FACT SHEET FOR HEALTHCARE PROVIDERS

SARS-CoV-2 NP Ab ELISA

April 09, **2020**

Coronavirus
Disease 2019
(COVID-19)

This Fact Sheet informs you of the significant known risks and benefits of the emergency use of the SARS-CoV-2 NP Ab ELISA test for COVID-19 test.

The SARS-CoV-2 NP Ab ELISA test is intended to be used with patients' serum/plasma specimens collected by healthcare provider for diagnostic of COVID-19.

All patients whose specimens are tested with this assay will receive the Fact Sheet for Patients: SARS-CoV-2 NP Ab ELISA test.

What are the symptoms of COVID-19?

Many patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing). However, limited information is currently available to characterize the full spectrum of clinical illness associated with COVID-19. Based on what is known about the virus that causes COVID-19, signs and symptoms may appear any time from 2 to 14 days after exposure to the virus. Based on preliminary data, the median incubation period is approximately 5 days, but may range 2-14 days.

Public health officials have identified cases of COVID-19 infection throughout the world, including the United States, which may pose risks for public health. Please check the CDC webpage for the most up to date information.

What do I need to know about COVID-19 testing? Current information on COVID-19 for healthcare providers is available at CDC's webpage, *Information for Healthcare Professionals* (see links provided in "Where can I go for updates and more information" section).

- The SARS-CoV-2 NP Ab ELISA test should be ordered for the detection of COVID-19 in individuals suspected of COVID-19 by their healthcare provider.
- The SARS-CoV-2 NP Ab ELISA test can be used to test serum/plasma specimens in using the

This test is to be performed only using serum/plasma specimens collected from individuals suspected of COVID-19 by their healthcare provider.

microplate reader in laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, to perform moderate or high complexity tests. A n d test results can be provided within 4-5 hours upon specimen collection.

Specimens should be collected with own collection supplies under appropriate infection control precautions. Current guidance for COVID-19 infection control precautions are available at the CDC's website (see links provided in "Where can I go for updates and more information" section).

Use appropriate personal protective equipment when collecting and handling specimens from individuals suspected of having COVID-19 as outlined in the CDC Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19). For additional information, refer to CDC Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons Under Investigation (PUIs) for Coronavirus Disease 2019 (COVID-19) (see links provided in "Where can I go for updates and more information" section).

Warnings and precautions

The ELISA assays are time and temperature sensitive. To avoid incorrect result, strictly follow the test procedure steps and do not modify them.



- Do not exchange reagents from different lots or use reagents from other commercially available kits. The components of the kit are precisely matched for optimal performance of the tests.
- Make sure that all reagents are within the validity indicated on the kit box and of the same lot. Never use reagents beyond their expiry date stated on labels or boxes.
- CAUTION CRITICAL STEP: Allow the reagents and specimens to reach room temperature (20-25°C) before use. Shake reagent gently before use. Return at 2-8°C immediately after use.

FACT SHEET FOR HEALTHCARE PROVIDERS

SARS-CoV-2- NP Ab ELISA

April 09, **2020**

Coronavirus
Disease 2019
(COVID-19)

- Use only sufficient volume of specimen as indicated in the procedure steps. Failure to do so, may cause low sensitivity of the assay.
- Do not touch the exterior bottom of the wells; fingerprints or scratches may interfere with the reading. When reading the results, ensure that the plate bottom is dry and there are no air bubbles inside the wells.
- Never allow the microplate wells to dry after the washing step. Immediately proceed to the next step. Avoid the formation of air bubbles when adding the reagents.
- Avoid long time interruptions of assay steps. Assure same working conditions for all wells.
- Calibrate the pipette frequently to assure the accuracy of specimens/reagents dispensing. Use different disposal pipette tips for each specimen and reagents in order to avoid cross-contaminations.
- When adding specimens, do not touch the well's bottom with the pipette tip.
- When measuring with a plate reader, determine the absorbance at 450nm.
- The enzymatic activity of the HRP-conjugate might be affected from dust and reactive chemical and substances like sodium hypochlorite, acids, alkalis etc. Do not perform the assay in the presence of these substances.
- All specimens from human origin should be considered as potentially infectious for COVID 19.
 Strict adherence to CDC guideline regulations can ensure the personal safety.
- Never eat, drink, smoke, or apply cosmetics in the assay laboratory. Never pipette solutions by mouth.
- Chemical should be handled and disposed of only in accordance with the current CDC guideline and the local or national regulations.

