



**CE Marked Material**  
**QCREBVVCAQC1 - Anti-Epstein Barr Virus (EBV) Viral Capsid**  
**Antigen (VCA) Quality Control Reagent Sample 1**  
**NIBSC code: 16/B697-xxx**  
**Instructions for use**  
**(Version 2.0, Dated 19/02/2020)**

**This material is a self certified IVD and complies with the requirements of the “EU in vitro diagnostic medical device directive 98/79/EC”.**

### 1. INTENDED USE

**This product is CE marked for use as an IVD within the EU member states and EEA countries. In all other territories this product can be used for research purposes only.**

QCREBVVCAQC1 is intended for use in the internal laboratory quality control of immunoassays that detect total antibodies to Epstein Barr Virus (EBV) Viral Capsid Antigen (VCA).

The QCREBVVCAQC1 should be included in each run as part of a continuing quality control programme to monitor the performance of the assay. Data obtained with QCREBVVCAQC1 can be used to construct quality control charts that can be visually monitored each time the assay is carried out to check for consistency of performance of the assay. Examples of how these charts are constructed and used have been described elsewhere<sup>1</sup>.

**QCREBVVCAQC1 IS NOT INTENDED TO BE USED TO COMPARE THE SENSITIVITY OF OR FOR CALIBRATION PURPOSES OF PARTICULAR ASSAYS.**

### 2. CAUTION

**This preparation is not for administration to humans or animals in the human food chain.**

QCREBVVCAQC1 has been prepared from a pool of anti-EBV VCA IgG reactive defibrinated plasma donations, repeatedly reactive in commercial EIA kits. The reactive donations used to prepare QCREBVVCAQC1 were nonreactive for anti-HIV, HBsAg and anti-HCV using commercial EIA kits. The reactive donations were pooled and then diluted in a pool of defibrinated human plasma donations. These samples used to dilute the reactive pool were non-reactive for anti-EBV EA, anti-EBV NA, anti-EBV VCA, EBV IgM, HBsAg, anti-HCV, anti-HTLV, anti-Syphilis, HIV-1 p24 and anti-HIV 1/2 using commercial EIA kits. As with all materials of biological origin, this preparation should be regarded as potentially hazardous to health. It should be used and discarded according to your own laboratory's safety procedures. Such safety procedures should include the wearing of protective gloves and avoiding the generation of aerosols. Care should be exercised in opening ampoules or vials, to avoid cuts.

### 3. UNITAGE

Table 1 gives a summary of the results obtained for QCREBVVCAQC1 16/B697. These results are intended only as a guide to the approximate levels of reactivity to be expected, and may not be exactly reproduced in other laboratories. In each case, at a minimum, three samples of QCREBVVCAQC1 were tested on three separate occasions. The results are expressed as the ratio of mean optical density or other measurement of the anti-EBV VCA response of the QC1 sample to the kit manufacturer's calculated cut-off

### 4. CONTENTS

Country of origin of biological material: United Kingdom.  
Ready-to-use reagent  
REF QCREBVVCAQC1 1x7mL Blood tubes  
Defibrinated Plasma 4mL  
Bronidox® (Sigma-Aldrich) 0.05% (w/v)

### 5. STORAGE

Reagents are to be kept at 2-8°C upon receipt  
• Reagents may be stored at 2-8°C until use by date  
• For single use only reagents should be divided into measured aliquots of one use and stored below -20°C to avoid freeze/thaw cycles. Once thawed use immediately. Do not refreeze.  
• Ensure all containers are properly sealed to avoid drying out of the reagent  
• Avoid microbial contamination of this product as this may alter product performance  
• Avoid excessively high temperatures or humidity

### 6. DIRECTIONS FOR OPENING

Vials have a screw cap; an internal stopper may also be present. The cap should be removed by turning anti-clockwise. Care should be taken to prevent loss of the contents. Please note: If a stopper is present on removal of the cap, the stopper should remain in the vial or be removed with the cap.

### 7. USE OF MATERIAL

1. Use of this reagent is to be restricted to trained laboratory staff only
2. Use suitable (latex/nitrile) gloves and eye/skin protection
3. Include reagent as a normal sample in routine work list
4. Allow reagent to reach room temperature before use
5. Plot reagent result to monitor performance

The Result Reporting System (RRS) has been developed by the National Institute for Biological Standards and Control (NIBSC) for the data monitoring of its serology and NAT quality control (QC) reagents. These include the Quality Control Reagent Unit (QCRU) and Clinical Virology Network (CVN) reagents. The system has been successfully running for serology assays for several years collecting thousands of data points a year. The system has recently been developed to accept data for Nucleic Acid-based Technologies (NAT) reagents and associated assays.  
<https://www.nibsc.org/products/rrs.aspx>

### 8. STABILITY

Reference materials are held at NIBSC within assured, temperature-controlled storage facilities. Reference Materials should be stored on receipt as indicated on the label.

Real-Time stability studies take place to ensure stated stability of the product.

