

SARS-CoV-2 Analytical Q Panel 01

SCV2AQP01-A

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The following instructions must be read before using this product



Intended Use

Qnostics' SARS-CoV-2 (SCV2) Analytical Q Panels are intended for molecular procedures for the identification of SCV2 nucleic acid.

The Panels can be used to establish the Limit of Detection (LOD) of the SARS-CoV-2 molecular diagnostic assays. It can also be used to support laboratory staff training and to assess assay performance in the SCV2 molecular assays from extraction phase through amplification to detection.

Principles of the Panel

The Panels are manufactured to ISO standard 13485:2016 compliant systems. The samples were produced by making quantitative dilutions of whole, inactivated SARS-CoV-2 into transport medium containing background human cells (see Table 1). SARS-CoV-2 material has been inactivated by heat treatment and gamma irradiation.

Samples are representative of clinical human specimens and they are traceable to an internal reference preparation in line with the requirements of ISO 17511:2003.

The Panels are suitable for use with the majority of commercial and in-house molecular methods. They can also be used to support the training and monitoring of new operators in line with laboratories quality management requirements.

Product Description and Performance Characteristics

The Panel consists of 9 x 0.5ml samples, 8 positive and 1 negative (see Table 1). The Panels are provided as liquid-frozen in a 'single-use' tube format and must be extracted immediately after thawing. The target concentrations of the Panel have been designed to cover the dynamic range of most molecular assays and are consistent within each lot and across batches.

Table 1: Panel Components and Characteristics

Sample Code	Target Concentration Log ₁₀ dC/ml	Target Concentration dC/ml	Number of vials
SCV2AQP01-S01	6.0	1,000,000	1
SCV2AQP01-S02	5.0	100,000	1
SCV2AQP01-S03	4.0	10,000	1
SCV2AQP01-S04	3.7	5,000	1
SCV2AQP01-S05	3.0	1,000	1
SCV2AQP01-S06	2.7	500	1
SCV2AQP01-S07	2.0	100	1
SCV2AQP01-S08	1.7	50	1
SCV2AQP01-S09	Negative	Negative	1

IMPORTANT NOTE: The Panel members have **no assigned value**. The values provided in Table 1 are specific to the Qnostics' reference assay used for the qualification of the Panel. The actual panel member quantification values may vary from those reported and are dependent on the evaluation procedure, the nucleic acid extraction and molecular assay used (see Limitations). It is the responsibility of the end user to establish their own target results for each of the Panel members using their laboratory's molecular procedures for their specific molecular diagnostic assay and appropriate statistical control.

Warnings and Precautions

The Panels contain whole inactivate virus and must only be handled by trained laboratory personnel and in accordance with Good Laboratory Practices, which must include the use of personal protective equipment (PPE). Although the samples have been inactivated by heat treatment and gamma irradiation, all residual materials must be treated as potentially hazardous and disposed of accordingly. This must be carried out according to the established procedures of the laboratory and in accordance with national and international regulations.

Do not pipette by mouth. Do not eat, drink or smoke when handling the samples or within laboratory spaces. Observe the expiration date for the Panels.

Hazard and Precautionary Statements: H303, H333, P202, P270, P280, P314

Additional Equipment Required but not Provided

The following equipment is not included:

- Personal Protective Equipment (PPE) - e.g. lab coat and gloves
- Biological safety cabinet
- Nucleic acid extraction kit used in accordance with the manufacturers' instructions
- Molecular Amplification assay specific for SCV2 and, where appropriate, used in accordance with the manufacturers' instructions
- Bench vortex
- Micro-centrifuge (12-14,000 RPM)
- Calibrated pipettes and sterile barrier filter tips

Procedure

- The Panel must be thawed at room temperature.
- Vortex briefly and spin down at 12,000 RPM for 30 seconds before opening the sample tube.
- The samples must then be treated in the same manner to that required by the laboratory for routine specimens, in the normal SCV2 molecular procedure being assessed.

IMPORTANT NOTICE: Each panel member is intended for 'single use' ONLY. After thawing and testing any surplus material must be disposed of according to laboratory procedures.

For technical queries please contact info@qnostics.com

Storage

The Panel must be stored within the recommended temperature range of -20/-80°C.

The re-freezing and repeated thawing or off label storage of the Panel is not recommended and may lead to variability in the results obtained.

Limitations

The Panel **must not** be used as a substitute for assay process controls and / or calibrators (Standards) provided by the manufacturer of the molecular assay.

This product is not an absolute reference material. The laboratory needs to establish its own target results using the Panel for their particular molecular assay system.

References

World Health Organisation (WHO). Laboratory Biosafety Manual, 3rd ed. 2004 ISBN 92 4 154650 6 (LC/NLM classification: QY 25).

Centers for Disease Control (CDC). Recommendations for the prevention of HIV transmission in healthcare settings. MMWR 1987; 36, Supplement no. 2S.

Centers for Disease Control (CDC). Update: Universal guidelines for the prevention of transmission of human immunodeficiency virus, hepatitis B virus and other blood borne pathogens in health-care settings. MMWR; 37:377-388.

Centers for Disease Control (CDC). Guidelines for prevention of transmission of human immunodeficiency virus and hepatitis B virus to healthcare and public-safety workers. MMWR 1989; 38(S6):1-36.

Symbols

Symbols used in the labelling of this product comply with BS EN ISO 15223-1:2016 Medical Devices - 'Symbols to be used with medical device labels, labelling and information to be supplied'.



Product Code



Single use only



Temperature limitations



Contains sufficient for "N" tests



Batch code



Attention, consult instructions for use



Expiry date (last day of month)



Biohazard



In Vitro Diagnostic device



Manufacturer

