



CE Marked Material

QCRTHBcQC1 - Total Anti-HBc Quality Control Serum Sample 1
NIBSC code: QCRTHBcQC1
Instructions for use
(Version 5.0, Dated 05/03/2024)

This material is an 'Annex II List A' 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 UK, EU member states and EEA countries. In all other territories this product can be used for research purposes only.

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Total anti-HBc QC1 (16/B704) is intended for use in the internal laboratory quality control of immunoassays that detect antibodies to the hepatitis B core antigen. The total anti-HBc QC1 should be included in each run as part of a continuing quality control programme to monitor the performance of the assay. Data obtained with the total anti-HBc QC1 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 elsewhere¹. Total anti-HBc QC1 is NOT INTENDED TO BE USED TO COMPARE THE SENSITIVITY OF PARTICULAR ASSAYS.

2. CAUTION

The preparation contains material of human origin, and either the final product or the source materials, from which it is derived, have been tested and found negative for HBsAg, anti-HIV and HCV RNA. This preparation is not for administration to humans or animals in the human food chain.

The total anti-HBc QC1 has been prepared from a pool of total anti-HBc reactive defibrinated plasma donations, repeatedly reactive in commercial EIA kits. The reactive donations used to prepare total anti-HBc QC1 were reactive for HBsAg and non-reactive for anti-HIV and anti-HCV using commercial EIA kits. The reactive donations were pooled and then diluted in a pool of defibrinated human plasma samples non-reactive for total anti-HBc. These samples were also non-reactive for HBsAg, anti-HCV and anti-HIV using commercial EIA kits. Bronidox[®] was added to a concentration of 0.05%(w/v) as a preservative. 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 total anti-HBc QC1 16/B704. 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 total anti-HBc QC1 were tested on two occasions. The results are expressed as the ratio of mean optical density or other measurement of the total anti-HBc 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 QCRTHBcQC1 1x7mL Blood Tubes
Defibrinated Plasma 4mL
Bronidox[®] 0.05% (w/v)

5. STORAGE

- o Reagents are to be kept at 2-8°C upon receipt
- o Reagents may be stored at 2-8°C until use by date
- o Reagents should be divided into measured sub-aliquots of one use and stored below -20°C to avoid freeze/thaw cycles. Do not use after expiry.
- o When thawed for use, store at 2-8°C. Once thawed, use within one month and do not refreeze
- o Ensure all containers are properly sealed to avoid drying out of the reagent
- o Avoid microbial contamination of this product as this may alter product performance
- o 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 on a QC chart 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 (Add or amend as necessary)

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

Stability studies are carried out to ensure stated stability.

9. REFERENCES

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

10. ACKNOWLEDGEMENTS

EC REP Advena Ltd. Tower Business Centre, 2nd Floor, Swatar, BKR 4013, Malta





11. FURTHER INFORMATION

Further information can be obtained as follows;
This material: 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
Ordering standards from NIBSC:
<http://www.nibsc.org/products/ordering.aspx>
NIBSC Terms & Conditions:
http://www.nibsc.org/terms_and_conditions.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

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 (Add or amend as necessary)

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 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

Country of origin for customs purposes*: 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.
Net weight: 4 g
Toxicity Statement: Toxicity not assessed
Veterinary certificate or other statement if applicable.
Attached: No



1: Results obtained for **Total Anti-HBc QC1** (Lot Number **16/B704**) using appropriate commercial EIA kits.

EIA KIT	Method Options	Cut-off to Test Ratio	
		Mean	SD (n-1)
Bioelisa anti-HBc Manufacturer: Biokit Catalogue number: 3000-1102 Lot number: B26115 & B24919	Standard Protocol	2.7	0.3
ETI-AB-COREK Plus Manufacturer: DiaSorin Catalogue number: N0137 Lot number: 9910620A	Standard Protocol	46.8	7.4
Monolisa anti-HBc Manufacturer: Bio-Rad Catalogue number: 72315 Lot number: 6C0094	Standard Protocol	6.6 (OD/CO)	0.4
Murex Total anti-HBc Manufacturer: DiaSorin Catalogue number: 8G21-01 Lot number: D431010	Standard Protocol	13.8 (CO/OD)	0.8
VIDAS Anti-HBc Total II (HBCT)* Manufacturer: Biomerieux Catalogue number: 30439 Lot number: 1004958700	Automated	0.2 (TV)	0.0
Liaison Murex anti-HBc Total Manufacturer: DiaSorin Catalogue number: 310130 Lot number: 43054	Automated	0.1 (Index)	0.0
Architect System Anti-HBc Total* Manufacturer: Abbott Diagnostics Catalogue number: 8L44 Lot number: 58395LH00	Automated	5.3 (Index)	0.1

* Tests performed at Royal Sussex County Hospital