

2019-nCoV S1 Protein ELISA Kit

Catalog # C19SD-876

Product Description

The 2019-nCoV S1 Protein detection Kit is a direct Enzyme-Linked ImmunoSorbent Assay (ELISA) kit for the measurement and detection of Coronavirus Spike Protein in complex biological samples. The kit includes one 96-well strip plate pre-coated with recombinant human ACE2 protein. Calibration controls are included to allow quantitative determinations of Coronavirus Spike Protein RBD levels in test samples, including 2019-nCoV and SARS-CoV.

Components – Kit Box

SignalChem Cat#	Component Name	Size
C19S1-61DH	Anti-nCoV S1 Detection Antibody, 1X	10 mL
CP02-A51C2	ACE2 Coated Plate	1 plate
CS02-506	One-step TMB Substrate	10 mL
E01-09	nCoV ELISA Sample Dilution Buffer	2 x 10 mL
SS01-09	Stop Solution	6 mL
C19SD-CAL0 C19SD-CAL1 C19SD-CAL2 C19SD-CAL3	Calibrators: 0 ng/mL 5 ng/mL 20 ng/mL 80 ng/mL	1 mL each
WB20-09	Wash Buffer, 20X	2 x 15 mL

Storage and Stability

Store kit and contents at 4°C for up to 6 months. Store unused multi well strips in the provided resealable bag and use within one month after opening.

Other Materials Required

- Micro plate cover
- Milli-Q water or other source of pure water
- Pipettes or multichannel pipettes
- Incubator for 37°C incubation
- Microplate reader capable of measuring absorbance at 450nm and 540 nm

Short Protocol

The following is only a short protocol. For a more detailed protocol, see 2019-nCoV Spike protein RBD Kit Instruction Manual.

2019-nCoV S1 Protein ELISA Assay Protocol:

- Bring all kit reagents to room temperature before use.
- Prepare 1X Wash buffer by adding 30 mL of the 20X concentrate with 570 mL of Milli-Q water.
- Prepare optimal sample dilutions using sample dilution buffer.
- Place the required number of coated strips onto the ELISA plate frame
- Add 100µL each of Sample or Calibrators per well (in duplicate or triplicate).
- Cover plate and incubate 1hr at 37°C.
- Decant solution from plate. Wash 4X with 1X wash buffer, 300µL per well. Invert plate and blot dry after last wash.
- Add 100µL 1X Detection Antibody per well.
- Cover plate and incubate 1hr at 37°C.
- Repeat decanting/washing step.
- Add 100µL One-Step TMB Substrate per well.
- Cover plate and incubate 10min at RT protected from light.
- Add 50µL stop solution to each well. The color in the wells should change from blue to yellow. Tap the plate to ensure thorough mixing.
- Read OD at 450nm and 540nm in a microplate reader within 30min of reaction termination.
- Calculate the sample concentration using the standard curve generated by the Calibrators.

Applications Note

This assay kit is for research use only and is NOT intended for use in diagnostic or therapeutic procedures. In native biological samples, there are various interfering substances that affect the accuracy of test results. For more information, visit the 2019-nCoV Spike protein RBD Kit page on the SignalChem website.