Datasheet for ABIN6999593

SARS-CoV-2 N-Protein IgA Antibody ELISA Kit

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Overview

Quantity:	96 tests
Target:	SARS-CoV-2 N-Protein IgA Antibody
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	12.5 ng/mL - 200 ng/mL
Minimum Detection Limit:	12.5 ng/mL
Application:	ELISA

Product Details

Purpose:	Real quantitative determination of absolute anti-SARS-CoV-2 Nucleocapsid IgA antibodies
Sample Type:	Plasma, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Cross-Reactivity (Details):	There is no cross reaction with native serum immunoglobulin
Sensitivity:	8 ng/mL
Components:	• Pre-coated, ready to use 96-well strip plate, flat buttom • Plate sealer for 96 wells • Standard • Control (high and low level) • Assay Buffer • Conjugate

Product Details

- TMB Substrate
- Stop Solution
- Wash Buffer (20 x concentrate)
- Instruction manual

Target Details

Target:	SARS-CoV-2 N-Protein IgA Antibody
Alternative Name:	anti-Nucleocapsid IgA antibodies
Target Type:	Antibody

Application Details

Sample Volume:	10 µL
Assay Time:	105 min
Plate:	Pre-coated
Protocol:	As described in "Assay Procedure".
Reagent Preparation:	Wash Buffer: Dilute e.g. 10 mL of Wash Buffer Concentrate (20x) with 190 mL of deionized or distilled water to make 200 mL of Wash Buffer Working Solution (1x). (Dilution Ratio 1/20) **Note:** • Prepare before starting assay procedure. • When crystals have formed in the Wash Buffer concentrate (20x), warm it to room temperature and mix gently until the crystals are completely dissolved. • The Wash Buffer Working Solution can be stored at 4 °C for up to 2 weeks. • Contaminated water or preparation containers affect the detection result.
Sample Preparation:	• It is recommended to use fresh samples without long storage, otherwise protein degradation and denaturationmay occur in these samples, leading to false results. Samples should therefore be stored for a short periodat 2 - 8 °C or aliquoted at -20 °C (≤1 month) or -80 °C (≤ 3 months). Repeated freeze-thawcycles should be avoided. Prior to assay, the frozen samples should be slowly thawed and centrifuged toremove precipitates. • If the sample type is not specified in the instructions, a preliminary test is necessary to determinecompatibility with the kit. • If a lysis buffer is used to prepare tissue homogenates or cell culture supernatant, there is a possibilityof causing a deviation due to the introduced chemical substance.The recommended dilution factor is for reference only.

- Please estimate the concentration of the samples before performing the test. If the values are not in therange of the standard curve, the optimal sample dilution for the particular experiment has to be determined.Samples should then be diluted with PBS (pH =7.0-7.2).

Note:

Serum and plasma samples must be diluted 1/200 with Assay Buffer e.g. First for 1/10 dilution take 10 µL sample + 90 µL Assay Buffer and Second, for 1/20 dilution take 10 µL diluted sample + 190 µL Assay Buffer. Patient samples with a concentration of drug above the measuring range are to be rated as > "Highest Standard (Standard A)". The result must not be extrapolated. The patient sample in question should be further diluted with Assay Buffer and retested.

Assay Procedure:

1. Dilute samples as described in "Sample preparation".
2. Pipette 100 µL Assay Buffer into each of the wells to be used.
3. Pipette 50 µL of each of the Standards, Low level Control, High level Control and diluted samples into the respective wells of microtiter plate.
4. Cover the plate with plate sealer, briefly mix contents by gently shaking the plate and incubate 60 minutes at room temperature (18-25 °C)
5. Remove plate sealer and discard solution. Wash plate three times with 300 µL Wash Buffer. Remove excess solution by tapping the inverted plate on a paper towel.
6. Add 100 µL Conjugate into each well.
7. Cover the plate with plate sealer.
8. Incubate 30 minutes at room temperature (18-25 °C).
9. Remove plate sealer and discard solution. Wash plate three times with 300 µL Wash Buffer. Remove excess solution by tapping the inverted plate on a paper towel.
10. Add 100 µL Substrate into each well.
11. Incubate 15 minutes without plate sealer at room temperature (18-25 °C) in the dark.
12. Stop the substrate reaction by adding 100 µL Stop Solution into each well. Briefly mix contents by gently shaking the plate. Colour changes from blue to yellow.
13. Measure optical density with a photometer at OD 450nm with reference wavelength 650 nm (450/650 nm) within 30 minutes after pipetting the Stop Solution.

Calculation of Results:

- Create a standard curve by using the standards. OD 450/650 nm for each standard on the vertical (Y-axis) axis versus the corresponding drug concentration on the horizontal (X-axis) axis.
- The concentration of the samples can be read directly from this standard curve. Using the absorbance value for each sample, determine the corresponding concentration of drug from the standard curve.
- Find the absorbance value on the Y- axis and extend a horizontal line to the curve. At the point of intersection, extend a vertical line to the X-axis and read the drug concentration of the unknown sample.
- If computer data is going to be used, we recommend primarily "Four Parameter Logistic (4PL)" or secondly the "point-to-point calculation".
- To obtain the exact values of the samples, the concentration determined from the standard-

Application Details

curve must be multiplied by the dilution factor (200x).

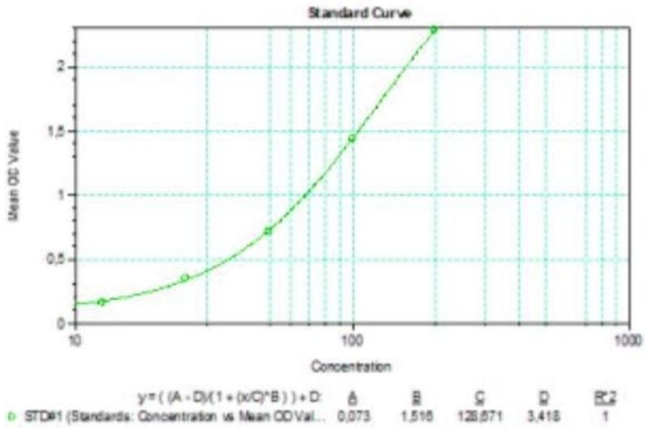
- Any sample reading greater than the highest standard should be further diluted appropriately with assay buffer and retested.
- Therefore, if the pre-diluted samples have been further diluted, the concentration determined from the standard curve must be multiplied by the further dilution factor. e.g., If the pre-diluted sample further diluted in a ratio of 1/5 then results should be multiplied by 1000.
- For low and high level controls values, refer to ""Quality Control Certificate"" provided by each kit.

Assay Precision:	Precision: Intra-assay and inter-assay CVs <30%
Restrictions:	For Research Use only

Handling

Storage:	4 °C
Storage Comment:	1. For unopened kit: All reagents should be stored according to the labels on the vials. All reagents should be stored at 4 °C for long term storage. Keep away from heat or direct sunlight. 2. For opened kits: the remaining reagents must be stored according to the above storage conditions. In addition, please return the unused wells to the foil pouch containing the desiccant and seal the foil pouch with the zipper. .
Expiry Date:	12 months

Images



ELISA

Image 1. Typical standard curve