

## VRE Q Control 01

VREQC01-B

### FOR RESEARCH USE ONLY, NOT FOR USE IN DIAGNOSTIC PROCEDURES

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The following instructions must be read before using this product

#### Intended Use

Qnostics' Vancomycin Resistant Enterococci Quality Control Panel is for research use only and intended to help laboratories monitor their molecular assays on a run to run basis within customer derived limits. The Q control is a mix of *vanA* resistant *E. faecium* and *vanB* resistant *E. faecalis*. VREQC01 is intended to help laboratories investigate their molecular technologies by assessing assay drift, identifying potential sources of variability and in the evaluation, research and development of existing and new molecular assays. The panel will support qualitative molecular assay procedures' ability to detect the *vanA* and *vanB* genes that can be associated with Vancomycin Resistant Enterococci (VRE). The panels would be used to support laboratory staff training and to assess assay performance of molecular assays from extraction phase through amplification to detection.

#### Principles of the Panel

The control is manufactured under ISO standard 13485:2016 compliant systems. The samples were prepared by making quantitated dilutions of *vanA* resistant *E. faecium* and *vanB* resistant *E. faecalis* into transport medium containing background human cells.

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

The controls 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 5 x 0.5ml positive duplex samples for of *vanA* resistant *E. faecium* and *vanB* resistant *E. faecalis* (see Table 1). The controls are provided as liquid-frozen in a 'single-use' tube format and must be processed immediately after thawing. The target concentration of the control has been designed to fall in the middle of the dynamic range of most molecular assays and is consistent within each lot and across batches.

Table 1: Panel Components and Characteristics

Sample Code	Ct Values		Number of vials
	vanA	vanB	
VREQC01-QC	28.6	25.6	5

**IMPORTANT NOTE:** The Panel has **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 sample quantification values may vary from those reported and are dependent on the analytical procedure, the nucleic acid extraction and molecular assay used, as well as the standards used to calibrate and validate the specified molecular procedure (see Limitations). It is the responsibility of the end user to establish their own target range and limits for the Panel using their laboratory's molecular procedures for their specific molecular diagnostic assay and appropriate statistical control.

#### Warnings and Precautions

The controls contain *vanA* resistant *E. faecium* and *vanB* resistant *E. faecalis* 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). 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 VRE 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 control must be thawed at room temperature.
- Vortex briefly and spin down at 12,000 RPM for 10 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 VRE 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](mailto:info@qnostics.com)

#### Storage

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

All samples within the Panel are intended for single use only. All samples within the Panel are intended for single use only. The repeated freeze-thaw of the Panel is not recommended and may lead to variability in the results obtained.

#### Limitations

The control **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 Control for their particular molecular assay system.

These products are labelled as Research Use Only and **cannot be used** as an *in vitro* diagnostic device for the management of human disease.

#### References

World Health Organisation (WHO). Laboratory Biosafety Manual, 3<sup>rd</sup> 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



Research Use Only



Manufacturer

