



**CE Marked Material**

**QCRHIV1QC5 - Anti-HIV-1 Quality Control Serum Sample 5**

**NIBSC code: QCRHIV1QC5**

**Instructions for use**

**(Version 4.0, 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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Anti-HIV-1 QC5 (13/B640) is intended for use in the internal laboratory quality control of immunoassays that detect antibodies to human immunodeficiency virus type 1. The anti-HIV-1 QC5 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-HIV-1 QC5 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<sup>1</sup>. Anti-HIV-1 QC5 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 anti-HIV-1 QC5 has been prepared from a pool of heat inactivated (+56°C for 60 minutes) anti-HIV-1 reactive defibrinated plasma donations, repeatedly reactive in commercial EIA kits and confirmed as anti-HIV-1 positive/anti-HIV-2 negative by commercial Western Blot kits. The reactive donations used to prepare anti-HIV-1 QC5 were non-reactive for HBsAg and anti-HCV using commercial EIA kits. The reactive sera were pooled and then diluted in a pool of defibrinated human plasma samples. These donations were non-reactive for HBsAg, anti-HCV and anti-HIV1/2 using commercial EIA kits. Bronidox<sup>®</sup> 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-HIV-1 QC5 13/B640. 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-HIV-1 QC5 were tested on two separate occasions. The results are expressed as the ratio of mean optical density or other measurement of the anti-HIV-1 response of the QC5 sample, to the kit manufacturer's calculated cut-off.

**4. CONTENTS**

Country of origin of biological material: United Kingdom.

Ready-to-use reagent

REF QCRHIV1QC5 1 x 4mL Blood Tubes

Defibrinated Plasma 4mL

Bronidox<sup>®</sup> (Sigma-Aldrich) 0.05% (w/v)

**5. STORAGE**

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.

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 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](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)

**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](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> 4 g
<b>Toxicity Statement:</b> Toxicity not assessed
<b>Veterinary certificate or other statement if applicable.</b>
<b>Attached:</b> No



1:

Results obtained for **Anti-HIV-1 QC5** (Lot Number **13/B640**) using the following EIA kits.

“ Tests performed at Brighton & Sussex University Hospitals

EIA KIT	Method Options	Test to Cut-off Ratio	
		Mean	SD (n-1)
<b>Murex HIV-1.2.0</b> Manufacturer: Diasorin Catalogue number: 9E25-01 Lot number: D212810	Standard Protocol	7.8	0.3
<b>Bioelisa HIV-1+2 3.0</b> Manufacturer: Biokit Catalogue number: 3000-1168 Lot number: B23096	Standard Protocol	29.2	1.5
<b>Architect System –HIV Ag/Ab Combo**</b> Manufacturer: Abbott Catalogue number: 4J27 Lot number: 36226/L100	Automated Protocol	82.2	4.4
<b>VIDAS HIV 6 Duo Quick™</b> Manufacturer: Bio-Merieux Catalogue number: 30447 Lot number: 1002419680/1/2/3/4/5/6/9	Automated Protocol	17.5	0.3
<b>Genetic Systems HIV-1 Ag<sup>‡</sup></b> Manufacturer: Bio-Rad Catalogue number: 71120 Lot number: 3C0047	Standard Protocol	0.5	N/A

<sup>‡</sup> Result showing HIV-1 Ag status of this reagent lot.

\*Tests performed at Poole Microbiology Laboratory