum (e) 1:10 diluted human serum, and (f) for 1:100 diluted human serum in TMB solution.