

(FOR RESEARCH USE ONLY, DO NOT USE IT IN CLINICAL DIAGNOSIS!)

Human Anti-SARS-CoV-2 Neutralization Antibody Lateral Flow Assay Kit

Catalog No: E-HD-C104

20T/40T

Version Number: V3.0
Replace version: V2.0

Revision Date: 2021.09.03

This manual must be read attentively and completely before using this product.

If you have any problems, please contact our Technical Service Center for help.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Email: <u>techsupport@elabscience.com</u>
Website: <u>www.vetassay-elab.com</u>

Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.



Test principle

The Anti-SARS-CoV-2 Neutralization Antibody Test Kit is a qualitative membrane-based immunoassay for the detection of SARS-CoV-2 neutralizing antibodies in serum, plasma and whole blood. The sample is dropped into the sample well, and chromatography is performed under the capillary effect. The SARS-CoV-2 neutralizing antibodies in the sample combined with the colloidal gold-labeled SARS-CoV-2 spike protein (SP), then spread to the test area. It is captured by coated SP subunit RBD- NTD-CTD, to form a complex and gather in the test area (T line). The quality control area is coated with mouse antichicken IgY, and the colloidal gold-labeled chicken IgY is captureed to form a complex and aggregate in the quality control area (C line). If the C line does not show color, it indicates that the result is invalid, and this sample need to be tested again.

Kit components

Item	Specification
Detection Card	20T/40T
Sample Diluent	20/40 vials
Dropper	20/40 pieces
Manual	1 copy

Note: All reagent bottle caps must be tightened to prevent evaporation and microbial pollution.

Notes

- 1. Do not reuse.
- 2. Handle all samples cautiously as if they may contain infectious agents. Observe established precautions against microbiological hazards throughout the process and properly handle samples in accordance with standard procedures.
- 3. Wear protective clothing such as laboratory coats, disposable gloves and eye protection when samples are assayed.
- 4. The used tests, samples and potentially contaminated should be discarded according to the local regulation.
- 5. Unreasonable sampling, transportation and handling, or low virus content in the sample will lead to false negative

Storage and expiry date

Storage: Store at 4-30°C. With cool and dry environment.

Expiry date: expiration date is on the packing box.

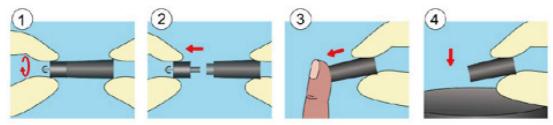
Requirements of sample

- 1. Rotate the twisting cap slightly.
- 2. Pull out the twisting cap.



- 3. Place the device on the puncture site and push to start.
- 4. Discard lancet into a sharps container.
- 5. Press lightly on the finger towards the puncture site to obtain adequate blood sample.

NOTE: the lancet is for single use only.



NOTE: This figure is only used as a reference.

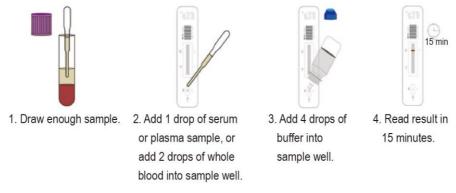
Assay procedure

Bring the pouch to room temperature before opening. Take the cassette from the sealed pouch and use it within ONE hour.

- 1. Place the cassette on a clean and flat surface.
- 2. For Serum or Plasma samples: add 1 drop (approximately 30 µ L) of sample into sample well, then add 4 drops of buffer and start the timer. Avoid trapping air bubbles into the sample well.
- 3. For Whole Blood samples: add 2 drops (approximately 50 $\,\mu$ L) of whole blood sample into sample well, then add 4 drops of buffer as soon as possible and start the timer. Avoid trapping air bubbles into the sample well.
- 4. Note: It's recommended to add 1 more drop of buffer if the liquid flows too slowly.
- 5. Wait for the colored line(s) to appear. The result shall be read at 15 minutes. The result is valid within 30 minutes.

NOTE: It is recommended to use serum or plasma as the priority sample types for testing.

NOTE: Micropipette is recommended to draw and add sample during the whole procedure.



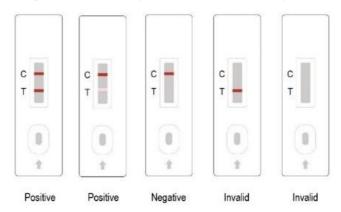
* Micropipette is recommended

NOTE: This figure is only used as a reference.



Interpretation of results

- 1. Positive: The presence of purple on the test line (T) and the control line (C) indicates positive result (it is also considered positive if the T line is only slightly purple colored).
- 2. Negative: The presence of purple only on the control line (C) while no color on the test line (T) indicates a negative result.
- 3. Invalid: The control line (C) is invisible after the test, the result is considered invalid and it is recommended to be repeated after reading the instruction for use again.



Note: this figure is only used as a reference.

Limitations of this test method

- 1. The test could be performed using serum, plasma samples and whole blood.
- 2. The presence of binding antibodies does not guarantee the presence of neutralizing antibodies, and the levels can not be consistent.
- 3. The half-life of binding antibody and neutralizing antibody is different, and the decline rate may be different.
- 4. Anti-SARS-CoV-2 Neutralization Antibody Test Kit will only indicate the presence of SARS-CoV-2 neutralization antibodies in the sample and should not be used as the sole basis, and should be combined with other test methods, as live virus and pseudovirus neutralizing antibodies assay.
- 5. The test result of this reagent can only be used as auxiliary tool. The test result should be combined with other data.

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