What does it mean if the specimen tests positive for the antibodies related to COVID-

A positive test result for COVID-19 indicates the antibodies (IgG and IgM) to the nucleocapsid protein (NP) of SARS-CoV-2 was detected and can be used as serological indications of COVID-19 currently or in the past. The patient infected with the virus currently and presumed to be contagious. Laboratory test results should always be considered in the context of clinical

observations and epidemiological data in making a final diagnosis and patient management decisions. Patient management should follow current CDC guidelines.

The SARS-CoV-2 NP Ab ELISA test has been designed to minimize the likelihood of false positive test results. However, in the event of a false positive result, risks to patients could include the following: a recommendation for isolation of the patient, monitoring of household or other close contacts for symptoms, patient isolation that might limit contact with family or friends and may increase contact with other potentially COVID-19 patients, limits in the ability to work, the delayed diagnosis and treatment for the true infection causing the symptoms, unnecessary prescription of a treatment or therapy, or other unintended adverse effects.

All laboratories and healthcare providers in patient care settings using this test must follow the standard testing and reporting guidelines according to their appropriate public health authorities.

What does it mean if the specimen tests negative for the virus that causes COVID-19?

A negative test result for this test means that SARS- CoV-2-NP antibody was not present in the specimen above the limit of detection. However, a negative result does not rule out COVID-19 and should not be used as the sole basis for treatment or patient management decisions. A negative result does not exclude the possibility of COVID-19.

When diagnostic testing is negative, the possibility of a false negative result should be considered in the context of a patient's recent exposures and the presence of clinical signs and symptoms consistent with COVID-19. The possibility of a false negative result should especially be considered if the patient's recent exposures or clinical presentation indicate that COVID- 19 is likely, and diagnostic tests for other causes of illness (e.g., other respiratory illness) are negative. If COVID-19 is still suspected based on exposure history together with other clinical findings, re-testing should be considered by healthcare providers in consultation with public health authorities.

Risks to a patient of a false negative include: delayed or lack of supportive treatment, lack of monitoring of infected individuals and their household or other close contacts for symptoms resulting in increased risk of spread of COVID-19 within the community, or other unintended adverse events.

FACT SHEET FOR HEALTHCARE PROVIDERS

SARS-CoV-2-NP Ab ELISA

April 09, 2020

Coronavirus
Disease 2019
(COVID-19)

Where can I go for updates and more information?

CDC webpages:

General: https://www.cdc.gov/COVID19

Healthcare Professionals:

https://www.cdc.gov/coronavirus/2019-nCoV/guidance-hcp.html Information for Laboratories: https://www.cdc.gov/coronavirus/2019-

nCoV/guidance-laboratories.html

Laboratory Biosafety: https://www.cdc.gov/coronavirus/2019-

nCoV/lab-biosafety-guidelines.html

Isolation Precautions in Healthcare Settings:

https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-

recommendations.html

Specimen Collection: https://www.cdc.gov/coronavirus/2019-

nCoV/guidelines-clinical-specimens.html

Infection Control: https://www.cdc.gov/coronavirus/2019-

ncov/infection-control/index.html

FDA webpages:

General: www.fda.gov/novelcoronavirus

EUAs:(includes links to patient fact sheet and manufacturer's instructions) https://www.fda.gov/medical-devices/emergency-use-authorizations

iCarbonX (Shenzhen) Company Limited:

iCarbonX, 3F, Building 2B Shahe Industrial Zone, No.4018 Qiaoxiang Road, Nanshan District, Shenzhen, Guangdong China (PRC), 518053

Email: cs@icarbonx.com

Website: https://www.icarbonx.com/en/products.html