



CE Marked Material
QCRHBsQC1 - Anti-HBs Quality Control Serum Sample 1
NIBSC code: 20/B760-xxx
Instructions for use
(Version 1.0, Dated 12/10/2020)

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.

Anti-HBs QC1 is intended for use in the internal laboratory quality control of immunoassays that detect antibodies to hepatitis B surface antigen. The anti-HBs 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 anti-HBs QC1 can be used to construct quality control charts that can be visually monitored each time the assay is run, to check for consistency of performance of the assay. Examples of how these charts are constructed and used have been described elsewhere (1). Anti-HBs QC1 is NOT INTENDED TO BE USED TO COMPARE THE SENSITIVITY OF PARTICULAR ASSAYS.

### 2. CAUTION

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

The anti-HBs QC1 has been prepared from a pool of human serum donations reactive for antibodies to hepatitis B surface antigen. These samples were non-reactive for HBsAg, anti-HCV, anti-HIV, anti-HTLV and anti-Syphilis using currently available commercial EIA kits. The reactive sera were pooled and then diluted in a pool of negative defibrinated human plasma donations. These samples were non-reactive for HBsAg, anti-HBs, anti-HCV, anti-HIV, anti-HTLV and anti-Syphilis using currently available 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 anti-HBs QC1 20/B760. 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 anti-HBs QC1 were tested on three separate occasions. The results are quantified by means of a standard curve calibrated against the WHO reference preparation.

# 4. CONTENTS

Country of origin of biological material: United Kingdom. REF QCRHBsQCI 1x4ml 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
- Reagents should be divided into measured sub-aliquots of one use and stored below –20°C to avoid freeze/thaw cycles. Use only until the expiry dateon the label.
- When thawed for use, store at 2-8°C.
- · Once thawed, use within one month and do not refreeze

• Ensure all containers are properly sealed to avoid drying out of reagent

### 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

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 of this product.

### 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



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WHO International Laboratory for Biological Standards,
UK Official Medicines Control Laboratory







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

(EC) No 1272/2008: Not applicable or not classified					
Physical and Chemical properties					
Physical appearance:		Corrosive:	No		
Liquid					
Stable: Yes		Oxidising:	No		
Hygroscopic: No		Irritant:	No		
Flammable: No		Handling:See	e caution, Section 2		
Other (specify):					
Toxicological properties					
		established, avoid inhalation			
Effects of ingestion: Not e		established, avoid ingestion			
Effects of skin absorption:	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	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: 4g

Toxicity Statement: Toxicity not assessed

Veterinary certificate or other statement if applicable.

Attached: No



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Table 1: Results obtained for QCRHBsQC1 (Lot Number 20/B760) using the following EIA kits.

EIA KIT	Method Options	Test results	
		Mean	SD
Kit: Liaison XL Anti-HBs Plus Manufacturer: Diasorin Distributor: Diasorin Catalogue number: 311230 Lot number: 253016	Automated Protocol	255.7 (mIU/mL)	7.0
Kit: Bioelisa Anti-HBs (*) Manufacturer: Biokit Distributor: WERFEN Catalogue number: 3000-1101 Lot number: B32277	Standard Protocol	16.9 (mIU/mL)	0.7
Kit: DiaPro HBsAb Manufacturer: DiaPro Distributor: Launch Diagnostics Catalogue number: SAB.CE Lot number: C11T5/3	Standard Protocol	114.8 (mIU/mL)	8.6

(\*) 1:10 dilution applied following manufacturer kit insert instruction

