Human SARS-CoV-2 N IgG Antibody ELISA Kit

Product Code	CSB-EL3325HU
Abbreviation	SARS-CoV-2 N Ab (IgG)
Uniprot No.	P0DTC9
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Infectious Diseases
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator that can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer. Absorbent paper for blotting the microtiter plate. 50-300ul multi-channel micropipette 100ml and 500ml graduated cylinders. Deionized or distilled water. Pipette tips Timer Test tubes for dilution.
Tag Info	qualitative
Protein Description	Indirect
Component	A 96-well Coated assay plate --This microplate has been pre-coated with human SARS-CoV-2 nucleoprotein. Negative Control (1 x 800 µl) --It is free of the SARS-CoV-2 N IgG antibody and used to preclude the false positive. Positive Control (1 x 800 µl) --Used to evaluate the validity, stability, and comparability of the test results. HRP-conjugated anti-Human IgG antibody (100 x concentrate) (1 x 120 µl) --Act as the detection antibody. HRP-conjugate Diluent (1 x 20 ml) --Dilute the HRP-conjugated anti-Human IgG antibody. Sample Diluent (2 x 20 ml) --Dilute the sample solution. Wash Buffer (25 x concentrate) (1 x 20 ml) --Wash the unbound reagents.

TMB Substrate (1 x 10 ml) --React with HRP, eliciting a chromogenic color reaction.
Stop Solution (1 x 10 ml) --Stop the color reaction. The solution turns from blue to yellow.
Four Adhesive Strips (For 96 wells) --Seal the microplate when incubation.
An Instruction manual

Description

CUSABIO's Human SARS-CoV-2 nucleoprotein (N) IgG Antibody ELISA Kit allows for in vitro qualitative detection of the IgG antibody-specific for SARS-CoV-2 N protein in human serum and plasma. This research-use only kit can be applied in the studies associated with COVID-19, infectious and severe pneumonia caused by SARS-CoV-2. It has been validated with high sensitivity, high specificity, and high precision.

Nucleoprotein is the most abundant protein in SARS-CoV-2. It packs the positive-sense single-stranded viral RNA into a helical ribonucleocapsid (RNP), forming the viral nucleocapsid (N). The N protein plays an important role in improving the efficiency of virus transcription and assembly. It is also involved in viral pathogenesis. N protein possessing an immunogenic effect makes it trigger an immune response, which leads to the production of IgM/G against SARA-CoV-2 N protein. SARS-CoV-2 N IgG antibodies appear in the serum after 2-3 weeks after the onset of the symptoms, peaks within the third week, and gradually declines to a lower level. IgG-specific for SARS-CoV-2 N protein rapidly increases to a higher level after a secondary infection and retains in the body for several months even years.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<15%
Three samples of known concentration were tested twenty times on one plate to assess.
Inter-assay Precision (Precision between assays): CV%<15%
Three samples of known concentration were tested in twenty assays to assess.

Typical

Test parameter	specification	test result
Positive control	≥0.6	0.867
Negative control	≤0.25	0.184
Positive rate	20?Positive	100%
Negative rate	20?Negative	100%