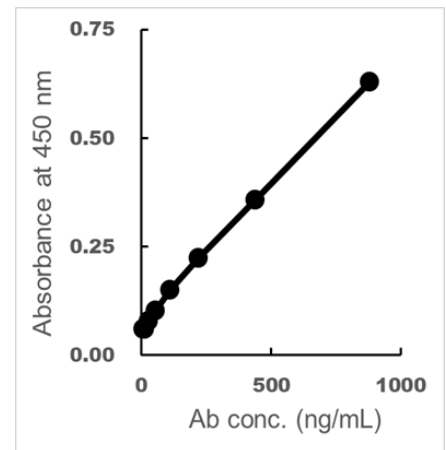


Protocol for detecting target protein

ELISA by immuno-plate

1. Add suitable antigen solution (i.e. SARS-CoV-2 Spike protein, conc. 0.1 $\mu\text{g/ml}$ ~5.0 $\mu\text{g/ml}$) into immuno-plate such as MaxiSorp™ and incubate for O/N at 4°C
2. Wash each well with maximum capacity of PBS-T for five times
3. Add blocking solution such as Blocking One (Nacalai, #03953-95) and incubate for 2 hrs at RT
4. Remove blocking solution and apply this product (1:400-1:4,000) or your antibody samples
5. Incubate sample for 1hr at RT
6. Repeat step 2
7. Add enzyme-conjugated secondary anti-human antibody solution and incubate for 1hr at RT
8. Repeat step 2
9. Add substrate solution such as TMB, and incubate for 5 to 30 min at RT
10. Stop reaction by acid solution such as phosphoric acid or sulfuric acid
11. Read suitable absorbance, and analyze data

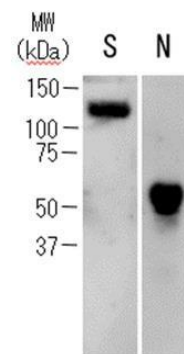


ELISA

Standard curve of this product against SARS-CoV-2 Spike protein

Western blot

1. Prepare ~100 ng of protein samples for PAGE
2. Perform PAGE including protein standard such as Protein ladder One+ triple color (Nacalai, #19593-25)
3. Transfer segregated proteins into PVDF membrane
4. Soak PVDF into blocking solution such as Bullet Blocking One for Western Blotting (Nacalai, #13779-56) for 5 min~ at RT
5. Apply this product (1:500) or your antibody samples on PVDF for 1 hr
6. Wash with TBS-T for three times
7. Apply enzyme-conjugated secondary anti-human antibody solution and incubate for 1 hr at RT
8. Repeat step 6
9. Visualize target proteins using Chemi-Luminescent substrate such as Chemi-Lumi One Super (Nacalai, #02230-14) or Chemi-Lumi one Ultra (Nacalai, #11644-24)
10. Detect signals and analyze data



Western blot

Western blot analyses of this product against SARS-CoV-2 S-protein (S) or N-protein (N)