### 9. REFERENCES

<sup>1</sup>. Levey, S. and Jennings, E.R. (1950) The use of control charts in clinical laboratories. *Am.J.Clin.Pathol.* 20, 1059-1066

### 10. ACKNOWLEDGEMENTS

### 11. FURTHER INFORMATION

Further information can be obtained as follows;  
This material: [enquiries@nibsc.org](mailto:enquiries@nibsc.org)  
WHO Biological Standards:  
<http://www.who.int/biologicals/en/>  
JCTLM Higher order reference materials:  
<http://www.bipm.org/en/committees/jc/jctlm/>  
Derivation of International Units:  
[http://www.nibsc.org/standardisation/international\\_standards.aspx](http://www.nibsc.org/standardisation/international_standards.aspx)  
Ordering standards from NIBSC:  
<http://www.nibsc.org/products/ordering.aspx>  
NIBSC Terms & Conditions:  
[http://www.nibsc.org/terms\\_and\\_conditions.aspx](http://www.nibsc.org/terms_and_conditions.aspx)  
NIBSC Results Reporting System  
<http://www.nibsc.org/products/rrs.aspx>



## 12. CUSTOMER FEEDBACK

Customers are encouraged to provide feedback on the suitability or use of the material provided or other aspects of our service. Please send any comments to [enquiries@nibsc.org](mailto:enquiries@nibsc.org)

## 13. CITATION

In all publications, including data sheets, in which this material is referenced, it is important that the preparation's title, its status, the NIBSC code number, and the name and address of NIBSC are cited and cited correctly.

## 14. MATERIAL SAFETY SHEET

Classification in accordance with Directive 2000/54/EC, Regulation (EC) No 1272/2008: Not applicable or not classified

Physical and Chemical properties	
Physical appearance: Liquid	Corrosive: No
Stable: Yes	Oxidising: No
Hygroscopic: No	Irritant: No
Flammable: No	Handling: See caution, Section 2
Other (specify):	
Toxicological properties	
Effects of inhalation:	Not established, avoid inhalation
Effects of ingestion:	Not established, avoid ingestion
Effects of skin absorption:	Not established, avoid contact with skin
Suggested First Aid	
Inhalation:	Seek medical advice
Ingestion:	Seek medical advice
Contact with eyes:	Wash with copious amounts of water. Seek medical advice
Contact with skin:	Wash thoroughly with water.
Action on Spillage and Method of Disposal	
Spillage of ampoule contents should be taken up with absorbent material wetted with an appropriate disinfectant. Rinse area with an appropriate disinfectant followed by water. Absorbent materials used to treat spillage should be treated as biological waste.	

## 15. LIABILITY AND LOSS

In the event that this document is translated into another language, the English language version shall prevail in the event of any inconsistencies between the documents.

Unless expressly stated otherwise by NIBSC, NIBSC's Standard Terms and Conditions for the Supply of Materials (available at [http://www.nibsc.org/About\\_Us/Terms\\_and\\_Conditions.aspx](http://www.nibsc.org/About_Us/Terms_and_Conditions.aspx) or upon request by the Recipient) ("Conditions") apply to the exclusion of all other terms and are hereby incorporated into this document by reference. The Recipient's attention is drawn in particular to the provisions of clause 11 of the Conditions.

## 16. INFORMATION FOR CUSTOMS USE ONLY

<b>Country of origin for customs purposes*:</b> United Kingdom * Defined as the country where the goods have been produced and/or sufficiently processed to be classed as originating from the country of supply, for example a change of state such as freeze-drying.
<b>Net weight:</b> 4g
<b>Toxicity Statement:</b> Toxicity not assessed
<b>Veterinary certificate or other statement</b> if applicable. <b>Attached:</b> No



**Table 1:**  
Results obtained for QCREBVVCAQC1, Lot Number 16/B697, using the following EIA Kits.

EIA Kit	Method Option	Test to Cut-Off Ratio	
		Mean	SD (n-1)
<b>Liaison EBV VCA IgG</b> Manufacturer: DiaSorin Catalogue Number: 310510 Lot Number(s): 30078, 30080	Automated	44.6	2.2
<b>Novagnost EBV VCA IgG</b> Manufacturer: Siemens Catalogue Number: EBVG0150DB Lot Number(s): EBVG-155, EBVG-157	Standard Protocol	29.0	2.3
<b>NovaLisa EBV VCA IgG</b> Manufacturer: NovaTec Catalogue Number: EBVG0150 Lot Number(s): EBVG-160	Standard Protocol	30.4	4.0
<b>Enzygnost Anti-EBV IgG</b> Manufacturer: Siemens Catalogue Number: OWIS15 Lot Number(s): 47573	Standard Protocol (Qualitative)	2.5	0.3
<b>Enzygnost Anti-EBV IgG</b> Manufacturer: Siemens Catalogue Number: OWIS15 Lot Number(s): 47573	Standard Protocol (Quantitative)	53.9 (U/mL)	6.1
<b>recomWell VCA IgG</b> Manufacturer: Mikrogen Diagnostik Catalogue Number: 7204 Lot Number(s): EEV121702	Standard Protocol (Qualitative)	2.4	0.2
<b>recomWell VCA IgG</b> Manufacturer: Mikrogen Diagnostik Catalogue Number: 7204 Lot Number(s): EEV121702	Standard Protocol (Quantitative)	47.7 (U/mL)	3.0
<b>Epstein Barr Virus VCA IgG</b> Manufacturer: DRG Diagnostics Catalogue Number: EIA-3475 Lot Number(s): 110GK117	Standard Protocol	15.3	0.8
<b>Epstein Barr Virus VCA IgG</b> Manufacturer: IBL International Catalogue Number: RE5731 Lot Number(s): IVCG129	Standard Protocol (Qualitative)	2.1	0.3
<b>Epstein Barr Virus VCA IgG</b> Manufacturer: IBL International Catalogue Number: RE5731 Lot Number(s): IVCG129	Standard Protocol (Quantitative)	45.5 (U/mL)	6.9