



# AMPIVIEW™ SARS-CoV-2 RNA probes Set

REF ENZ-GEN159

2.0 mL

## INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

## SUMMARY AND EXPLANATION

**AMPIVIEW™ RNA probes** are uniquely designed with the precision of targeted, sequence-specific RNA probes, powered by Enzo's LoopRNA ISH™ technology to deliver superior sensitivity and compatible with existing nanopolymer detection systems used in immunohistochemistry (IHC) procedures.

**AMPIVIEW™ SARS-CoV-2 RNA probes** is a mix of RNA probes that targets the nucleocapsid (N) protein and spike (S) protein of SARS-CoV-2. Coronavirus disease (COVID-19) is caused by SARS-CoV-2 virus and it's known to affect the lower respiratory system.

## ASSAY PRINCIPLE

The biotin-labeled probe mixture will denature and hybridize to the fixed and pre-treated tissue section on the microscope slide. The labeled probes can be detected with a streptavidin detection system such as Enzo's SAVIEW® PLUS reagents (AP or HRP) combined with HIGHDEF® chromogens. Moreover, an unconjugated biotin antibody can be combined with Enzo's nanopolymer detection system such as Enzo's POLYVIEW® PLUS reagents. Results can be visualized under a light microscope. For more information and other detection solutions available, visit [enzolifesciences.com/IHC](http://enzolifesciences.com/IHC).

## KNOWN APPLICATION

*in situ* Hybridization (ISH) on formalin-fixed paraffin-embedded (FFPE) tissue specimens or cells.

## PRODUCTS SUPPLIED

AMPIVIEW™ SARS-CoV-2 RNA probes (ENZ-GEN157)  
AMPIVIEW™ Hybridization Buffer (ENZ-ACC152)

## MATERIALS NEEDED (Not Provided)

Reagents and materials, such as detection kits, ancillary reagents and instruments are not provided. For information about reagents and additional materials needed refer to Enzo's Life Sciences website, [www.enzolifesciences.com/AMPIVIEW](http://www.enzolifesciences.com/AMPIVIEW).

## STORAGE AND SHELF-LIFE

- Upon receipt, store probes solution and hybridization buffer at -20°C. For long-term storage, you can store probes at -80°C.

These products are stable under these conditions up to the expiration date indicated in the vial label.

## PERFORMANCE CONSIDERATIONS

- Do not use reagents past their expiration date.
- Do not allow the slides to dry completely during the hybridization and detection procedures, or erroneous results may occur. Avoid drying by ensuring that the entire specimen is covered with sufficient amounts of buffers and reagents as recommended in the procedures. While incubating, the slides may be covered with a coverslip to help prevent drying.
- Cross-contamination of samples could cause false results. Use care preparing slides for more than one specimen.
- Allow all components to reach room temperature (20-30°C) before beginning the test procedure.
- Incubation times and temperatures other than those specified may give erroneous results.
- Improper specimen preparation may cause false results.

## CONTROLS

To assure the staining procedures are performed correctly, a control slide should be run with the first set of specimen slides. It serves as a hybridization/detection control and as an aid in interpretation of the specimen slides. Each laboratory can prepare tissue control slides from known HPV positive tissue blocks. If the control slides do not appear as expected, the test run should be invalid.

## LIMITATIONS

- This procedure is for research use only. It is not intended for diagnostic or therapeutic use.
- Negative results do not rule out the possibility of SARS-CoV-2 infection.
- It has been reported that there is a marked variability in the number of cells containing SARS-Cov-2. The majority of cell types involved are macrophages.

## PRECAUTIONS

- Refer to reagent Safety Data Sheet (SDS) from precautions.
- Specimens, before and after fixation, and all materials exposed to them should be handled and disposed of with proper precautions.
- Never pipette reagents by mouth and avoid contact with skin and mucous membranes with reagents and specimens. If reagents and/or specimens come into contact with sensitive areas, rinse thoroughly with water and follow your institution's safety protocols.

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## TECHNICAL NOTES

1. AMPIVIEW™ RNA probes have been optimized with SAVIEW® PLUS detection solutions.
2. AMPIVIEW™ RNA probes have been optimized with anti-biotin (mouse or rabbit) and POLYVIEW® PLUS Detection Systems. Use of other polymer-based reagents will require prior optimization.
3. Autostainers such as LEICA Bond III or Bond Max, Ventana Discovery Ultra or others can be used, but will require prior optimization.
4. Changes in the amount of probe or temperature incubation times from what's recommended may lead to inconsistent results.

## INSTRUCTIONS FOR USE

AMPIVIEW™ SARS-CoV-2 RNA probes are developed for manual and automated systems in combination with a streptavidin-based IHC detection system such as Enzo's SAVIEW® PLUS detection reagents and HIGHDEF® chromogens.

### Deparaffinization

Start specimen pre-treatment (e.g. dewaxing, proteolysis) according to instructions for use of SAVIEW® PLUS detection kit.

### Hybridization

1. Add 50 to 100 µL AMPIVIEW™ SARS-CoV-2 RNA probes onto dried slide and cover the specimen with a cover slip.
2. Denature samples at 60°C for 5 minutes.
3. Place the slides in the hybridization oven at 40°C for 2 hours.

### Post-hybridization and Detection

Perform post-hybridization processing and detection according to detection kit.

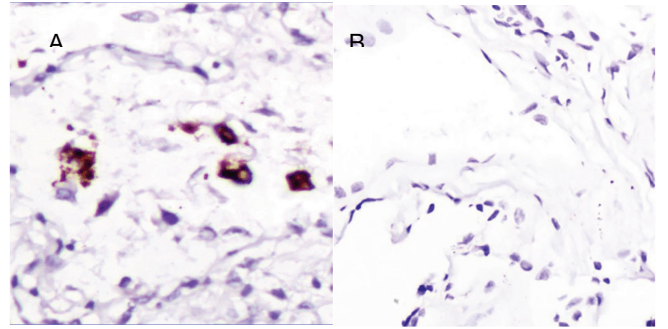
For specific protocols, visit [enzolifesciences.com/AMPIVIEW](https://enzolifesciences.com/AMPIVIEW)

## INTERPRETATION OF RESULTS

Using SAVIEW® PLUS detection systems and HIGHDEF® chromogens, hybridized AMPIVIEW™ SARS-CoV-2 RNA probes appear as [chromogen color] pattern when detected with SAVIEW® PLUS AP or HRP.

### Please note:

- Do not evaluate areas of necrosis, overlapping nuclei, over-digested nuclei, nuclei with weak signal intensity.
- A negative or unspecific result can be caused by multiple factors.
- In order to correctly interpret the results, the used must validate this product prior to use.



AMPIVIEW™ SARS-CoV-2 RNA probes combined with SAVIEW® PLUS HRP/DAB detection kit. A. SARS-CoV-2 (brown) detection in infected lung tissue. B. SARS-CoV-2 (no signal) detection in normal lung tissue.

## REFERENCES

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